

# CONTROLLERS PRICE LIST



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- CTRL EC COOL series: cooling towers controllers

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**MEASURING PARAMETERS:** Free (residual) and Total chlorine; pH, RX (ORP); Conductivity EC ( $\mu$ S); Dissolved Oxygen; Hydrogen Peroxide; Bromine; Ozone; Chlorine Dioxide; Peracetic acid.



**TOUCH 4-7"**



**TOUCH B 3-4.3"**

**MAIN FEATURES COMMON TO ALL MODELS**

- Touch screen controllers with graphic display;
- Simultaneous measurements, temperature, alarm and flow status;
- Graphic icons (7" screen) and messages for Errors, Alarms, output, Input status;
- Scrolling parameter and alpha-numerical selection by touch screen;
- Possibility to expand relay outputs to control other remote equipment
- Configurable relays outputs to control remote equipment or functions via PLC;
- ON-OFF and Timed pulses (PWM) modes; PH priority (except single unit);
- Relays outputs activations by timer control or by measurements settings;
- Auxiliary outputs for driving remote equipment or sensor cleaning;
- Aux programming of days and time operations;
- Timer to Start-up and End unit operations;
- mA outputs, adjustable settings and galvanic isolation;
- Hysteresis, Max/min Alarm, Alarm overdosage, Start-up delay, Delay set point relay;
- Universal power supply 100÷250 Vac (upon request 12÷24 Vdc) ;
- Real time clock configurable as Timer to drive controller functions and outputs;
- Time out of dosing pump maximum dosage controlling "Max dosing Time";
- Level control for external chemical tanks (according to parameters);
- Proximity switch functions;
- Manual and Automatic temperature, programmable settings;
- Temperature set point and output relay (when using temperature sensor);
- Suitable for PT100 or NTC temperature sensors;
- Programmable Menu Basic / Expert;
- Display contrast adjustment for energy saving;
- Graphic charts and data logger download;
- Standard Ethernet (LAN) connection, Modbus TCP, USB port;

• Enclosures IP66 ABS enclosure with hinged lid

• TOUCH 4: 264w x 234,2h x 105 - UL94 HB (self-extinguish)

• TOUCH 1, 2 and 3: 231w x 125h x 90 - UL94 V0 (self-extinguish)

• Enclosures B IP56 ABS enclosure with lid captive screws

• TOUCH B3 and B4: 256w x 200h x 102 - UL94 HB

• TOUCH B1 and B2: 204w x 149h x 85 UL94

**TOUCH** series are work-in progress controllers: the featured functions make it the most versatile controller unit on the market. The alphanumeric touch screen display and an internal timer allows the operator to allocate each auxiliary output according to the system requirements thus creating a full customization. TOUCH series can be appropriately to be consider a Central management unit for Industry, water systems or BMS (Building management system) and Domotic applications.

**TOUCH** series a high quality advanced system from single to quadruple controller, featuring making it extremely versatile:

- Auxiliary functions drive remote equipment either via a relay output or by means of a timer programming, allowing the user to choose the exact time, date, week these equipment must operate and for what time duration making Touch series a perfect tool for automated systems; the functions can also be renamed using the keyboard;
- PH measurements can be changed to RX just changing the parameter during programming and using RX electrode;
- Chlorine measurements features 4 chlorine ranges suitable for Membrane type chlorine sensors 0-2 ppm, 20 ppm, 0-200 ppm and also for open type chlorine cell range 0-10 ppm;
- Conductivity measurements are in micro Siemens features K factor ranges (Cell Constant) selectable by the operator: ranges K1 20.000  $\mu$ S; K 5 up to 2.000  $\mu$ S; K 0,1 up to 200.000  $\mu$ S; K10 up to 200  $\mu$ S;
- PPM measurements suitable for Membrane type sensors for various ranges: 2 ppm, 20 ppm, 200 ppm, 2000 ppm, 20000 ppm and 200000 ppm. Measurements: Dissolved Oxygen; Hydrogen Peroxide; Bromine; Chlorine Dioxide; Peracetic acid; Chlorites; Absence of Chlorine.
- Temperature set point with Auxiliary functions using temperature sensor.

**BENEFITS:** The above feature allow dealers to stock one type for all controller thus reducing stock value or saving time and money when placing orders to manufacturer. Touch screen is widely used by all, a friendly user menu programming, almost self-explanatory and the elegant wide display allows easy vision. Different models are available each featuring different functions to ensure a high level of measurement accuracy and safety.

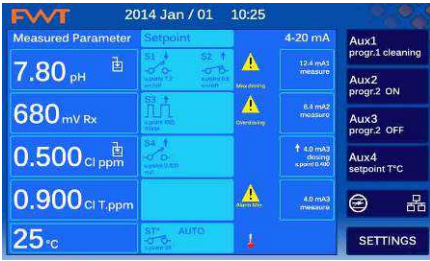
**STANDARD EXTRA FEATURES**

- ➔ **RS485** expansion board Modbus protocol using FWT TOUCH programming/communication software included;
- ➔ **USB port** direct download of Data Logger on Pen drive or SD card via FWT software (PEN or SD not included);
- ➔ **ETHERNET** connection: it allows operator to connect the unit via LAN (programming unit IP address) to PC and change programming and settings using FWT CTRL software. Unit will signal once reaching alarm level or overdosing settings. Ethernet cable not included.

**OPTIONS UPON REQUEST:**

- ✓ *Wi-Fi adapter for remote control by smartphone or tablets: it allows operator to connect the unit via wireless connection, selecting WIFI net and change programming / settings. Unit will send email in case of alarm or overdosing settings functions.*

**TOUCH4 - 7"**



TOUCH series, Graphic 7" touch screen controller.

- 4 measuring parameters + Temperature + Real clock timer
- 9 relays (on request expandable to 13) 4 set-points+1 Alarm+4 Aux configurable outputs
- 4 ON-OFF mode / Proportional (PWM) time / pause outputs to drive On-Off equipment
- 4 of 4÷20mA programmable outputs for remote equipment or set point proportional dosing
- 3 Level control inputs for external chemical tanks
- Flow sensor; Temperature sensor PT100 o NTC
- Housing IP66 264w x 234,2h x 105; *Housing B series IP56 256w x 200h x 102*

**4 measuring parameters  
Temperature °C - 7" screen**

**PH-RX-CI-CLT or PH-RX-CI-PPM or PH-RX-CI-EC**  
Above configurations to specify when placing the order

**TOUCH4 - 7"**  
€ 1.980,00

**TOUCH4 B 7"**  
€ 1.780,00

**TOUCH3 - 4.3"**



TOUCH series, Graphic 4.3" touch screen controller.

- 3 measuring parameters + Temperature + Real clock timer
- 9 relays (on request expandable to 13) 3 set-points+1 Alarm+4 Aux configurable outputs
- 4 ON-OFF mode / Proportional (PWM) time / pause outputs to drive On-Off equipment
- 3 of 4÷20mA programmable outputs for remote equipment or set point proportional dosing
- 3 Level control inputs for external chemical tanks
- Flow sensor; Temperature sensor PT100 o NTC
- Housing IP66 264w x 234,2h x 105; *Housing B series IP56 256w x 200h x 102*

**3 measuring parameters  
Temperature °C - 4.3" screen**

**PH-RX-CI or PH-RX-PPM or PH-RX-EC**  
Above configurations to specify when placing the order

**TOUCH3 - 4.3"**  
€ 1.520,00

**TOUCH3 B 4.3"**  
€ 1.340,00

**TOUCH2 - 4.3"**



TOUCH series, Graphic 4.3" touch screen controller.

- 2 measuring parameters + Temperature + Real clock timer
- 8 relays (on request expandable to 12) 3 set-points+1 Alarm+4 Aux configurable outputs
- 3 ON-OFF mode / Proportional (PWM) time / pause outputs to drive On-Off equipment
- 4 of 4÷20mA programmable outputs for remote equipment or set point proportional dosing
- 2 Level control inputs for external chemical tanks
- Flow sensor; Temperature sensor PT100 o NTC
- Housing IP66 231w x 125h x 90; *Housing B series IP56 204w x 149h x 85*

**2 measuring parameters  
Temperature °C - 4.3" screen**

**PH-RX or PH(RX)CI or PH(RX)PPM PH(RX)EC**  
Above configurations to specify when placing the order

**TOUCH2 - 4.3"**  
€ 1.280,00

**TOUCH2 B 4.3"**  
€ 1.180,00

**TOUCH1 - 4.3"**



TOUCH series, Graphic 4.3" touch screen controller.

- 1 measuring parameter + Temperature + Real clock timer
- 7 relays (on request expandable to 11) 2 set-points+1 Alarm+4 Aux configurable outputs
- 2 ON-OFF mode / Proportional (PWM) time / pause outputs to drive On-Off equipment
- 2 of 4÷20mA programmable outputs for remote equipment or set point proportional dosing
- 1 Level control inputs for external chemical tanks
- Flow sensor; Temperature sensor PT100 o NTC
- Housing IP66 231w x 125h x 90; *Housing B series IP56 204w x 149h x 85*

**1 measuring parameter  
Temperature °C - 4.3" screen**

**PH (or RX) or CI or PPM or EC**  
Above configurations to specify when placing the order

**TOUCH1 - 4.3"**  
€ 980,00

**TOUCH2 B 4.3"**  
€ 880,00

**REMINDER for TOUCH series**

- PH measurements can be changed to RX just changing the parameter during programming and using RX electrode;
- Chlorine measurements features 4 chlorine ranges suitable for Membrane type chlorine sensors open type chlorine cell;
- Conductivity measurements are in micro Siemens features K factor ranges (Cell Constant) selectable by the operator;
- PPM measurements suitable for Membrane type sensors in various ranges measuring: Dissolved Oxygen; Hydrogen Peroxide; Bromine; Chlorine Dioxide; Peracetic acid; Chlorites; Absence of Chlorine;
- RS485 expansion board Modbus protocol using FWT TOUCH programming/communication software included;
- USB port direct download of Data Logger on Pen drive or SD card via FWT software (PEN or SD not included);
- ETHERNET connection: to connect the unit via LAN (programming unit IP address) to PC using FWT CTRL software

**OPTIONS UPON REQUEST:**

- ✓ *Wi-Fi pen for remote control by smartphone or tablets.*

**MEASURING PARAMETERS:** Free (residual) and Total chlorine; pH, RX (ORP); Conductivity EC (µS); Dissolved Oxygen; Hydrogen Peroxide; Bromine; Ozone; Chlorine Dioxide; Peracetic acid.

**CTRL series is available in 4 housing enclosures**



**CTRL enclosure PPO IP66**

easy access via hinged front lid with safe lock

CTRL3: 264w x 234,2h x 105 – UL94 HB

CTRL2/6, 2 and 1: 231w x 125h x 90 – UL94 V0 (fireproof),



**CTRL B enclosure ABS IP56**

easy access via lid locked with captive screws

CTRL3 B: 256w x 200h x 102 – UL94 HB

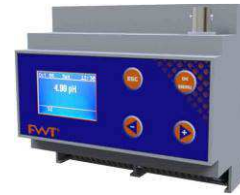
CTRL2/6, 2 B: 204w x 149h x 85 – UL94 HB

CTRL B 164w x 124h x 83 – UL94 HB



**CTRL R enclosure PPO**

plastic self-extinguish, DIN 43700 type 96x96 for rack mounting



**CTRL din enclosure PC/ABS**

plastic self-extinguish, DIN rail 43880 (EN 60715)

**MAIN FEATURES COMMON TO ALL MODELS**

- Large graphic display 128x64; model R and DIN display 70x50
- Simultaneous measurements, temperature, alarm, flow status
- Selection of parameters by push-button control;
- Messages for Errors, Alarms, Outputs and Inputs status
- ON-OFF and Timed pulses (PWM) modes;
- mA outputs, adjustable settings and galvanic isolation;
- Hysteresis, Max/min Alarm, Delay set point relay activation;
- PH priority (except single unit);
- Universal power supply 100÷250 Vac (upon request 12÷24 Vdc);
- Start-up delay when switching ON unit;
- Level control for chemical tanks (according to parameters);
- Proximity switch functions and Digital inputs;
- Automatic / Manual temperature settings and calibration;
- Suitable for PT100 or NTC temperature sensors;
- Programmable Menu Basic / Expert;
- Display contrast adjustment for energy saving.

**MAIN FEATURES COMMON TO CTRL3; CTRL2/6; CTRL+**

- ➔ Auxiliary outputs to drive remote equipment or sensor cleaning;
- ➔ Aux programming of days and time operations;
- ➔ Timer to Start-up and End unit operations;
- ➔ Real time clock configurable as Timer to drive controller;
- ➔ Time out maximum dosage controlling “Max dosing Time”;
- ➔ Temperature set point relay (when using temperature sensor);
- ➔ Graphic charts and data logger download;
- ➔ Expandable relay outputs.

**CTRL** series is a compact system with single, dual and triple controller with various functions that make the unit extremely versatile:

- PH measurements can be changed to RX just changing the parameter during programming and using RX electrode;
- Chlorine measurements features 4 chlorine ranges suitable for Membrane type chlorine sensors 0-2 ppm, 20 ppm, 0-200 ppm and also for Open type chlorine cell range 0-10 ppm;
- Conductivity measurements are in micro Siemens features K factor ranges (Cell Constant) selectable by the operator: ranges K1 20.000 µS; K 5 up to 2.000 µS; K 0,1 up to 200.000 µS; K10 up to 200 µS;
- PPM measurements suitable for Membrane type sensors for various ranges: 2 ppm, 20 ppm, 200 ppm, 2000 ppm, 20000 ppm, 200000 ppm. Measurements: Dissolved Oxygen; Hydrogen Peroxide; Bromine; Chlorine Dioxide; Peracetic acid; Chlorites.

**BENEFITS:** The above feature allow dealers to stock one type for all controller thus reducing stock value or saving time and money when placing orders to manufacturer. A friendly user menu programming, almost self-explanatory and the elegant wide display allows easy vision. Different models are available ensuring a high level of measurement accuracy and safety.

**OPTIONS UPON REQUEST:**

- ➔ RS485 expansion board Modbus protocol using FWT TOUCH programming/communication software not included;
- ➔ USB port direct download of Data Logger on Pen drive or SD card via FWT software (PEN or SD not included);

**CTRL3**



- 3 measuring parameters + Temperature + Real clock timer
- 8 relays (upon request expandable to 12) 4 set-points + 1 Alarm + 3 Aux configurable outputs
- 4 ON-OFF mode / Proportional (PWM) time / pause outputs to drive On-Off equipment
- 3 of 4÷20mA programmable outputs for remote equipment or set point proportional dosing
- 3 Level control inputs for external chemical tanks
- Flow sensor; Temperature sensor PT100 o NTC
- Housing IP66 264w x 234,2h x 105; *Housing B series IP56 256w x 200h x 102*

3 measuring parameters  
- Temperature °C  
- Real clock timer  
3 Auxiliary outputs

*Parameters configuration to specify when placing the order*

**PH-RX-CI**  
**PH-RX-PPM or PH-RX-EC**

CTRL3	CTRL3 B
€ 1.080,00	€ 1.000,00
€ 1.140,00	€ 1.060,00

**CTRL2/6**



- 2 measuring parameters + Temperature + Real clock timer
- 6 relays (upon request expandable to 10) 3 set-points + 1 Alarm + 2 Aux configurable outputs
- 3 ON-OFF mode / Proportional (PWM) time / pause outputs to drive On-Off equipment
- 4 of 4÷20mA programmable outputs for remote equipment or set point proportional dosing
- 2 Level control inputs for external chemical tanks
- Flow sensor; Temperature sensor PT100 o NTC
- Housing IP66 231w x 125h x 90; *Housing B series IP56 204w x 149h x 85*

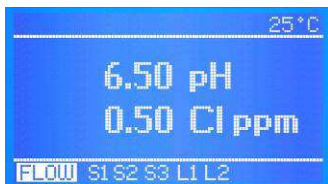
2 measuring parameters  
- Temperature °C  
- Real clock timer  
2 Auxiliary outputs

*Parameters configuration to specify when placing the order*

**PH(RX)-CI or PH-RX**  
**PH(RX)-PPM or PH(RX)-EC**

CTRL2/6	CTRL2/6 B
€ 880,00	€ 780,00
€ 940,00	€ 840,00

**CTRL2**



- 2 measuring parameters + Temperature
- 4 relays: 3 set-points + 1 Alarm
- 3 ON-OFF mode / Proportional (PWM) time / pause outputs to drive On-Off equipment
- 2 of 4÷20mA programmable outputs for remote equipment or set point proportional dosing
- 2 Level control inputs for external chemical tanks
- Flow sensor; Temperature sensor PT100 o NTC
- Housing IP66 231w x 125h x 90; *Housing B series IP56 204w x 149h x 85*

2 measuring parameters  
- Temperature °C

*Parameters configuration to specify when placing the order*

**PH(RX)-CI or PH-RX**

CTRL2	CTRL2 B
€ 760,00	€ 660,00

**CTRL+**



- 1 measuring parameter + Temperature + Real clock timer
- 4 relays (upon request expandable to 8) 2 set-points + 1 Alarm + 1 Aux configurable outputs
- 2 ON-OFF mode / Proportional (PWM) time / pause outputs to drive On-Off equipment
- 2 of 4÷20mA programmable outputs for remote equipment or set point proportional dosing
- 1 Level control inputs for external chemical tanks
- Flow sensor; Temperature sensor PT100 o NTC
- Housing IP66 231w x 125h x 90; *Housing B series IP56 204w x 149h x 85*

1 measuring parameter  
- Temperature °C  
- Real clock timer  
1 Auxiliary output

*Parameters configuration to specify when placing the order*

**PH(RX); CI (or CI total)**  
**PPM or EC (µS)**

CTRL+	CTRL+ B
€ 560,00	€ 460,00
€ 600,00	€ 500,00

**CTRL**



- 1 measuring parameter + Temperature
- 2 relays: 2 set-points + 1 Alarm + 1 Aux configurable outputs
- 2 ON-OFF mode / Proportional (PWM) time / pause outputs to drive On-Off equipment
- 1 of 4÷20mA programmable outputs for remote equipment or set point proportional dosing
- 1 Level control inputs for external chemical tanks
- Flow sensor Temperature sensor PT100 o NTC
- Housing IP66 231w x 125h x 90; *Housing B series IP56 164w x 124h x 83*

1 measuring parameter  
- Temperature °C

*Parameters configuration to specify at the order*

**PH(RX); CI (or CI total)**  
**EC (µS)**

CTRL R or DIN	CTRL	CTRL B
€ 400,00	€ 480,00	€ 380,00
€ 440,00	€ 504,00	€ 404,00

**REMINDER for CTRL series**

- PH measurements can be changed to RX just changing the parameter during programming and using RX electrode;
- Chlorine measurements features 4 chlorine ranges suitable for Membrane type chlorine sensors open type chlorine cell;
- Conductivity measurements are in micro Siemens features K factor ranges (Cell Constant) selectable by the operator;
- PPM measurements suitable for Membrane type sensors in various ranges.

CTRL series is available in two housing enclosures



**CTRL enclosure IP65 ABS, 231w x 125h x 90 – V0 (fireproof)**  
easy access via hinged front panel with safe lock

**CTRL/B enclosure IP56 ABS, 204w x 149h x 85 – UL94 HB**  
easy access via front panel locked with captive screws



**CTRL EC-COOL 1** measuring parameter + temperature + timer

- ✓ 5 relays: 4 set-points ON-OFF + 1 Aux/Alarm configurable outs
- ✓ Conductivity controller range: 0÷20 mS or 0÷2000 µS
- ✓ 2 of 4÷20mA programmable outputs to drive equipment or data log
- ✓ Universal power supply 100÷240 Vac
- ✓ 3 Level control input
- ✓ Real time Clock/Timer to program Bleed/Inhibitor/Biocide operations
- ✓ Automatic temperature compensation and display

<b>CTRL EC COOL</b>	
€	<b>960,00</b>
<b>CTRL/B EC COOL</b>	
€	<b>860,00</b>

**CTRL2 ECRX-COOL 2** measuring parameters+temperature+timer

- ✓ 6 relays: 5 set-points ON-OFF + 1 Aux/Alarm configurable outs

**NOTE: RX measurements can be changed to PH measurement !!!!**

<b>CTRL2/6 ECRX COOL</b>	
€	<b>1.100,00</b>
<b>CTRL2/6 ECRX BCOOL</b>	
€	<b>1.000,00</b>

- Conductivity measurements are in micro Siemens features 4 K factor ranges (Cell Constant): K1 (default) ranges 20.000 µS; K 5 ranges up to 2.000 µS; K 0,1 ranges up to 200.000 µS; K10 ranges up to 200 µS.
- Sensor Calibration based on 2 points to ensure the most accurate measurement.
- Temperature calibration "EC alfa factor" which is the correction factor for conductivity measurement in function of temperature which is based on a straight line. Alfa factor ensures the best results and accuracy.

**EV-BLEED OPERATIONS**

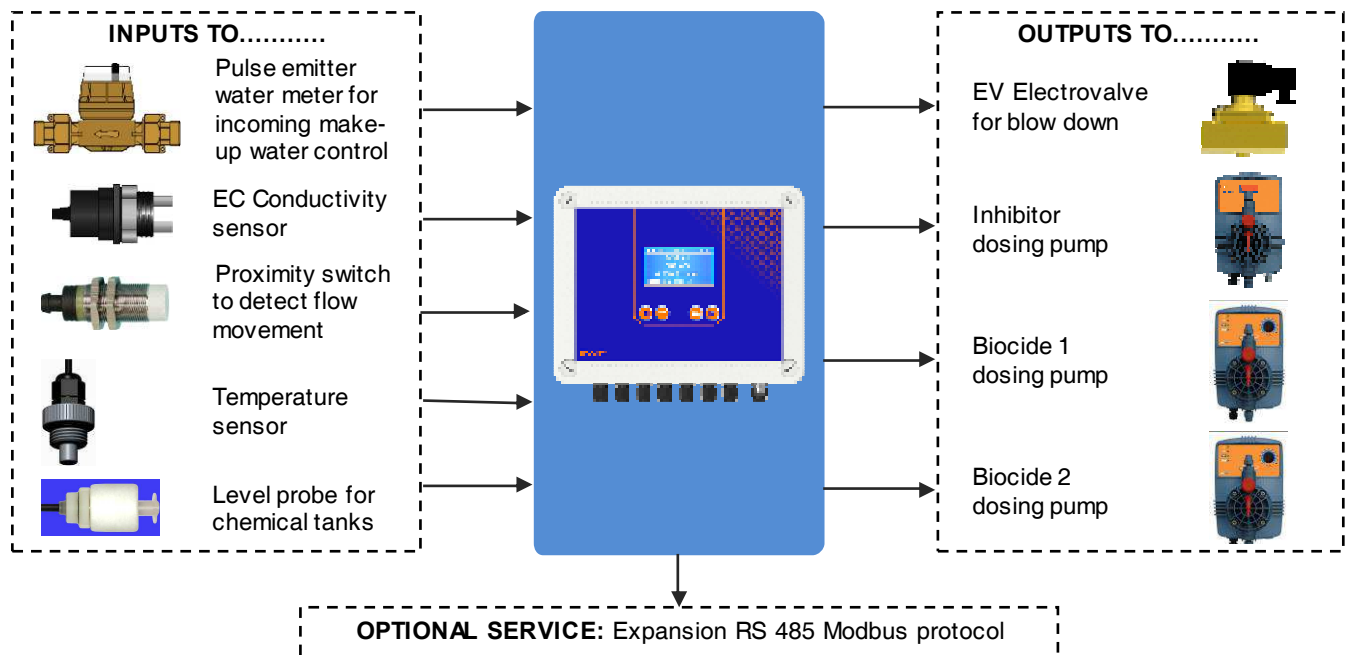
- Conductivity Set-point value
- Blowdown control via Timer
- Blow-down (Bleed) lockout
- Alarm Max blow-down time
- Blow-down Safety mode

**INHIBITOR DOSING OPERATIONS**

- Inhibitor dosing direct with EV Bleed
- Inhibitor dosing according to % Bleed
- Water meter proportional dosing mode
- Alarm Inhibitor dosing time
- Inhibitor timer mode
- Inhibitor lock-out mode

**BIOCIDE DOSING OPERATIONS**

- Biocide dosing operations based on timer settings for 2 dosing pumps
- Timer with settings-daily/4 weekly programs: max dosing time 250 min. 20 independent different programming for each biocide
- Pre-bleed and Biocide Lock-out mode



**OPTIONAL FEATURES TOUCH SERIES**

	List price
RS485/USB cable (to connect the unit to a pc via RS485 protocol)	€ 102,00
DIGITAL I/O expansion board to add extra inputs/outputs relays (upon FWT technical approval)	UPON REQUEST
FWT Smartapp® software	INCLUDED
ETHERNET / RS485 connection INTERNAL module + micro SD memory card 8 GB	INCLUDED
ETHERNET port IP65	INCLUDED

**OPTIONAL FEATURES CTRL3, CTRL2/6, CTRL+ SERIES**

	List price
RS485 expansion board Modbus protocol (CTRL3; CTRL2/6)	€ 20,00
RS485 expansion board Modbus protocol (CTRL+)	€ 48,00
FWT Smartapp® software	€ 105,00
ETHERNET / RS485 connection EXTERNAL module + micro SD memory card 8 GB	€ 103,00
DIGITAL I/O expansion board to add extra inputs/outputs relays (upon FWT technical approval)	UPON REQUEST
RS485/USB cable (to connect the unit to a pc via RS485 protocol)	€ 102,00



ETHERNET / RS485 external module



RS485 / USB cable



# SOLENOID DOSING PUMPS AND PERISTALTICS PRICE LIST



## INDEX

- Solenoid driven dosing pumps specs and models
- Solenoid driven dosing pumps accessories kits
- Pulse water meters
- Mixers
- Dosing tanks
- Solenoid dosing pumps accessories
- Liquid end spares



**PUMPS MAIN FEATURES**

Power supply: **230 Vac - 1 phase - 50/60 Hz - ±10/15%**  
 Upon request: **110 Vca/60 Hz; 12 Vdc; 24 Vac/dc**  
 Reproducibility under standard conditions: **± 5%**  
 Plastic housing and support: **PP reinforced, IP65**  
 Connectors: **4 pole IP66**  
 Ambient working temperature: **45°C**  
 Voltage working range: **min.207 Vac ÷ Max 253 Vac**  
 Voltage Peak: **Max 270 Vac**

Pumps are provided with **Standard Accessories Kit:**

- 1 - Injection valve;
- 2 m - Discharge Hose PE semi-rigid (white);
- 2 m - Suction Hose PVC flexible (transparent);
- 1,5 m - Air Bleed Hose PVC flexible (transparent);
- 1 - Foot Valve/Filter

Pumps are also provided **upon request** with **Level control switch** (except C/A models)

**LIQUID ENDS**

WETTED PARTS	STANDARD VERSION	UPON REQUEST
Pump head	PP (FX, MX)/PVC (VX30÷80l/h)	PVDF; PMMA
Diaphragm	PTFE	-----
Ball check valve - standard FX-MX series	CERAMIC	AISI 316
Pump head Nipples / Hose Nut	PP	PVDF
Seals / O-rings	FPM	EPDM
Injection Fitting	PP	PVDF
Injection No-Return Valve (sleeve type)	FPM	EPDM
Foot Valve Lip type	FPM	EPDM
Filter body / Fitting-Nipple / <i>Filtering media</i>	PE / PP / <i>Glasswool</i>	PVDF
Suction/Air relief hose 4x6mm (1 ÷ 20l/h) / 10x14 (30 ÷ 80l/h)	PVC flexible	PVDF; avail. 6x8 size
Discharge hose 4x6mm (1 ÷ 20 l/h) / 10x14mm (30 ÷ 80l/h)	PE semi-flexible	PVDF; avail. 6x8 size
<b>OTHER LIQUID ENDS UPON REQUEST:</b>		
Reed type "Lip" Valve	FPM (Viton ®)	EPDM (Dutral ®)
Ball check Injection and Foot Valves / <i>Fitting</i>	CERAMIC / PP	CERAMIC / PVDF
PVDF Spring Injection ball Valve / <i>Fitting</i>	PVDF spring / CERAMIC / PP	PVDF spring / CERAMIC / PVDF
<i>All the products are manufactured according CE regulations FPM=Viton® / EPDM=Dutral®: are trademarks of Dupont Elastomers</i>		

**\*Note:** FX-VX series high performances 3÷5 l/h at 20bar and 22÷30÷50÷80 l/h pump heads do not feature air bleed valve.



**FX series**



**MX series**



**VX series**

**COMMON CHARACTERISTICS TO ALL FX-MX SERIES**

- ⇒ Ball check valves CERAMIC (FX-MX-VX)
- ⇒ Plastic housing PP IP65 rating - (VX die-cast aluminium)
- ⇒ Air Bleed valve for priming (up to 15 l/h pump head)
- ⇒ Cylinder FPM no-return injection valve (available EPDM)
- ⇒ PTFE diaphragm
- ⇒ Standard accessories

**SOLENOID DRIVEN PUMPS CONTROLS**

**All solenoid dosing pumps series operations are guaranteed by stroke frequency adjustment:**

⇒ **STROKE FREQUENCY ADJUSTMENT**

FX and MX series control operations feature two functioning controls versions:

- **Analog** with L.E.D. indicators
- **Digital** with display and L.E.D.

⇒ **STROKE LENGTH ADJUSTMENT (ONLY FX SERIES)**

It varies the single stroke volume displacement offering the advantage of double flow rate regulation: pulse frequency adjustment and stroke length allowing accurate dosing operations.

Recommended stroke adjustment rate: 30%÷100%



**FX series**



⇒ Available **WITHOUT** stroke adjustment, **FXS series**

Recommended for applications where a **competitive price** is the most important requirement.

**NOTE:** Dosing pumps performances are obtained testing each unit with water, at rated pressure, 1,5 m suction lift, room temp.

MX series main characteristics are:

- WALL MOUNTING HOUSING: includes a support bracket for easy quick mounting
- SMALL DIMENSIONS: ready also for mounting into small cabinets and small environments
- PRICE QUALITY: the new design allows to have a more competitive price with same quality of FX series
- MX series mounts the same solenoid as FX series and CERAMIC ball check valves



### MX SERIES MAIN FEATURES

- CERAMIC ball check valves
- Standard hose  $\varnothing$  4x6 mm
- Plastic housing PP reinforced – IP65 rating
- Stroke frequency adjustment 120 impulses / minute
- PTFE diaphragm / Air Bleed valve for priming
- Standard accessories

Type	MX C/A	MX C/AL	MX C/D	MX P/D	MX CS/D	MX MF	PVDF cont.*	POLY cont.*	Auto-Bleed*
1,5-10	€ 226,00*	€ 275,00	€ 251,00	€ 342,00	€ 357,00	€ 365,00	Suitable for aggressive chemicals <b>ADD</b> + € 62,00	<b>ADD</b> + € 212,00	<b>ADD</b> + € 25,00
2,5-15	€ 226,00*	€ 275,00	€ 251,00	€ 342,00	€ 357,00	€ 365,00			
5,5-07	€ 231,00*	€ 279,00	€ 259,00	€ 342,00	€ 357,00	€ 365,00			
07-04	€ 231,00*	€ 279,00	€ 259,00	€ 342,00	€ 357,00	€ 365,00			

SILENCED VERSIONS for all series:

**ADD** to above list price + € 20,00

LEVEL switch+bracket for all series:

**ADD** to above list price + € 36,00

Type	MX C/A		SPECIAL LIST PRICES FOR SHIPMENTS MINIMUM OF 50 UNITS
1,5-10	€ 211,00*	Standard	
5,5-07	€ 215,00*	Standard	
5,5-07	€ 205,00*	With LIP valves	

\* MX with "LIP" type valves **deduct** from list price – € 10,00

\* **PVDF aggressive chemicals configuration:** PVDF pump head/fittings, double Ceramic ball checks, o-rings FPM (or EPDM or PTFE), Foot and Injection no-return valve PVDF spring/ Ceramic ball check, PVDF suction/discharge hoses

\* **POLY polymer viscous liquid configuration:** PMMA pump head, AISI316 ball checks ( $\varnothing$ 11), Fittings PP 3/4", seals FPM (or EPDM), Standard Injection fitting and Strainer (without no-return valve), hoses PVC flexible 10x14.

\* **Auto-air bleed pump head:** PVDF head/fittings, Ceramic balls, o-rings FPM (or EPDM) - 20l/h PVC head with LIP valves

\*\* **NOTE:** using Auto-Bleed or Polymer PMMA configuration, pump pressure performance decreases of about 50%

l/h	bar	Start up* performance	Frequency	cc (ml)	Hose $\varnothing$	Pump head	Valve type	o-rings**	Fittings
1,5	10	1,5 l/h 10 bar	120 imp/min	0,21	4x6 mm	PP 3/8"	BALL checks	FPM	PP
2,5	15	2,4 l/h 15 bar	120 imp/min	0,34	4x6 mm	PP 3/8"	BALL checks	FPM	PP
5,5	7	6 l/h 7 bar	120 imp/min	0,77	4x6 mm	PP 3/8"	BALL checks	FPM	PP
7	4	7 l/h 4 bar	120 imp/min	0,98	4x6 mm	PP 3/8"	BALL checks	FPM	PP

\* **NOTE:** "Start up" performances are available when the pump starts the operations and are constant only if duties are not continuous (working for time periods not over 30 min and with at least 15 min rest).

\*\* **NOTE:** available EPDM o-rings (for PTFE o-rings ask FWT technical department)

**AVAILABLE** 110Vac 60Hz • 12-24Vdc: **add 10% to above list prices** (C/A, C/AL and MF only up to 5,5-07 type).

<b>MX C/A</b>	<b>CONSTANT flow rate – ON/OFF mode</b> flow rate is obtained by adjusting pulse frequency 0÷100%. ⇒ Max frequency 120 imp/min ⇒ Frequency reduction adjustment range 100%÷20%, analog controls; 2 LED.
<b>MX C/AL</b>	<b>CONSTANT flow rate – ON/OFF mode</b> with same operating adjustments as model C/A ⇒ Provided with level control and <b>floating level switch</b> , LED alarm. <b>Double level</b> available upon request
<b>MX C/D</b>	<b>DIGITAL CONSTANT flow rate / ON-OFF mode:</b> Injections frequency adjustment 0÷100%. ⇒ Microcontroller technology, digital controls, 7-segments display, LED indicators
<b>MX P/D</b>	<b>PROPORTIONAL TO EXTERNAL PULSE CONTACT</b> modes Divider (n pulses: 1 inject.); Multiplier (1xN pulse) ⇒ Proportional mode / Constant mode / Injections frequency adjustment 0÷100% ⇒ Microcontroller technology, digital controls, display 7-segments, 3 LED display status: power, pulses, level ⇒ Level control connector setting. <b>P/DL</b> model provided with level probe switch (upon request) ⇒ Digital Constant flow rate / ON-OFF mode: injections frequency adjustment 0÷100%
<b>MX CS/D</b>	<b>PROPORTIONAL to analog mA signal:</b> selection range 0/4 mA÷20mA or reverse / Constant mode. ⇒ Injections frequency adjustment 0÷100% ⇒ Microcontroller technology, digital controls, 7-segments, 3 LED display status: power, pulses, level ⇒ Level control connector setting. <b>CS/DL</b> model provided with level probe switch (upon request)
<b>MX MF</b>	<b>MULTIFUNCTIONS</b> dosing pump which comprehend all dosing functions ...and more. Benefit: reduced stock. ⇒ Proportional to external digital pulses: divider n:1 ; multiplier 1xn / ppm direct selection dosing mode ⇒ Proportional to external current signal 0/4 mA÷20mA or reverse ⇒ Constant-ON/OFF (manual) mode with digital adjustment: imp/min; imp/hour; max 120 imp/min ⇒ Digital timer, weekly and daily programming ⇒ Level control connector setting. <b>MF/L</b> model provided with level probe switch

## FXS SERIES MAIN FEATURES

- CERAMIC ball check valves
- Standard hose  $\varnothing$  4x6 mm
- Plastic housing PP reinforced – IP65 rating
- Standard accessories
- FXS series only stroke frequency adjustment
- Strokes frequency 120 impulses / minute
- PTFE diaphragm
- Air Bleed valve for priming



Type	FXS C/A	FXS C/AL	FXS C/D	FXS P/D	FXS CS/D	FXS MF	PVDF conf.*	POLY conf.*	Auto-Bleed*
1,5-10	€ 237,00	€ 285,00	€ 261,00	€ 352,00	€ 367,00	€ 376,00	Up to 14 l/h aggressive chemicals <b>ADD</b> <b>+ € 62,00</b>	Up to 14 l/h <b>ADD</b> <b>+ € 212,00</b>	Up to 14 l/h <b>ADD</b> <b>+ € 25,00</b>
2,5-15	€ 237,00	€ 285,00	€ 261,00	€ 352,00	€ 367,00	€ 376,00			
03-20	€ 343,00	€ 391,00	€ 408,00	€ 427,00	€ 450,00	€ 455,00			
5,5-07	€ 241,00	€ 289,00	€ 270,00	€ 352,00	€ 367,00	€ 376,00	22 l/h <b>Not available</b>	22 l/h <b>ADD</b> <b>+ € 226,00</b>	22 l/h <b>Not available</b>
06-12	€ 294,00	€ 329,00	€ 344,00	€ 379,00	€ 402,00	€ 404,00			
08-09	€ 294,00	€ 343,00	€ 344,00	€ 379,00	€ 402,00	€ 404,00			
14-04	€ 317,00	€ 365,00	€ 382,00	€ 403,00	€ 424,00	€ 430,00	22 l/h <b>Not available</b>	22 l/h <b>ADD</b> <b>+ € 226,00</b>	22 l/h <b>Not available</b>
22-02	€ 343,00	€ 391,00	€ 408,00	€ 427,00	€ 450,00	€ 455,00			

FXS WALL MOUNTING SUPPORT AISI list price € 44,00	SILENCED VERSIONS <b>ADD</b> to above list price + € 20,00
LEVEL switch+bracket for all models: <b>ADD</b> to above list price + € 36,00	

\* FXS with "LIP" type valves **deduct** from list price – € 10,00

\* **PVDF aggressive chemicals configuration:** PVDF pump head/fittings, double Ceramic ball checks, o-rings FPM (or EPDM or PTFE), Foot and Injection no-return valve PVDF spring / Ceramic ball check, PVDF suction/discharge hose

\* **POLY polymer viscous liquid configuration:** PMMA pump head, AISI316 ball checks ( $\varnothing$ 11), Fittings PP 3/4", seals FPM (or EPDM), Standard Injection fitting and Strainer (without no-return valve), hoses PVC flexible 10x14.

\* **Auto-air bleed pump head:** PVDF head/fittings, Ceramic balls, o-rings FPM (or EPDM) - 20l/h PVC head and LIP valves

\*\* **NOTE:** using Auto-Bleed or Polymer PMMA configuration, pump pressure performance decreases of about 50%

l/h	bar	Start up* performance	Frequency	cc (ml)	Hose $\varnothing$	Pump head	Valve type	o-rings**	Fittings
1,5	10	1,5 l/h 10 bar	120 imp/min	0,21	4x6 mm	PP 3/8"	BALL checks	FPM	PP
2,5	15	2,5 l/h 15 bar	120 imp/min	0,34	4x6 mm	PP 3/8"	BALL checks	FPM	PP
3	20	3,6 l/h 20 bar	120 imp/min	0,42	4x6 mm	PVC20bar3/8"	BALL checks	FPM	PP
5,5	7	6 l/h 7 bar	120 imp/min	0,77	4x6 mm	PP 3/8"	BALL checks	FPM	PP
6	12	6,2 l/h 12 bar	120 imp/min	0,84	4x6 mm	PP 3/8"	BALL checks	FPM	PP
8	9	7,5 l/h 9 bar	120 imp/min	1,10	4x6 mm	PP 3/8"	BALL checks	FPM	PP
14	4	17,6 l/h 4 bar	120 imp/min	1,96	4x6 mm	PP 3/8"	BALL checks	FPM	PP
22	2	23 l/h 2 bar	120 imp/min	3,08	4x6 mm	PP 3/8"20lt	BALL checks	FPM	PP

\* **NOTE:** "Start up" performances are available when the pump starts the operations and are constant only if duties are not for continuous (working for time periods not over 30/40 min and with at least 15 min rest).

\*\* **NOTE:** available EPDM o-rings (for PTFE o-rings ask FWT technical department)

**AVAILABLE** 110Vac 60Hz • 12-24Vdc: **add 10% to above list prices** (C/A, C/AL and MF only up to 5,5-07 type)

<b>FXS C/A</b>	<b>CONSTANT flow rate – ON/OFF mode</b> flow rate is obtained by adjusting pulse frequency 0÷100%. ⇒ Frequency potentiometer reduction adjustment range 100%÷20%, analog controls; 2 LED display status.
<b>FXS C/AL</b>	<b>CONSTANT flow rate – ON/OFF mode</b> with same operating adjustments as model C/A ⇒ Provided with level control and <b>floating level switch</b> , LED alarm. <b>Double level</b> available upon request
<b>FXS C/D</b>	<b>DIGITAL CONSTANT flow rate / ON-OFF mode:</b> Injections frequency adjustment 0÷100%. ⇒ Microcontroller technology, digital controls, 7-segments display, LED indicators ⇒ Level control connector setting. <b>C/DL</b> model provided with level probe switch (upon request)
<b>FXS P/D</b>	<b>PROPORTIONAL TO EXTERNAL PULSE CONTACT</b> modes Divider (n pulses:1 inject.); Multiplier (1xn pulse) ⇒ Proportional mode / Constant mode / Injections frequency adjustment 0÷100% ⇒ Level control setting. ⇒ Upon request sequence control strokes/ injection with flow sensor <b>model P/D+</b>
<b>FXS CS/D</b>	<b>PROPORTIONAL to analog mA signal:</b> selection range 0/4 mA÷20mA or reverse / Constant mode. ⇒ Level control connector setting. <b>CS/DL</b> model provided with level probe switch (upon request)
<b>FXS MF</b>	<b>MULTIFUNCTIONS</b> dosing pump which includes all dosing functions ...and more. Benefit: reduced stock. ⇒ Proportional to external digital pulses: divider n:1 ; multiplier 1xn / ppm direct selection dosing mode ⇒ Proportional to external current signal 0/4÷20mA or reverse ⇒ Level control connector setting. <b>MF/L</b> ⇒ Constant-ON/OFF (manual) mode with digital adjustment: imp/min; imp/hour; max 120 imp/min ⇒ Digital timer, weekly and daily programming ⇒ Sequence strokes/injection with flow sensor (upon request)

## FX SERIES MAIN FEATURES

- CERAMIC ball check valves
- Standard hose  $\varnothing$  4x6 mm
- Plastic housing PP reinforced – IP65
- Standard accessories
- Stroke adjustment for injected volume (only FX)
- Stroke frequency adjustment 120 impulses / minute
- PTFE diaphragm
- Air Bleed valve for priming



Type	FX C/A	FX C/AL	FX C/D	FX P/D	FX CS/D	FX MF	PVDF conf.*	POLY conf.*	Auto-Bleed*
1,5-10	€ 298,00	€ 347,00	€ 323,00	€ 414,00	€ 429,00	€ 437,00	Up to 14 l/h aggressive chemicals <b>ADD + € 62,00</b>	Up to 14 l/h <b>ADD + € 212,00</b>	Up to 14 l/h <b>ADD + € 25,00</b>
2,5-15	€ 298,00	€ 347,00	€ 323,00	€ 414,00	€ 429,00	€ 437,00			
03-20	€ 404,00	€ 453,00	€ 469,00	€ 489,00	€ 512,00	€ 517,00			
5,5-07	€ 303,00	€ 351,00	€ 331,00	€ 414,00	€ 429,00	€ 437,00	22 l/h <b>Not available</b>	22 l/h <b>ADD + € 226,00</b>	22 l/h <b>Not available</b>
06-12	€ 356,00	€ 391,00	€ 406,00	€ 440,00	€ 464,00	€ 466,00			
08-09	€ 356,00	€ 563,00	€ 406,00	€ 440,00	€ 464,00	€ 466,00			
14-04	€ 379,00	€ 427,00	€ 444,00	€ 465,00	€ 486,00	€ 492,00	22 l/h <b>Not available</b>	22 l/h <b>ADD + € 226,00</b>	22 l/h <b>Not available</b>
22-02	€ 404,00	€ 453,00	€ 469,00	€ 489,00	€ 512,00	€ 517,00			

<b>FXS WALL MOUNTING SUPPORT</b> AISI list price € 44,00	<b>SILENCED VERSIONS</b> <b>ADD</b> to above list price + € 20,00
<b>LEVEL switch+bracket for all models:</b> <b>ADD</b> to above list price + € 36,00	

\* FX with "LIP" type valves **deduct** from list price – € 10,00

\* **PVDF aggressive chemicals configuration:** PVDF pump head/fittings, double Ceramic ball checks, o-rings FPM (or EPDM or PTFE), Foot and Injection no-return valve PVDF spring / Ceramic ball check, PVDF suction/discharge hose

\* **POLY polymer viscous liquid configuration:** PMMA pump head, AISI316 ball checks ( $\varnothing$ 11), Fittings PP 3/4", seals FPM (or EPDM), Standard Injection fitting and Strainer (without no-return valve), hoses PVC flexible 10x14.

\* **Auto-air bleed pump head:** PVDF head/fittings, Ceramic balls, o-rings FPM (or EPDM) - 20l/h PVC head and LIP valves

\*\* **NOTE:** using Auto-Bleed or Polymer PMMA configuration, pump pressure performance decreases of about 50%

l/h	bar	Start up* performance	Frequency	cc (ml)	Hose $\varnothing$	Pump head	Valve type	o-rings**	Fittings
1,5	10	1,5 l/h 10 bar	120 imp/min	0,21	4x6 mm	PP 3/8"	BALL checks	FPM	PP
2,5	15	2,5 l/h 15 bar	120 imp/min	0,34	4x6 mm	PP 3/8"	BALL checks	FPM	PP
3	20	3,6 l/h 20 bar	120 imp/min	0,42	4x6 mm	PVC20bar3/8"	BALL checks	FPM	PP
5,5	7	6 l/h 7 bar	120 imp/min	0,77	4x6 mm	PP 3/8"	BALL checks	FPM	PP
6	12	6,2 l/h 12 bar	120 imp/min	0,84	4x6 mm	PP 3/8"	BALL checks	FPM	PP
8	9	7,5 l/h 9 bar	120 imp/min	1,10	4x6 mm	PP 3/8"	BALL checks	FPM	PP
14	4	17,6 l/h 4 bar	120 imp/min	1,96	4x6 mm	PP 3/8"	BALL checks	FPM	PP
22	2	23 l/h 2 bar	120 imp/min	3,08	4x6 mm	PP 3/8"20lt	BALL checks	FPM	PP

\***NOTE:** "Start up" performances are available when the pump starts the operations and are constant only if duties are not for continuous (working for time periods not over 30/40 min and with at least 15 min rest).

\***NOTE:** available EPDM o-rings (for PTFE o-rings ask FWT technical department)

**AVAILABLE** 110Vac 60Hz • 12-24Vdc: **add 10% to above list prices** (C/A, C/AL and MF only up to 5,5-07 type)

<b>FX C/A</b>	<b>CONSTANT flow rate – ON/OFF mode</b> flow rate is obtained by adjusting pulse frequency 0÷100%. ⇒ Frequency potentiometer reduction adjustment range 100%÷20%, analog controls; 2 LED display status.
<b>FX C/AL</b>	<b>CONSTANT flow rate – ON/OFF mode</b> with same operating adjustments as model C/A ⇒ Provided with level control and <b>floating level switch</b> , LED alarm. <b>Double level</b> available upon request
<b>FX C/D</b>	<b>DIGITAL CONSTANT flow rate / ON-OFF mode:</b> Injections frequency adjustment 0÷100%. ⇒ Microcontroller technology, digital controls, 7-segments display, LED indicators ⇒ Level control connector setting. <b>C/DL</b> model provided with level probe switch (upon request)
<b>FX P/D</b>	<b>PROPORTIONAL TO EXTERNAL PULSE CONTACT</b> modes Divider (n pulses:1 inject.); Multiplier (1xn pulse) ⇒ Proportional mode / Constant mode / Injections frequency adjustment 0÷100% ⇒ Level control setting. ⇒ Upon request sequence control strokes/ injection with flow sensor <b>model P/D+</b>
<b>FX CS/D</b>	<b>PROPORTIONAL to analog mA signal:</b> selection range 0/4 mA÷20mA or reverse / Constant mode. ⇒ Level control connector setting. <b>CS/DL</b> model provided with level probe switch (upon request)
<b>FX MF</b>	<b>MULTIFUNCTIONS</b> dosing pump which includes all dosing functions ...and more. Benefit: reduced stock. ⇒ Proportional to external digital pulses: divider n:1 ; multiplier 1xn / ppm direct selection dosing mode ⇒ Proportional to external current signal 0/4÷20mA or reverse ⇒ Level control connector setting. <b>MF/L</b> ⇒ Constant-ON/OFF (manual) mode with digital adjustment: imp/min; imp/hour; max 120 imp/min ⇒ Digital timer, weekly and daily programming ⇒ Sequence strokes/injection with flow sensor (upon request)

**DOSING PUMPS WITH BUILT-IN PROPORTIONAL CONTROLLER CTRL3**

These series includes both a dosing pumps and high tech controllers which features **three parameters** all in one enclosure: PH or RX (ORP) or Cl<sub>2</sub> (chlorine). **BENEFITS:** reducing stock value against a great quality and versatility.

⇒ **pH:** measuring range 0÷14,00 pH (resolution 0,01pH)

⇒ **RX:** measuring range: -1000÷+1400 mV (resolution 1 mV)

⇒ **Free or Total chlorine\*:** range: 0÷20,00 ppm (resolution 0,1ppm)

\*Cl<sub>2</sub> parameter suitable either with membrane-potentiostatic Chlorine sensors or open amperometric chlorine cells (latter upon request)

- Microcontroller technology, back-lit LCD graphic display, digital controls
- Injection frequency adjustment, Stroke length adjustment (only FX)
- 2 Reset modes: - full reset - partial reset keeping calibration settings
- Level control (Level switch upon request)
- ON-OFF and Proportional modes: selection of proportional range value
- Delay adjustment - Delay at powering ON (for electrodes polarization)
- Hysteresis regulation
- Setting for proximity switch to stop operations in case of no water
- Password setting
- 4÷20 mA output for chart recorder with calibration of mA output
- Stand-by for cleaning electrodes and sensors or re-calibration

⇒ **ADVANCED SETTING** offers the following functions:

- Temperature measurement °C or °F
- Suitable for Temperature probe PT100
- Alarm functions and setting with relay output connector

⇒ **ALARM FUNCTIONS**

- Over-dosing alarm time value
- Alarm for set point minimum measured (low) value
- Alarm for set point max measured (high) value



MX series



FX series

**DOSING PUMPS WITH BUILT-IN PROPORTIONAL CONTROLLER CTRL2**

These series includes is a simple and economic version of above CTRL3 unit which features two parameters all in one enclosure: PH or RX (ORP). **BENEFITS:** reducing stock value against a versatile economic solution.

⇒ **pH:** measuring range 0÷14,00 pH (resolution 0,01pH)

⇒ **RX:** measuring range: -1000÷+1400 mV (resolution 1 mV)

- Microcontroller technology, back-lit LCD graphic display, digital controls
- ON-OFF and Proportional modes
- Injection frequency adjustment, Stroke length adjustment (only FX)
- Level control (Level switch upon request)

CTRL3 advanced menu			CTRL 2 series			PVDF config.*	Auto-Bleed PVDF*
Type	MX CTRL3	FXS CTRL3	Type	MX CTRL2	FXS CTRL2		
1,5-10	€ 478,00	€ 488,00	1,5-10	€ 448,00	€ 458,00	Up to 14 l/h Suitable for aggressive chemicals <b>ADD+ € 62,00</b>	Up to 14 l/h <b>ADD + € 25,00</b>
2,5-15	€ 478,00	€ 488,00	2,5-15	€ 448,00	€ 458,00		
03-20		€ 571,00	03-20		€ 541,00		
5,5-07	€ 478,00		5,5-07	€ 448,00			
07-04	€ 478,00	€ 488,00	07-04	€ 448,00	€ 458,00		
06-12		€ 523,00	06-12		€ 493,00		
08-09		€ 523,00	08-09		€ 493,00		
14-04		€ 517,00	14-04		€ 545,00		
22-02		€ 541,00	22-02		€ 571,00		

\* **Auto-air bleed pump head:** PVDF head/fittings, Ceramic balls, o-rings FPM (or EPDM) - 20l/h PVC head and LIP valves  
 \*\* **NOTE:** using Auto-Bleed or Polymer PMMA configuration pump pressure performance decreases of about 50%

**FX WALL MOUNTING SUPPORT AISI** list price **€ 44,00** with **LIP valves** **DEDUCT** from MX-FXS-FX list price **- € 10,00**

**FOR CHLORINE SENSORS , ELECTRODES AND ELECTRODE HOLDERS, PLEASE GO ON PAGES 16÷17**

<b>STROKE LENGTH ADJUSTMENT</b> for FX series:	<b>ADD</b> to above list price <b>+ € 65,00</b>
<b>SILENCED VERSIONS</b> for all series:	<b>ADD</b> to above list price <b>+ € 20,00</b>
<b>LEVEL</b> switch+bracket for all series:	<b>ADD</b> to above list price <b>+ € 36,00</b>

**CTRL series AVAILABLE** 110Vac 60Hz • 12-24Vdc: **add 10% to above list prices** (up to 08-05 type)

**NEW**

### MEASURING PARAMETERS pH and RX (ORP)

The CTRL2 POOL/MX is a compact system, with dual controller PH and RX measurements including two solenoid driven dosing pumps. CTRL2 POOL is an extremely versatile and easy to operate and with excellent price/quality ratio:

- PH measurement can be changed to RX just a simple programming and using RX electrode

**BENEFIT:** The above feature allow dealers to stock one type for all controller thus reducing stock value or saving problems when issuing orders to manufacturer. The quality is well included in the price relationship.

A friendly user menu programming it is almost self-explanatory and the elegant wide display allows easy vision.

Two types of programming menu: **Basic** and **Expert**.

CTRL2 POOL/MX features two solenoid driven dosing pumps with **adjustable** flow rate.

### MAIN CHARACTERISTICS

#### INPUTS

- ✓ From pH and RX electrodes
- ✓ From Proximity switch (flow sensor)
- ✓ From Temperature probe (probe upon request)
- ✓ From 1 Level switch input for external chemical tank

#### OUTPUTS

- 2 set-point ON-OFF/ PWM mode
  - PWM mode for peristaltic proportional operations
- 1 Alarm output relay

- Universal power supply 90÷240 Vac (available 12÷24 Vdc);
- 485 communication between measuring unit – transmitter;
- ON-OFF mode; Timed pulses mode (PWM) start/stop mode;
- Hysteresis and Delay adjustable;
- Max / min Alarm output;
- PH range: 0÷14; Resolution: pH±0,01; PH priority;
- REDOX range ± 0÷1000 mV; Resolution ± 1 mV;
- PWM / timed pulses activating point: 1.50 pH / 150 mV;
- Timer for Start-up / Stop unit operations;
- Basic / Expert menu programming;
- Temperature measurements;
- 2 Level control of external chemical tank

#### DISPLAY

*Graphic display 70x50;  
Simultaneous measurements;  
Scrolling output keys and programming menu;  
Graphic icons for status of outputs,  
Alarmsignaling;  
Display power saving control;  
Set point relay activation;  
Error and No link (485 communication);  
Level control and Flow sensor status.*

#### MX dosing pumps performances

	l/h	bar
▪ ADJUSTBLE flow rate	3	3
	5	4

**CTRL2 POOL / MX**

**list price € 36,00**

### ACCESSORIES PROVIDED WITH THE PUMPS

**2+2 m** - Discharge Hose (white)

**2+2 m** - Suction Hose PVC flexible (transparent)

**1.5+1,5 m** - Air Bleed Hose PVC flexible (transparent)

**2** - Injection lance with No-return sleeve valve

**2** - Foot Valve / Filter

**2** - Level switch with fixing bracket (only for C/AL model)

## VX SERIES MAIN FEATURES

- CERAMIC ball check valves 30÷50÷80 l/h
- Reed "LIP" valve types 05-20/10-10/20-05
- Die-cast aluminium housing / IP65 rating
- Epoxy anti-acid coating
- Stroke frequency adjustment
- Level control setting
- PTFE diaphragm
- Standard accessories



Type	VX C/A	VX C/AL	VX P/A	VX MF	PVDF conf.*	POLYMER conf.*	Auto-Bleed*
05-20	€ 496,00	€ 528,00	€ 559,00	€ 660,00	Not available	Not available	Not available
10-10	€ 375,00	€ 407,00	€ 506,00	€ 605,00	ADD + € 62	ADD + € 212	ADD + € 25
20-05	€ 430,00	€ 462,00	€ 509,00	€ 609,00	Not available	ADD + € 226	Not available
30-04	€ 585,00	€ 616,00	€ 641,00	€ 744,00		ADD + € 220	
50-03	€ 603,00	€ 635,00	€ 660,00	€ 773,00			
80-01	€ 603,00	€ 635,00	€ 660,00	€ 773,00			

LEVEL switch for all series: ADD to above list price + € 36,00

\* VX with "LIP" type valves **deduct** from list price – € 12,00

\* **PVDF aggressive chemicals configuration:** PVDF pump head/fittings, double or single Ceramic ball checks, o-rings FPM (or EPDM or PTFE), Foot and Injection no-return valve PVDF spring / Ceramic ball check, PVDF suction/discharge hoses

\* **POLY polymer viscous liquid configuration:** PMMA pump head, Ceramic ball checks (Ø11), Fittings PP 1 1/8", seals FPM (or EPDM), Injection fitting and Strainer (without no return valve), hoses PVC flexible 10x14, discharge.

\*\* **NOTE:** using Auto-Bleed or Polymer PMMA configuration pump pressure decrease of about 50%

l/h	bar	Frequency	cc (ml)	Suction lift	Hose Ø	Pump head	Valve type	o-rings*	Fittings
5	20	160 imp/min	0,52	2m	4x6 mm	PVC 20bar 3/8"	BALL checks	FPM	PP
10	10	160 imp/min	1,04	2m	4x6 mm	PP 3/8"	BALL checks	FPM	PP
20	5	160 imp/min	2,08	2m	4x6 mm	PP 3/8"20lt	BALL checks	FPM	PP
30	4	180 imp/min	2,08	1,5m	10x14 mm	PVC 1/2"	BALL checks	FPM	PP/PVC
50	3	180 imp/min	4,60	1,5m	10x14 mm	PVC 1/2"	BALL checks	FPM	PP/PVC
80	1	180 imp/min	7,40	1,5m	10x14 mm	PVC 1/2"	BALL checks	FPM	PP/PVC

\*NOTE : available EPDM o-rings (for PTFE o-rings ask FWT technical department) • AVAILABLE 110Vac 60Hz **add 10%**

<b>VX C/A</b>	<b>CONSTANT flow rate – ON/OFF mode</b> flow rate is obtained by adjusting pulse frequency percentage (%); Also it features reduction frequency scale of 1/5 reducing max frequency range from 100% to 20%. ⇒ Injections frequency adjustment 0÷100%, max frequency 120 imp/min
<b>VX C/AL</b>	<b>CONSTANT flow rate – ON/OFF mode</b> ⇒ Provided with <b>level control</b> and <b>floating level switch</b> , LED alarm. <b>Double level</b> available upon request
<b>VX P/A</b>	<b>PROPORTIONAL TO EXTERNAL PULSE CONTACT</b> modes Divider (n pulses: 1 inject.); Multiplier (1 xN pulse) ⇒ Proportional mode / Constant mode / Injections frequency adjustment 0÷100%
<b>VX MF</b>	<b>MULTIFUNCTIONS</b> dosing pump which comprehend all dosing functions ... and more. Benefit: reduced stock. ⇒ Proportional to external digital pulses ⇒ Proportional to external current signal 0/4÷20mA or reverse ⇒ Constant-ON/OFF (manual) mode with digital adjustment: imp/min; imp/hour; max 120 imp/min ⇒ Digital timer, weekly and daily programming ⇒ Strokes / injection control with flow sensor (upon request)

**Standard Accessories KIT1 STD** pumps 1÷20l/h, included with the pump

- 1 - Injection fitting 3/8" PP/no-return valve "sleeve" FPM;
- 2 m - Discharge Hose PE (semi-rigid) 4x6mm;
- 2 m - Suction Hose PVC (flexible) / Air Bleed Hose; 4x8mm
- 1 - Filter fitting PP / Foot Valve "Lip" type FPM

- **KIT1** standard for dosing pumps 1÷20l/h, list price € 24,00

**Standard Accessories KIT2 STD** pumps 30÷50÷80l/h, included with the pump

- 1 - Injection valve fitting 1/2" PP-PVC/no-return valve FPM;
- 2 m - Discharge Hose PE (semi-rigid) 10x14mm;
- 2 m - Suction Hose PVC (flexible) 10x14mm;
- 1 - Filter PP

- **KIT2** standard for dosing pumps 30÷50÷80l/h, list price € 34,00

**Upon request Accessories KIT3** pumps 1÷20l/h

- 1 - CERAMIC ball check PVDF spring return / Injection fitting 3/8"PP;
- 2 m - Discharge Hose PE (semi-rigid) 4x8mm;
- 2 m - Suction Hose PVC (flexible) / Air Bleed Hose; 4x6mm
- 1 - CERAMIC ball check / Foot Valve/Filter PP

- **KIT3** for dosing pumps 1÷20l/h, list price € 42,00

**ADD to pump list price – € 22,00**

Available adaptor for hoses 6x8 add € 2,00 with hoses same size

Available adaptor for hoses 10x8 add € 20,00 with hoses same size

**Upon request Accessories KIT3 PVDF** pumps 1÷20l/h

- 1 - CERAMIC ball check PVDF spring return / Injection fitting 3/8" PVDF;
- 2 m - Discharge Hose PE (semi-rigid) 4x8mm;
- 2 m - Suction Hose PVC (flexible) / Air Bleed Hose; 4x6mm
- 1 - CERAMIC ball check / Foot Valve/Filter PVDF

- **KIT3** for dosing pumps 1÷20l/h, list price € 54,00

**ADD to pump list price – € 30,00**

Available adaptor for hoses 6x8 add € 2,00 with hoses same size

Available adaptor for hoses 10x8 add € 31,00 with hoses same size

**Upon request Accessories KIT aggressive chemicals** pumps 1÷20l/h

- 1 - Spring return PVDF/CERAMIC ball/PVDF spring return/Injection fitting 3/8" PVDF;
- 2 m - Discharge Hose PVDF (semi-rigid) 4x8mm;
- 2 m - Suction Hose PVDF (semi-rigid) / Air Bleed Hose; 4x6mm
- 1 - CERAMIC ball Foot Valve / Filter PVDF

- **KIT aggressive chemicals** for dosing pumps 1÷20l/h, list price € 114,00

**ADD to pump list price – € 90,00**

Available adaptor for hoses 6x8 add € 2,00 with hoses same size

Available adaptor for hoses 10x8 add € 31,00 with hoses same size



Other accessories KIT configuration available upon request.

**NOTE:** seals configuration follow the actual pump liquid ends configuration **UNLESS** otherwise requested, examples: Standard pump FPM o-rings and seals liquid ends and accessories Kit. Available in EPDM, Silicon, PTFE



# PERISTALTIC DISPENSERS



**VPER-N**  
230V 50Hz

## VPER

Peristaltic **VARIABLE SPEED** flow control. Standard peristaltic hose: Santoprene (on request Silicone) • Power rating 90÷260V 50Hz

- IP65 plastic housing • Accessories **KITWT**
- Level control **ADD +€ 40,00** upon request.
- With removable power cable via connectors **ADD +€ 9,50** upon request.

Part no.	Model	Flow rate	Max pressure	Displacement	Motor rpm	List price
PBV4337274FT	VPER 1-3	1 l/h	3 bar	0,45 ml	37 rpm	€ 119,00
PBV4336574FT	VPER 4-3	4 l/h	3 bar	1,80 ml	52 rpm	€ 119,00
PBV4337374FT	VPER 12-1	12 l/h	1 bar	1,85 ml	108 rpm	€ 119,00

## UPER minimum order 12 pieces

Peristaltic with **FIXED** flow **without** housing • Standard hose: Santoprene • **NO** Accessories provided

Part no.	Model	Flow rate	Displacement	Motor rpm	List price
<b>NEW</b>	<b>UPER 0,5-1bar</b>	<b>0,5 l/h</b>	0,83 ml/rpm	10 rpm	€ 65,00
PPF0219264FT	<b>UPER 1,1-1bar</b>	<b>1,1 l/h</b>	0,92 ml/rpm	20 rpm	€ 65,00
PPF0218764FT	<b>UPER 2,2-1bar</b>	<b>2,2 l/h</b>	0,92 ml/rpm	48 rpm	€ 65,00
PPF0231164FT	<b>UPER 3,3-1bar</b>	<b>3,3 l/h</b>	0,92 ml/rpm	60 rpm	€ 65,00

\*Available also 24Vdc or 110Vac power / Available **UPER 6 l/h list price 75,00**



**UPER**

## VPER HF

Peristaltic with **VARIABLE SPEED** flow rate with plastic housing • Max pressure **1 BAR** • Standard peristaltic hose NORPRENE (available Santoprene, Silicon) • Provided with accessories **KITHF**

Part no.	Model	Flow rate	Displacement	Motor rpm	List price
PBH4230574FT	<b>VPER HF 100-1,5bar</b>	<b>10÷100 l/h</b>	11,1 ml/rpm	150 rpm	€ 388,00

Power supply: 90÷260V 50Hz

**Note:** HF peristaltic series works at max efficiency at 80% adjustment / 15 min duty



**VPER-HF**

## TVPER / TUPER

**Peroxide or flocculant control for residential small pools or for biological activators**

- Peristaltic with integral **TIMER** (Digital or Analog settings) • Adjustable time setting / 8 weekly
- Peristaltic variable flow rate by motor speed adjustment or fixed speed • Provided accessories kit
- Working pressure up to 3 bar • Power supply 230V 50Hz
- Level control upon request **ADD** to list price **euro 39,00**

Model	Type	Flow rate	Maxpress.	Motor rpm	List price
<b>TVPER 1-3 or 4-3</b>	<b>1-3 / 4-3</b>	<b>1 or 4 l/h</b>	3 bar	37/52 rpm	€ 294,00
<b>T-UPER 1,1 or 2,2</b>	<b>1,1 / 2,2</b>	<b>1,1 or 2,2 l/h</b>	1 bar	20/48 rpm	€ 249,00



**TVPER-N**  
230V 50Hz

## ACCESSORIES KIT PROVIDED WITH PERISTALTIC DISPENSERS

Accessories **KITWT**:

**1**-Injection fitting 3/8" PP-PVC no-return valve FPM;

**2+2 m**- Discharge/Suction Hose PVC;

**1**-Filter PP; no-return valve FPM

**INCLUDED WITH UNIT**

SCO000702 **SPARE List price € 25,00**



Accessories **KITHF**:

**1**-Injection fitting 3/8" PP-PVC no-return valve FPM;

**4 m**- Suction /Discharge Hose PVC;

**2**- Fastening clips and fittings;

**1**- Filter PP; no-return valve FPM

**INCLUDED WITH UNIT**

SCO0001201 **SPARE List price € 105,00**

Accessories **KITDET**:

Suitable for *mod. VPER DET; UPER CD*

**1**- Injection fitting 90° PP/EPDM seals;

**1**- Filter fitting PP/AISI body/EPDM or;

**4 m**- Suction Hose PVC (flexible);

**SUBTRACT from list price + € 5,00**

SCO0000202 **SPARE List price € 18,00**



Accessories **KITBRIGHT**:

**1**- Injection valve fitting 1/2" 90°/AISI Ball valve/EPDM

**2 m+ 2m**- Hoses;

**1**- Filter fitting PP/AISI body/EPDM;

**ADD to list price + € 19,00**

SCO0000301 **SPARE List price € 44,00**





**THREADED DRY DIAL Multi-jets**

**Cold/hot water meter**

**STANDARD 4 imp/lt**

**WMC**

**COLD WATER METERS THREADED pulse emitter STANDARD 4 imp/lt -Max 30°C**

Part no.	Model	Connections	Ø mm	Nominal Flow	List price
1CNT028	<b>WMTC 13</b>	1/2"	13	1,5 m³/h	<b>€ 95,00</b>
1CNT086	<b>WMTC 20</b>	3/4"	20	2,5 m³/h	<b>€ 110,00</b>
1CNT066	<b>WMTC 25</b>	1"	25	3,5 m³/h	<b>€ 194,00</b>
1CNT053	<b>WMTC 30</b>	1 1/4"	30	5 m³/h	<b>€ 235,00</b>
1CNT040	<b>WMTC 40</b>	1 1/2"	40	10 m³/h	<b>€ 385,00</b>
1CNT111	<b>WMTC 50</b>	2"	50	15 m³/h	<b>€ 385,00</b>

**WMH**

**HOT WATER METERS THREADED pulse emitter STANDARD 4 imp/lt -Max 90°C**

Part no.	Model	Connections	Ø mm	Nominal Flow	List price
1CNT007	<b>WMTH 13</b>	1/2"	13	1,5 m³/h	<b>€ 97,00</b>
1CNT017	<b>WMTH 20</b>	3/4"	20	2,5 m³/h	<b>€ 111,00</b>
1CNT011	<b>WMTH 25</b>	1"	25	3,5 m³/h	<b>€ 198,00</b>
1CNT010	<b>WMTH 30</b>	1 1/4"	30	5 m³/h	<b>€ 243,00</b>
1CNT009	<b>WMTH 40</b>	1 1/2"	40	10 m³/h	<b>€ 398,00</b>
ACT0250201	<b>WMTH 50</b>	2"	50	15 m³/h	<b>€ 621,00</b>

**AVAILABLE THREADED TEFLON COATED WATER METERS, PRICE UPON REQUEST**

**FLANGED Woltman type Cold water meter**



**WMFC**

**COLD WATER METERS FLANGED**

**Woltman type pulse emitter - Max 30°C Upon request other pulses configuration available**

Part no.	Model	Connections	pulse / lt	Ø mm	Nom. Flow	List price
ACT0250603	<b>WMFC 50</b>	2"	<b>1/10 lt</b>	50	15 m³/h	<b>€ 580,00</b>
ACT0300303	<b>WMFC 65</b>	2 1/2 "	<b>1/10 lt</b>	65	25 m³/h	<b>€ 665,00</b>
ACT0350202	<b>WMFC 80</b>	3"	<b>1/10 lt</b>	80	40 m³/h	<b>€ 747,00</b>
ACT0150105	<b>WMFC 100</b>	4"	<b>1/1000 lt</b>	100	60 m³/h	<b>€ 799,00</b>
ACT0400102	<b>WMFC 150</b>	6"	<b>1/1000 lt</b>	150	150 m³/h	<b>€ 1.476,00</b>
ACT0600101	<b>WMFC 200</b>	8"	<b>1/250 lt</b>	200	250 m³/h	<b>€ 1.476,00</b>

**PULSE / LITRES CONFIGURATION CHARTS**  
Flow rates are indicated in m³/h unless otherwise stated

Diam.Ø mm	Inch	Nominal Flow	Pulses per lt			Liters / Pulses										
			4	2	1	2.5	5	10	25	50	100	250	500	1000		
<b>13*</b>	1/2"	1.5 m³/h	●*	□	□	□	□	□	□	□	□	□	□	□	□	□
<b>20*</b>	3/4"	2.5 m³/h	●*	□	□	□	□	□	□	□	□	□	□	□	□	□
<b>25*</b>	1"	3.5 m³/h	●*	□	□	□	□	□	□	□	□	□	□	□	□	□
<b>30*</b>	1 1/4"	5 m³/h	●*	□	□	□	□	□	□	□	□	□	□	□	□	□
<b>40*</b>	1 1/2"	10 m³/h	●*	□	□	□	□	□	□	□	□	□	□	□	□	□
<b>50*</b>	2"	15 m³/h	●*	□	□	□	□	□	□	□	□	□	□	□	□	□
<b>50**</b>	2"	15 m³/h				□	□	●*	□	□	□	□	□	□	□	□
<b>65**</b>	2 1/2"	25 m³/h				□	□	●*	□	□	□	□	□	□	□	□
<b>80**</b>	3"	40 m³/h				□	□	●*	□	□	□	□	□	□	□	□
<b>100**</b>	4"	60 m³/h							□	□	□	□	□	□	□	●*
<b>150**</b>	6"	150 m³/h							□	□	□	□	□	□	□	●*
<b>200**</b>	8"	250 m³/h												●*	□	□

\* THREADED CONNECTION  
\*\* FLANGED CONNECTION

●*	Standard pulses
□	Pulses upon request

## MIXERS



### MIX/FE series

**FAST MIXERS** for small tanks (100÷300 lt), 1400 rpm. Steel shaft and impeller AISI with **PP coating**, Flange PVC (**available AISI shaft ADD+ 25%** on list price), seals V type. Impeller marine type.

Part no.	Model	Shaft length mm / Material	Power supply	Motor power / rpm	List price
AGT1241003	<b>MIX/FE 3-6</b>	600 / PP coating	230/400V – 3 phase – 50 Hz	0,18 kW / 4 pole / <b>1400rpm</b>	€ 575,00
AGT1242003	<b>MIX/FE 1-6</b>	600 / PP coating	230V – 1 phase – 50 Hz	0,18 kW / 4 pole / <b>1400rpm</b>	€ 575,00
AGT1241103	<b>MIX/FE 3-8</b>	800 / PP coating	230/400V – 3 phase – 50 Hz	0,18 kW / 4 pole / <b>1400rpm</b>	€ 575,00
AGT1242103	<b>MIX/FE 1-8</b>	800 / PP coating	230V – 1 phase – 50 Hz	0,18 kW / 4 pole / <b>1400rpm</b>	€ 575,00

### MIX/MFV series

**MEDIUM MIXERS** with rigid coupling by motors 4–6–8 poles with gearbox, support bearing, oil seal This mixers are suitable for mixing or dissolving chemical products with medium viscosity into **little-medium tanks**. **STANDARD SHAFT/MARINE IMPELLER** 4 blades 35° in **AISI 304**. **ON REQUEST AISI 316 ADD+10%**. **SHAFT/IMPELLER coated with Rubber Ebanite or PVC ADD+25%**

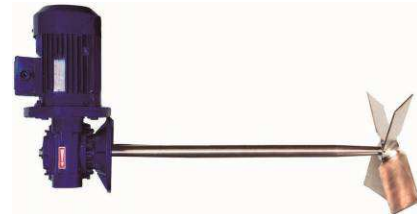


Single phase motor (up to 0,37 kW) **ADD +10%**

Part no.	Model	Shaft length mm / Material	Power supply	Motor power / rpm	List price
Require code at the order indicating <b>model/material shaft/impeller power supply KW / rpm</b>	<b>MIX/FMV 3-6/018</b>	600 / AISI 304	230/400V-3phase-50 Hz	0,18 kW / 6 pole / <b>900rpm</b>	€ 1.190,00
	<b>MIX/FMV 3-6/025</b>	600 / AISI 304	230/400V-3phase-50 Hz	0,25 kW / 6 pole / <b>900rpm</b>	€ 1.394,00
	<b>MIX/FMV 3-8</b>	800 / AISI 304	230/400V-3phase-50 Hz	0,37 kW / 6 pole / <b>900rpm</b>	€ 1.387,00
	<b>MIX/FMV 3-90/055</b>	900 / AISI 304	230/400V-3phase-50 Hz	0,55 kW / 6 pole / <b>900rpm</b>	€ 1.575,00
	<b>MIX/FMV 3-10/075</b>	1000 / AISI 304	230/400V-3phase-50 Hz	0,75 kW / 6 pole / <b>900rpm</b>	€ 1.800,00
	<b>MIX/FMV 3-125</b>	1250 / AISI 304	230/400V-3phase-50 Hz	1,1 kW / 6 pole / <b>900rpm</b>	€ 2.071,00
	<b>MIX/FMV 3-150</b>	1500 / AISI 304	230/400V-3phase-50 Hz	1,5 kW / 6 pole / <b>900rpm</b>	€ 2.522,00

### MIX/SV series

**SLOW MIXERS** The shaft is directly coupled with the gear box worm-wheel . This mixers are suitable for flocculation/neutralization, polyelectrolyte preparation for **tanks up to 5m<sup>3</sup>**. Mounting via gearbox flange. **STANDARD SHAFT/ IMPELLER** 4 blades 45° **AISI 304**. **ON REQUEST AISI 316 ADD+10%**. **SHAFT/IMPELLER coated with Rubber Ebanite or PVC ADD+25%**



Single phase motor (up to 0,37 kW) **ADD +10%**

Part no.	Model	Shaft length mm / Material	Power supply	Motor power / rpm	List price
Require code at the order indicating <b>model/material shaft/impeller power supply KW / rpm</b>	<b>MIX/SV 3-7</b>	700 / AISI 304	230/400V-3phase-50 Hz	0,18 kW / 4 pole / <b>140rpm</b>	€ 1.224,00
	<b>MIX/SV 3-8</b>	800 / AISI 304	230/400V-3phase-50 Hz	0,25 kW / 4 pole / <b>90rpm</b>	€ 1.371,00
	<b>MIX/SV 3-10/037</b>	1000 / AISI 304	230/400V-3phase-50 Hz	0,37 kW / 4 pole / <b>90rpm</b>	€ 1.507,00
	<b>MIX/SV 3-10/055</b>	1000 / AISI 304	230/400V-3phase-50 Hz	0,55 kW / 4 pole / <b>90rpm</b>	€ 1.911,00
	<b>MIX/SV 3-120</b>	1200 / AISI 304	230/400V-3phase-50 Hz	0,75 kW / 4 pole / <b>90rpm</b>	€ 2.092,00
	<b>MIX/SV 3-150/1,1</b>	1500 / AISI 304	230/400V-3phase-50 Hz	1,1 kW / 4 pole / <b>90rpm</b>	€ 2.339,00
	<b>MIX/SV 3-150/1,5</b>	1500 / AISI 304	230/400V-3phase-50 Hz	1,5 kW / 4 pole / <b>70rpm</b>	€ 2.746,00



### MIX MAN series

**MANUAL MIXERS** for medium tanks (up to 300 lt), PVC shaft and impeller

Part no.	Model	Shaft length mm / Material	List price
AGTM000002	<b>MIX-MAN 60</b>	60 cm	€ 158,00
AGTM000102	<b>MIX-MAN 80</b>	80 cm	€ 171,00

**D-TANK dosing tanks**



Dosing tanks made of first-rate medium/high-density and anti-UV linear polyethylene using the rotational moulding method, which gives a single seamless item free from internal stress. The temperature range is -20°C to +60°C. Certified for food stuff. Graduated scale in litres, threaded LID.

Part no.	Model	Diameter mm	Height mm	List price
1SRB045	<b>D-TANK 60 lt</b>	380	670	<b>€ 158,00</b>
1SRB002	<b>D-TANK 108 lt</b>	470	680	<b>€ 174,00</b>
1SRB003	<b>D-TANK 230 lt</b>	610	870	<b>€ 237,00</b>
1SRB004	<b>D-TANK 315 lt</b>	680	960	<b>€ 315,00</b>
1SRB005	<b>D-TANK 530 lt</b>	830	1065	<b>€ 495,00</b>
1SRB006	<b>D-TANK 1040 lt</b>	1005	1415	<b>€ 944,00</b>

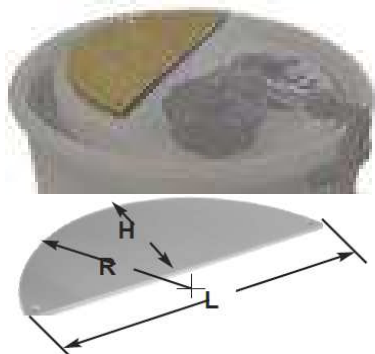
**BUNDS-TANK Rotational moulding PE dosing tanks**



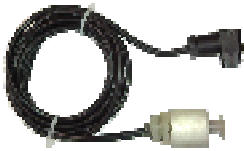
**Open bunds for dosing tanks** made of first-rate medium/high-density and anti-UV linear PE rotational moulding method. Temperature range - 20°C to +60°C. Certified for food materials. Threaded LID. Available three colors: **White, Grey, Black**

Part no.	Model	Diameter mm	Height mm	List price
ASB0001001	<b>BUND</b> for D-tank 60-108 lt	565	635	<b>€ 224,00</b>
ASB0000801	<b>BUND</b> for D-tank 230 lt	565	685	<b>€ 385,00</b>
1SRB038	<b>BUND</b> for D-tank 315 lt	835	965	<b>€ 509,00</b>
1SRB042	<b>BUND</b> for D-tank 530 lt	885	1070	<b>€ 621,00</b>
1SRB027	<b>BUND</b> for D-tank 1040 lt	1100	1430	<b>€ 1.075,00</b>

**SUPPORT MIXERS PVC FOR DOSING TANKS**



Part no.	Model thickness 10mm	L mm	H mm	R mm	List price
1ACS043	Tank Support x60 lt tank	334	114	180	<b>€ 76,00</b>
1ACS027	Tank Support x108 lt tank	415	200	208	<b>€ 82,00</b>
1ACS025	Tank Support x230 lt tank	535	220	273	<b>€ 100,00</b>
1ACS018	Tank Support x315 lt tank	610	275	307	<b>€ 126,00</b>
1ACS032	Tank Support x530 lt tank	760	320	386	<b>€ 145,00</b>
Part no.	Model thickness 20mm	L mm	H mm	R mm	List price
1ACS056	Tank Support x230 lt tank	535	220	273	<b>€ 126,00</b>
1ACS057	Tank Support x315 lt tank	610	275	307	<b>€ 164,00</b>
1ACS058	Tank Support x530 lt tank	760	320	386	<b>€ 195,00</b>
1ACS019	Tank Support x1000 lt tank	935	415	470	<b>€ 249,00</b>

**FLOATING LEVEL SWITCH** with fixing bracket to foot valve/filter fitting

Part no.	Model	List price
SSO000402	LEVEL SWITCH+SUPPORT BRACKET PP	€ 36,00
DSA0001101	FILTER BRACKET PP	€ 6,00

**AISI WALL MOUNTING BRACKET** for FX-FXS dosing pumps

Part no.	Model	List price
DSU0005001	SUPPORT BRACKET AISI 316 (2 mm)	€ 44,00
DSU0005002	SUPPORT BRACKET AISI 316 (3 mm)	€ 56,00

**FLOW SENSOR to control dosing pump pulses / injections status**

It can be mounted on the following models which can program the exact alarm point:

MX-MXE P/D+ • FX-FXS P/D+ • MX-MXE MF+ • FX-FXS MF • VX MF

Part no.	Model	List price
SSN000101 / SSN0000702	FLOW SENSOR 3/8" (FPM - EPDM)	€ 148,00
SSN0001001	FLOW SENSOR 1/2" 30÷50÷80 l/h	€ 169,00

**SUCTION LANCES PVC** provided with foot valve/filter, level switch. **FPM seal or EPDM or TFE/P**

Part no.	Model	List price
SSO0000805	SUCTION LANCE FILTER/ LEVEL SWITCH 35 cm (up to 20 l/h)	€ 120,00
SSO0000501	SUCTION LANCE FILTER/ LEVEL SWITCH 60 cm (up to 20 l/h)	€ 123,00
SSO0000502	SUCTION LANCE FILTER/ LEVEL SWITCH 80 cm (up to 20 l/h)	€ 130,00
SSO0000503	SUCTION LANCE FILTER/ LEVEL SWITCH 100cm (up to 20 l/h)	€ 130,00
SSO0000601	SUCTION LANCE FILTER/ LEVEL SWITCH 100cm (30÷50÷80 l/h)	€ 181,00

**RELIEF or BACK-PRESSURE VALVE** (max 250 l/h) Other valves sizes available upon request

Part no.	Model	List price
AVA0010101	SRV DN10 PVC-PTFE-EPDM (max 250 l/h) with hose nut	€ 254,00
KRA0005301	KIT PP NIPPLES-HOSE NUT 4x6 FOR RELIEF VALVE	€ 6,00
KRA0005311	KIT PVDF NIPPLES-HOSE NUT 4x6 FOR RELIEF VALVE	€ 13,00
KRA0005401	KIT PP NIPPLES-HOSE NUT 10X14 FOR RELIEF VALVE	€ 13,00

**ANTI-SYPHON VALVE** max backpressure 2 bar. Available with EPDM valve upon request

Part no.	Model	List price
2144077	ASV 3/8" FPM sleeve no-return valve	€ 18,00

**PULSATION DAMPNER** PVC configuration, FPM diaphragm, 3/8" connection, max 10 bar / 0,05 lt

Part no.	Model	List price
APL0000301	DAMP 3/8 10bar Available other sizes and configurations upon request	€ 397,00

**INJECTION LANCES** fitting extension 1/2" (Gm-Gf) PVDF max 10 bar, easy valve inspection

Part no.	Model	List price
SSO1431001	QUICK REMOVABLE INJECTION LANCE PVDF-FPM	€ 120,00
SSO1431011	QUICK REMOVABLE INJECTION LANCE PVDF-EPDM	€ 120,00
SSO1431021	QUICK REMOVABLE INJECTION LANCE PVDF-TFE/P	€ 125,00

**INJECTION VALVE/IN-LINE ELECTRODE CLAMP SADDLE**

Part no.	Model	List price
AFA0000601	Clamp saddle DN50 fitting for injection valve 1/2" or IN-line electrode holder ELINE. Material PP 1/2" complete with bolts+nuts	€ 9,00
AFA0000801	Clamp saddle DN63 fitting for injection valve 1/2" or IN-line electrode holder ELINE. Material PP 1/2" complete with bolts+nuts	€ 10,00
1RAC011	Reduction fitting PP for injection valves up to 20 l/h 1/2"- 3/8"	€ 4,00

## PUMP HEADS CHECK VALVES



Part no.	BALL CHECK VALVES	List price	
SVA0005303	CERAMIC ball check, FPM o-ring, PE housing, 1÷20 l/h	€ 8,00	
SVA0005306	CERAMIC ball check, EPDM o-ring, PE housing, 1÷20 l/h	€ 8,00	
SVA0005302	AISI ball check, PTFE o-ring, PE housing, 1÷20 l/h	€ 107,00	
KVA0002801	KIT 20 SUCT-DISCH.2Xceram.ball,FPM o-ring, PVDF spring, 1÷20 l/h	€ 107,00	
KVA0002802	KIT 20 SUCT-DISCH.2Xceram.ball,EPDM o-ring, PVDF spring, 1÷20 l/h	Not available yet	
KVA0002601	KIT suct-disch AISI ball check, o-ring+seat FPM, Viscous liquids, 20 l/h	Not available yet	
SVA0007601	CERAMIC ball, FPM o-ring, PVDF seat, Viscous liquids, 1÷20 l/h	Not available yet	
KIT Part no.	KIT "LIP" CHECK VALVES*+SEAT only KIT 20 pcs	KIT 20	Unit price
KVA0002701	LIP valve FPM+SEAT (Viton®) 1÷20 l/h, only KIT 20 pcs	€ 59,00	€ 3,00
KVA0002702	LIP valve EPDM+SEAT (Dutral®) 1÷20 l/h, only KIT 20 pcs	€ 59,00	€ 3,00
2020046	LIP valve FPM (Viton®) VX series 30÷50÷80 l/h,**KIT 10	€ 41,00	€ 4,00
2020047	LIP valve EPDM (Dutral) VX series 30÷50÷80 l/h**KIT 10	€ 41,00	€ 4,00

\*\*\*NOTE: LIP valves 30÷50÷80 l/h are without seat and also used as FOOT VALVES no-return valves for all types.

## FOOT VALVES / FILTERS

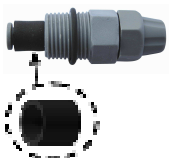


Part n°	FOOT VALVES LIP / FILTERS 1÷20 l/h	List price
2142020	Foot valve LIP type FPM / Filter Glasswool, PP fitting 1÷20 l/h	€ 16,00
2142022	Foot valve LIP type EPDM / Filter Glasswool, PP fitting 1÷20 l/h	€ 16,00
Part n°	FOOT VALVES LIP TYPE / FILTERS 30÷50÷80 l/h	List price
2142040	Foot valve LIP type FPM/Filter Glasswool, PP fitting, VX30÷50÷80 l/h	€ 17,00
2142041	Foot valve LIP EPDM / Filter Glasswool, PP fitting, VX 30÷50÷80 l/h	€ 17,00



Part n°	FOOT BALL CHECKS VALVES / FILTERS	List price
SFT0030002	CERAMIC ball foot valve/Fitting PP/FPM seal, 4x6 6x8 10x14 hose	€ 21,00
KFT0030002	KIT10 Ceramic ball foot valve/Fitting PP/FPM seal, 4x6 6x8 10x14 hose	€ 186,00
SFT0030001	CERAMIC ball foot valve/Fitting PVDF/FPM seal, 4x6 6x8 10x14 hose	€ 27,00
KFT0030001	KIT10 Ceram. ball foot valve/Fitting PVDF/FPM seal, 4x6 6x8 10x14 hose	€ 244,00

## INJECTION VALVES / FITTINGS



Part n°	STANDARD INJECTION VALVE-NO-RETURN "SLEEVE" TYPE	List price
2144037	KIT 10 Injection valve 3/8" PP fitting / FPM sleeve, 1÷20 l/h, hose 4x6	€ 6,50
2144038	KIT 10 Injection valve 3/8" PP fitting / EPDM sleeve, 1÷20 l/h, hose 4x6	€ 6,50
2020007	NO RETURN valve, FPM sleeve, 1÷20 l/h only KIT 10 pieces	€ 26,00
2020010	NO RETURN valve, EPDM sleeve, 1÷20 l/h only KIT 10 pieces	€ 26,00



Part n°	INJECTION VALVE-SPRING BALL CHECK NO-RETURN VALVE	List price
SVA0030002	Inject.valve PP/Ceramic ball/PVDFspring/FPM, 140lt, 4x6/6x8/10x14 hose	€ 21,00
SVA0030012	Inject.valve PP/Ceramic ball/PVDFspring/EPDM, 140lt, 4x6 6x8 10x14 hose	€ 21,00
SVA0030001	Inject.valve, spring PVDF/Ceramic ball/FPM, 140lt, 4x6 6x8 10x14 hose	€ 37,00
SVA0030011	Inject.valve, spring PVDF/Ceramic ball/EPDM, 140lt, 4x6 6x8 10x14 hose	€ 37,00



Part n°	STANDARD INJECTION "LIP" NO-RETURN VALVE 30÷50÷80 l/h	List price
2144029	Injection valve 1/2" PP-PVC fitting, LIP type no return valve FPM, FPM o-ring, VX series 30÷50÷80 l/h	€ 24,00
SVA0005201	Injection valve 1/2" PP-PVC fitting, LIP type no return valve EPDM, EPDM o-ring, VX series 30÷50÷80 l/h	€ 24,00

## SUCTION / DISCHARGE HOSES

Part n°	Description	Unit price 2m	List price
ATU0008201	PVC flexible suction hose Ø 4x6 20 l/h	€ 3,40	100 m € <b>87,00</b>
DUT0000006	PVC flexible suction hose Ø 4x6 20 l/h	-----	25 m € <b>30,00</b>
DTU0002203	PVC flexible suction hose Ø 10x14 30÷50÷80 l/h	€ 16,00	50 m € <b>140,00</b>
DTU0002202	PVC flexible suction hose Ø 10x14 30÷50÷80 l/h	-----	10 m € <b>42,00</b>
ATU0008301	PE semi-flexible discharge hose Ø4x6 20 l/h	€ 4,00	100 m € <b>79,00</b>
2003021	PE semi-flexible discharge hose Ø4x6 20 l/h	-----	25 m € <b>28,00</b>
DTU0000103	PE semi-flexible discharge hose Ø10x14 30÷50÷80 l/h	€ 20,00	50 m € <b>156,00</b>
DTU0000102	PE semi-flexible discharge hose Ø10x14 30÷50÷80 l/h	-----	10 m € <b>48,00</b>
DTU0000301	PVDF-KYNAR semi-flexible discharge hose Ø4x6 20 l/h	-----	10 m € <b>73,00</b>
DTU0010302	PVDF-KYNAR semi-flexible discharge hose Ø4x6 20 l/h	-----	25 m € <b>168,00</b>

## COMPLETE STANDARD PUMP HEADS SPARE



Part n°	Description	List price
SCP0002552	PP Pump head manual bleed valve, CERAMIC ball checks, FPM o-ring, STANDARD 1÷15 l/h	€ <b>38,00</b>
SCP0002551	PP Pump head, manual air bleed valve, FPM LIP valve, FPM o-ring, 1÷15 l/h	€ <b>27,00</b>

\*\*AVAILABLE O-RINGS EPDM, SAME LIST PRICE

KSM0000101	Air bleed replacement kit minimum 10 pcs	€ <b>135,00</b>
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Part n°	Description	List price
2083160	PP Pump head CERAMIC ball, FPM o-ring, standard 20 l/h	€ <b>38,00</b>
2083148	PP Pump head, FPM LIP valve / FPM o-ring, 20 l/h	€ <b>27,00</b>



Part n°	Description	List price
SCP0000368	PVC P. head CERAMIC checks FPM o-ring, STANDARD 30÷50÷80 l/h	€ <b>87,00</b>
SCP0000352	PVC Pump head FPMLIP valve, FPM o-ring, 30÷50÷80 l/h	€ <b>74,00</b>

## COMPLETE PVDF PUMP HEADS



Part n°	Description	List price
SCP0003192	PVDF Pump head, CERAMIC double ball checks, FPM o-ring, 1÷15 l/h	€ <b>49,00</b>
SCP0001402	PVDF P. head, CERAMIC ball checks, FPM o-ring, 20 l/h	Not available yet

\*\*AVAILABLE o-rings EPDM, same list price, TFE-P add extra € 16,00

## AUTO-BLEED COMPLETE PUMP HEADS



Part n°	Description	List price
SCP0002712	AUTO-BLEED PVDF Pump head, 2 CERAMIC ball, FPM o-ring, 1÷15 l/h	€ <b>65,00</b>
SCP0002702	AUTO-BLEED PVC Pump head, LIP valve, FPM o-ring, 20 l/h	€ <b>46,00</b>

\*\*AVAILABLE o-rings PTFE - EPDM - SILICON, same list price € 37,00

## COMPLETE PMMA (metacrylate) PUMP HEADS for viscous liquids



Part n°	Description	List price
SCP0002204	PMMA Pump head, AISI316 ball checks, FPM o-ring, 1÷15 l/h	€ <b>231,00</b>
SCP0002304	PMMA Pump head, AISI316 ball checks, FPM o-ring, 20 l/h	€ <b>245,00</b>
SCP0002404	PMMA Pump head, AISI316 ball checks, FPM o-ring, 30÷50÷80 l/h	€ <b>331,00</b>

\*\*AVAILABLE LIP valves and o-rings FPM - EPDM - SILICON, same list price

## CTRL POOL

The simple, reliable, cost effective system for small pools





# Single CONTROLLER with PERISTALTIC for domestic small size pools and whirlpool



**CTRL POOL/V**



**CTRL POOL**

Measuring parameter: **pH, RX (ORP)**

CTRL POOL is a compact system, with **single** controller PH or RX:

- PH measurement can be changed to RX just a simple programming and using RX electrode

**BENEFIT:** the above feature allow dealers to stock one type controller thus reducing stock value or saving problems.

Two types of programming menu: **Basic** making life easier for home applications with small swimming pool;

**Expert** for professionals, allowing refining measurements and safety functions.

A friendly user menu programming it is almost self-explanatory and the elegant wide display allows easy vision.

## MAIN CHARACTERISTICS

### CONTROLLER MAIN FEATURES

- Universal power supply 100÷250 Vac (available 12÷24 Vdc);
- Outputs: 1 relay setpoint, 1 relay Alarm output;
- PH range: 0÷14; REDOX range  $\pm 0 \div 1000$  mV
- Resolution: pH  $\pm 0,01$  RX /  $\pm 1$  mV
- ON-OFF mode or Timed pulses proportional (PWM) time / pause mode;
- Hysteresis and Delay adjustable; Max / min Alarm output;
- Timer for Start-up the unit; Basic / Expert menu programming;
- Temperature measurements (NTC);
- Proximity switch (probe on request) function and block of output;
- Level control of external chemical tank (level probe on request)

### DISPLAY

- ✓ Back-lit graphic display;
- ✓ Simultaneous measurements;
- ✓ Scrolling output keys;
- ✓ Alarms and functions;
- ✓ Display energy saving adjustment;
- ✓ Error and No link (485 communication);
- ✓ Alarm for each measuring parameter;
- ✓ Level control and Flow sensor status.

### CTRL POOL/V

VPER Peristaltic variable flow rate adjustment;

- ➔ Accurate motor speed regulation;
- ➔ Peristaltic hose Santoprene®
- ➔ Provided with accessories kit: hoses; injection valve, filter/foot valve

### CTRL POOL

UPER Peristaltic fixed flow rate;

- ➔ Peristaltic hose Santoprene®
- ➔ Provided with accessories kit: hoses; injection valve, filter/foot valve

Model	l/h	bar	LIST PRICE
CTRL POOL/V 1-3	1	3	€ 430,00
CTRL POOL/V 4-3	4	3	€ 430,00
CTRL POOL/V 12-1	12	1	€ 430,00

Model	l/h	bar	LIST PRICE
CTRL POOL 1,1	1,1	1	€ 380,00
CTRL POOL 2,2	2,2	1	€ 380,00
CTRL POOL 6	6	1	€ 390,00

## CTRL POOL/C COMPLETE SYSTEM

FWT offers CTRL POOL COMPLETE comprising with the following items:

pH or RX electrodes  
5m coaxial cable



Buffer solutions



In-line electrode holders  
**ELINE1**



Due to the various functions featured, we strongly recommend using with this unit **Off-line electrode holders** including proximity switch and/or temperature sensors holders

Model	l/h	bar	LIST PRICE
CTRL POOL/C 1-3	1	3	€ 550,00
CTRL POOL/C 4-3	4	3	€ 550,00
CTRL POOL/C 12-1	12	1	€ 550,00

Model	l/h	bar	LIST PRICE
CTRL POOL/C 1,1	1,1	1	€ 500,00
CTRL POOL/C 2,2	2,2	1	€ 500,00
CTRL POOL/C 6	6	1	€ 510,00

## Single multifunction CONTROLLER with PERISTALTIC for small size pools and whirlpool



**CTRL+ POOL/V**



**CTRL+ POOL**

Measuring parameter: **pH, RX (ORP), Chlorine, Hydrogen Peroxide**

The CTRL+ POOL is a compact **multifunction** system, with **single** controller and with large graphic display.

- PH measurement can be changed to RX just a simple programming and using RX electrode;
- CTRL controller is set as for 4 ranges of CHLORINE ranges and for PPM measurements:
- Membrane type ion selective sensor range 0-2 ppm (default); range 0-20 ppm; range 0-200 ppm; or higher ranges;
- Open chlorine cell (CLC4 model) range 0-10ppm;
- 2 Auxiliary outputs drive remote equipment via timer operations making this unit extremely versatile to control also other functions of the system to service.

**BENEFIT:** the above feature allow dealers to stock one type controller thus reducing stock value or saving problems.

Two types of programming menu: **Basic** making life easier for home applications with small swimming pool;

**Expert** for professionals, allowing refining measurements and safety functions.

A friendly user menu programming it is almost self-explanatory and the elegant wide display allows easy vision.

### MAIN CHARACTERISTICS

- Universal power supply 100÷250 Vac (available 12÷24 Vdc);
- 3 relays: 2 for setpoints, 1 for Alarm output
- PH range: 0÷14; REDOX range  $\pm 0 \div 1000$  mV
- Resolution: pH  $\pm 0,01$  RX /  $\pm 1$  mV
- ON-OFF mode or Timed pulses proportional (PWM) mode;
- Hysteresis and Delay adjustable; Max / min Alarm output;
- Overdosing Time; Max dosing time operations;
- 4-20 mA analog current for external functions;
- Basic / Expert menu programming;
- Large graphic back-lit display;
- 2 Auxiliary relay outputs for remote equipment;
- Real time clock to drive:
  - Auxiliary output connecting remote equipment;
  - Auxiliary output for open chlorine cell cleaning;
- Timer for Start-up the unit;
- Temperature measurements;
- Proximity switch (probe on request) and block of output
- Level control of chemical tank (level probe on request)

#### CTRL+ POOL/V

VPER Peristaltic variable flow rate adjustment;

- ➔ Accurate motor speed regulation;
- ➔ Peristaltic hose Santoprene®
- ➔ Provided with accessories kit: hoses; injection valve, filter/foot valve

#### CTRL+ POOL

UPER Peristaltic fixed flow rate;

- ➔ Peristaltic hose Santoprene®
- ➔ Provided with accessories kit: hoses; injection valve, filter/foot valve

Model	l/h	bar	LISTPRICE
CTRL+ POOL/V 1-3	1	3	€ 540,00
CTRL+ POOL/V 4-3	4	3	€ 540,00
CTRL+ POOL/V 12-1	12	1	€ 540,00

Model	l/h	bar	LISTPRICE
CTRL+ POOL 1,1	1,1	1	€ 490,00
CTRL+ POOL 2,2	2,2	1	€ 490,00
CTRL+ POOL 6	6	1	€ 500,00

### CTRL+ POOL/C COMPLETE SYSTEM

FWT offers CTRL+ POOL COMPLETE (only PH or RX) comprising with the following items:

- ➔ pH or RX electrodes 5m coaxial cable; ➔ Buffer solutions; ➔ In-line electrode holders **ELINE1**
- ➔ For chlorine sensor or other sensors inquiry with FWT sales department or authorised dealer.

Due to the various functions featured, we strongly recommend using with this unit **Off-line electrode holders** including proximity switch and/or temperature sensors holders

Model	l/h	bar	LISTPRICE
CTRL+ POOL/VC 1-3	1	3	€ 660,00
CTRL+ POOL/VC V 4-3	4	3	€ 660,00
CTRL+ POOL/VC 12-1	12	1	€ 660,00

Model	l/h	bar	LISTPRICE
CTRL+ POOL/C 1,1	1,1	1	€ 620,00
CTRL+ POOL/C 2,2	2,2	1	€ 620,00
CTRL+ POOL/C 6	6	1	€ 630,00

## Dual CONTROLLER with PERISTALTICS for domestic small size pools and whirlpool



**CTRL2 POOL/V**



**CTRL2 POOL**

Measuring parameter: **pH and RX (ORP)**

CTRL2 POOL is a compact system, with dual controller PH and RX:

- PH measurement can be changed to RX just a simple programming and using RX electrode

**BENEFIT:** the above feature allow dealers to stock one type controller thus reducing stock value or saving problems.

Two types of programming menu: **Basic** making life easier for home applications with small swimming pool;

**Expert** for professionals, allowing refining measurements and safety functions.

A friendly user menu programming it is almost self-explanatory and the elegant wide display allows easy vision.

### MAIN CHARACTERISTICS

#### CONTROLLER MAIN FEATURES

- Universal power supply 100÷250 Vac (available 12÷24 Vdc);
- Outputs: 2 relays setpoints, 1 relay Alarm output;
- PH range: 0÷14; REDOX range  $\pm 0\div 1000$  mV; **PH priority**;
- Resolution: pH  $\pm 0,01$  RX /  $\pm 1$  mV
- ON-OFF mode or Timed pulses proportional (PWM) time / pause mode;
- Hysteresis and Delay adjustable; Max / min Alarm output;
- Timer for Start-up the unit; Basic/Expert menu programming;
- Temperature measurements (NTC);
- Proximity switch (probe on request) function and block of output;
- 2 Level controls of external chemical tank (level probe on request)

#### DISPLAY

- ✓ Back-lit graphic display;
- ✓ Simultaneous measurements;
- ✓ Scrolling output keys;
- ✓ Alarms and functions;
- ✓ Display energy saving adjustment;
- ✓ Error and No link (485 communication);
- ✓ Alarm for each measuring parameter;
- ✓ Level control and Flow sensor status.

#### CTRL2 POOL/V

2 of VPER Peristaltic variable flow rate adjustment;

- ➔ Accurate motor speed regulation;
- ➔ Peristaltic hose Santoprene®
- ➔ Provided with double accessories kit: hoses; 2 of injection valve, 2 of filter/foot valve

#### CTRL2 POOL

2 of UPER Peristaltic fixed flow rate;

- ➔ Peristaltic hose Santoprene®
- ➔ Provided with accessories kit: hoses; injection valve, filter/foot valve

Model	l/h	bar	LIST PRICE
CTRL2 POOL/V 1-3	1	3	€ 760,00
CTRL2 POOL/V 4-3	4	3	€ 760,00
CTRL2 POOL/V 12-1	12	1	€ 760,00

Model	l/h	bar	LIST PRICE
CTRL2 POOL 1,1	1,1	1	€ 660,00
CTRL2 POOL 2,2	2,2	1	€ 660,00
CTRL2 POOL 6	6	1	€ 670,00

### CTRL2 POOL/C COMPLETE SYSTEM

FWT offers CTRL2 POOL COMPLETE comprising with the following items:

- ➔ pH or RX electrodes 5m coaxial cable;
- ➔ Buffer solutions;
- ➔ In-line electrode holders **ELINE1**

Due to the various functions featured, we strongly recommend using with this unit **Off-line electrode holders** including proximity switch and/or temperature sensors holders

Model	l/h	bar	LIST PRICE
CTRL2 POOL/VC 1-3	1	3	€ 960,00
CTRL2 POOL/VC 4-3	4	3	€ 960,00
CTRL2 POOL/VC 12-1	12	1	€ 960,00

Model	l/h	bar	LIST PRICE
CTRL2 POOL/C 1,1	1,1	1	€ 860,00
CTRL2 POOL/C 2,2	2,2	1	€ 860,00
CTRL2 POOL/C 6	6	1	€ 870,00

## Dual multifunction CONTROLLER with PERISTALTICS for small size pools and whirlpool



**CTRL2 POOL/V**



**CTRL2 POOL**

Measuring parameter: **pH, RX (ORP), Chlorine, Hydrogen Peroxide**

The CTRL2/6 POOL is a compact **multifunction** system, with **dual** controller and with large graphic display.

- PH measurement can be changed to RX just a simple programming and using RX electrode;
- CTRL controller is set as for 4 ranges of CHLORINE ranges and for PPM measurements:
- Membrane type ion selective sensor range 0-2 ppm (default); range 0-20 ppm; range 0-200 ppm; or higher ranges;
- Open chlorine cell (CLC4 model) range 0-10ppm;
- 3 Auxiliary output drives remote equipment via timer operations making this unit extremely versatile to control also other functions of the system to service.

**BENEFIT:** the above feature allow dealers to stock one type controller thus reducing stock value or saving problems.

Two types of programming menu: **Basic** making life easier for home applications with small swimming pool;

**Expert** for professionals, allowing refining measurements and safety functions.

A friendly user menu programming it is almost self-explanatory and the elegant wide display allows easy vision.

### MAIN CHARACTERISTICS

- Universal power supply 100÷250Vac (available 12÷24 Vdc);
- 3 relays: 2 for setpoints, 1 for Alarm output
- PH range: 0÷14; REDOX range  $\pm 0\div 1000$  mV
- Resolution: pH  $\pm 0,01$  RX /  $\pm 1$  mV; **PH priority**;
- ON-OFF mode or Timed pulses proportional (PWM) mode;
- Hysteresis and Delay adjustable; Max / min Alarm output;
- Overdosing Time; Max dosing time operations;
- 4-20 mA analog current for external functions;
- Basic / Expert menu programming;
- Large graphic back-lit display;
- 3 Auxiliary output for remote equipment;
- Real time clock to drive:
  - Auxiliary output connecting remote equipment;
  - Auxiliary output for open chlorine cell cleaning;
- Timer for Start-up the unit;
- Temperature measurements;
- Proximity switch (probe on request) and block of output;
- Level control of chemical tank (level probe on request)

#### CTRL2/6 POOL/V

VPER Peristaltic variable flow rate adjustment;

- ➔ Accurate motor speed regulation;
- ➔ Peristaltic hose Santoprene®
- ➔ Provided with double accessories kit: hoses; injection valve, filter/foot valve

#### CTRL2/6 POOL

UPER Peristaltic fixed flow rate;

- ➔ Peristaltic hose Santoprene®
- ➔ Provided with accessories kit: hoses; injection valve, filter/foot valve

Model	l/h	bar	LISTPRICE
CTRL2/6 POOL/V 1-3	1	3	€ 960,00
CTRL2/6 POOL/V 4-3	4	3	€ 960,00
CTRL2/6 POOL/V 12-1	12	1	€ 970,00

Model	l/h	bar	LIST PRICE
CTRL2/6 POOL 1,1	1,1	1	€ 860,00
CTRL2/6 POOL 2,2	2,2	1	€ 860,00
CTRL2/6 POOL 6	6	1	€ 870,00

### CTRL2 POOL/C COMPLETE SYSTEM

FWT offers CTRL2 POOL COMPLETE comprising with the following items:

- ➔ pH or RX electrodes 5m coaxial cable;
- ➔ Buffer solutions;
- ➔ In-line electrode holders **ELINE1**

Due to the various functions featured, we strongly recommend using with this unit **Off-line electrode holders** including proximity switch and/or temperature sensors holders

Model	l/h	bar	LISTPRICE
CTRL2/6 POOL/VC 1-3	1	3	€ 1.140,00
CTRL2/6 POOL/VC 4-3	4	3	€ 1.140,00
CTRL2/6 POOL/VC 12-1	12	1	€ 1.140,00

Model	l/h	bar	LIST PRICE
CTRL2/6 POOL C 1,1	1,1	1	€ 1.040,00
CTRL2/6 POOL C 2,2	2,2	1	€ 1.040,00
CTRL2 POOL/C 6	6	1	€ 1.050,00

**NEW**



# FWT MOTOR DRIVEN METERING PUMPS



## FWT motor driven dosing pumps feature:

⇒ **DIAPHRAGM** mechanical actuated motor driven metering pumps:

*D series: flow rates from 18 to 1000 l/h with pressures up to 8 bar*

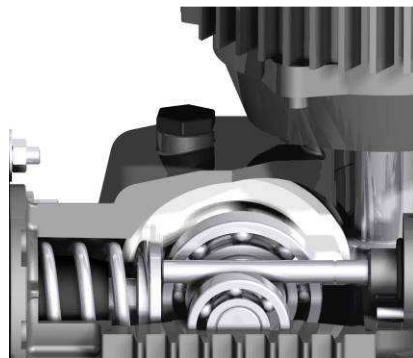
⇒ **PLUNGER** “piston” actuated motor driven metering pumps:

*P series: flow rates from 2 to 425 l/h with pressures up to 150 bar*

*H series: flow rates from 6 to 945 l/h with pressures up to 100 bar*

⇒ **Gearbox** in cast aluminium protected with Epoxy paint. The gearbox mechanism is operated by an eccentric cam, which provides a positive displacement delivery stroke, whilst the suction stroke is **spring** assisted.

⇒ **Adjustable capacity** from 0÷100% whilst in operation or at rest. Flow rate is adjusted by a micrometer knob which control stroke length (10:1 turndown ratio).



⇒ **Maximum suction lift** 4 metres (with water).

⇒ **Motor and gearbox** coupled by means of a **flexible motor coupling**, thus increasing transmission life.

*Each pump is individually tested and all units are **CE certified***

## MOTORS CHARACTERISTICS

⇒ Standard **MULTI FREQUENCY/VOLTAGE**: 230-400Vac 50Hz • 275-480Vac 60Hz / 3phase

⇒ Conform with IP55 protection. Isolation class F, others available upon request

⇒ Motors are TEFC vertically mounted, B14 type, ~1400 rpm

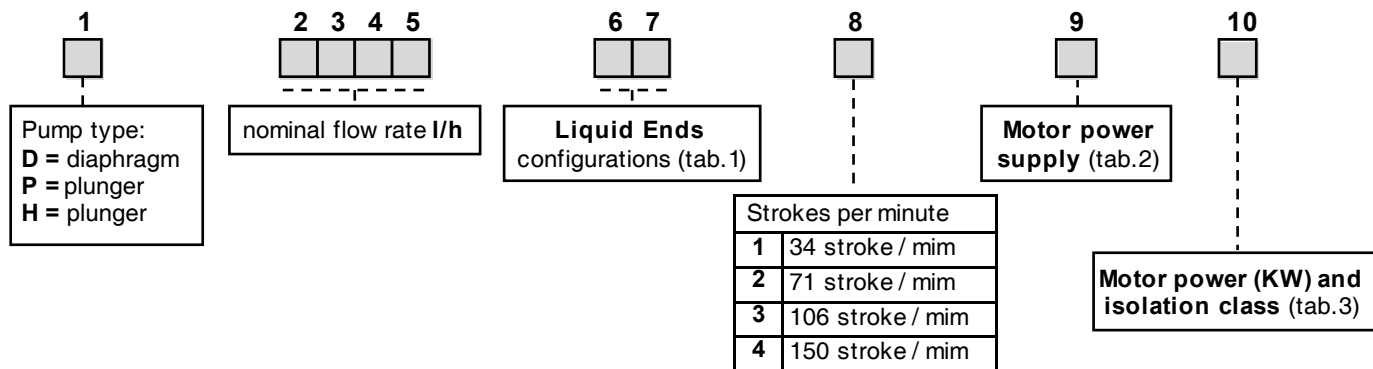
**Other power supply upon request:**

• 230 Vac 1 phase 50 Hz or 230 Vac 60 Hz (\*) • 110 Vac 1 phase 50 Hz or 60 Hz (\*)

(\*) **NOTE**: 60 Hz frequency, motor speed, stroke rates and flow rates increase approx. 20%.



MOTOR CODES	POWER	MOTOR FLANGES
Code 0	0,18 kW	Flange 63 IM B14
Code 1	0,37 kW	Flange 71 IM B14



**DIGITS 6 - 7 Tab.1:** tables points out different configurations materials for head, diaphragm or plunger, gaskets, valves

**D - SERIES DIAPHRAGM ACTUATED MOTOR DOSING PUMP**

Configuration	Pump head	Valve seats	Connections	Ball valves	Valve o-rings	Diaphragm
<b>AA A</b>	AISI 316L	AISI 316L	AISI 316L	AISI 316L	FPM®	PTFE
<b>AT A331</b>	AISI 316L	AISI 316L	AISI 316L	AISI 316L	PTFE	PTFE
<b>BA B</b>	PP	PVC	PP	PYREX®	FPM	PTFE
<b>BB B33</b>	PP	AISI 316L	PP	AISI 316L	FPM	PTFE
<b>BT B2</b>	PP	PVC	PP	PTFE	FPM	PTFE
<b>BH B56</b>	PP	Incoloy 825	PP	Hastelloy C276	FPM	PTFE
<b>VT F</b>	PVDF	PVDF	PVDF	PTFE	PTFE	PTFE
<b>VH F5</b>	PVDF	PVDF	PVDF	Hastelloy C276	PTFE	PTFE

**AVAILABLE** EPDM o-rings, Ball checks CERAMIC, DOUBLE Ball checks

**BB** for viscous liquids lowering price from AA configuration

**BT** when Ball check in glass PYREX is not compatible

**BH** for aggressive chemicals and aggressive viscous chemicals

**P - SERIES PLUNGER ACTUATED MOTOR DOSING PUMP**

Configuration	Pump head	Valve seats	Valve Guide	Ball valves	Valve o-rings	Piston	Piston packing
<b>AA A</b>	AISI 316L	AISI 316L	PP	AISI 316L	FPM®	AISI 316L	FPM®
<b>AB AF</b>	AISI 316L	AISI 316L	AISI 316L	AISI 316L	FPM	AISI 316L	FPM
<b>BA V</b>	PVC	PVC	PP	PYREX®	FPM	CERAMIC	FPM
<b>BB VA</b>	PVC	PVC	PP	PYREX	FPM	AISI 316L	FPM
<b>BC</b>	PVC	AISI 316L	PP	AISI 316L	FPM	AISI 316L	FPM

**AB** high viscosity

**BB** suggested for Fertirrigation application duties

**V33** for viscous liquids lowering price from AF configuration

**H - SERIES PLUNGER ACTUATED MOTOR DOSING PUMP HIGH PERFORMANCES**

Configuration	Pump head	Valve seats	Valve Guide	Ball valves	Valve o-rings	Piston	Piston packing
<b>AA A</b>	AISI 316L	AISI 316L	PP	AISI 316L	FPM®	AISI 316L	PTFE
<b>AT AT</b>	AISI 316L	AISI 316L	PP	AISI 316L	FPM	PTFE	PTFE
<b>BA V</b>	PVC	PVC	PP	PYREX®	FPM	PVDF	PTFE
<b>BV V33</b>	PVC	AISI 316L	PP	AISI 316L	FPM	PVDF	PTFE
<b>TT T</b>	PTFE	PTFE	PP	PTFE	PTFE	PTFE	PTFE
<b>VT F</b>	PVDF	PVDF	PVDF	PTFE	PTFE	PVDF	PTFE

**DIGITS 9 Tab.2: POWER SUPPLY**

<b>0</b>	3 PHASE - 230/400V 50Hz – 60Hz 285-460V
<b>1</b>	1 PHASE - 230V 50Hz

**DIGITS 10 Tab.3: MOTOR POWER-POLE-ISOLATION CLASS**

<b>0</b>	0.18 kW - 4 poles - IP55 - class F
<b>1</b>	0.37 kW - 4 poles - IP 55 - class F



### D series

D series is a mechanical actuated **diaphragm** motor driven metering pumps and features a small gearbox designed for smaller flow rates, always keeping reliable performances.

**Mechanical actuated diaphragm type pumps are suitable when:**

- ✓ Zero leakage is essential
- ✓ Pumped liquid is abrasive and contains suspended solids particles

MODEL	FLOW RATE (l/h)		MAX PRESSURE (barg)	STROKES / MIN	Ø DIAPHRAGM (mm) STROKE LENGTH (mm)	Ø VALVE PASSAGE	MOTOR POWER (kW)		OPTIONAL POWER 3-PH (kW)	MAXIMUM OPTIONAL PRESSURE (barg) 3-PH motor	THREADED CONNECTIONS STANDARD	FLANGED CONNECTIONS OPTIONAL (UNI / ANSI)	LIQUID ENDS CONFIGURATIONS LIST PRICE						
	MAX	MIN					3PH	1PH					AA (ASI)	BA (PP-PVC)	VT (PVDF)				
D 0018	18	2	8	34	110 / 2	5					1/4"	DN15/1/2" 150 RF	€ 842,00	€ 660,00	€ 982,00				
D 0035	35	4	8	71									€ 842,00	€ 660,00	€ 982,00				
D 0050	50	5	8	106									€ 842,00	€ 660,00	€ 982,00				
D 0085	85	9	8	150									€ 842,00	€ 660,00	€ 982,00				
D 0040	40	4	8	34									110 / 4	8,5	0,18	0,37	0,37	8	3/8" BSPf
D 0075	75	8	8	71	€ 861,00	€ 673,00	€ 1.102,00												
D 0115	115	9	8	106	€ 861,00	€ 673,00	€ 1.102,00												
D 0160	160	11	8	150	€ 861,00	€ 753,00	€ 1.102,00												
D 0055	55	5	8	34	110 / 6						----								
D 0110	110	11	8	71							----		€ 726,00	€ 1.222,00					
D 0180	180	13	8	106							€ 1.281,00		€ 814,00	€ 1.439,00					
D 0250	250	25	8	150							€ 1.281,00		€ 814,00	€ 1.439,00					
D 0155	155	15	5	71							170 / 3							----	€ 930,00
D 0240	240	24	5	106	€ 1.329,00	€ 977,00	€ 1.638,00												
D 0340	340	34	5	150	170 / 6	0,18	0,37	0,37	8	1" BSPf								€ 1.432,00	€ 977,00
D 0150	150	15	5	34								----						€ 977,00	€ 1.638,00
D 0320	320	32	5	71								€ 1.432,00						€ 1.045,00	€ 1.638,00
D 0480	480	48	5	106							€ 1.537,00	€ 1.082,00	€ 1.638,00						
D 0680	680	68	5	150							€ 1.573,00	€ 1.050,00	€ 1.638,00						
D 0500	500	50	5	71	170 / 9						€ 1.668,00	€ 1.116,00	€ 1.901,00						
D 0700	700	70	4	106							€ 2.559,00	€ 1.573,00	€ 2.597,00						
D 1000	1000	100	3	150							€ 2.559,00	€ 1.573,00	€ 2.597,00						

**Code configuration example:** DS0061CA001 features PP liquid ends, 0,18 kW motor, max flow 61 l/h against max 7 bar

**MOTOR:** MULTI FREQUENCY/VOLTAGE 230/400Vac,3 phase,50Hz•275-480V/3 phase 60 Hz • Class F, IP 55, ~1400 rpm

**USEFUL information selecting of dosing pumps:** Max flow rate, Max working pressure, viscosity, specific gravity (S. G.), temperature, area classification, suspended solids into chemical.





### P series

P series is a **plunger** actuated motor driven metering pumps and features a small gearbox designed for smaller flow rates, always keeping reliable performances.

**Plunger actuated type pumps are suitable when:**

- ✓ High pressure dosing is required
- ✓ Low stroke pumps suitable for high viscous liquids
- ✓ Liquid WITHOUT suspended solids

MODEL	FLOW RATE (l/h)		MAX PRESSURE (barg)	STROKES / MIN	Ø PLUNGER (mm) STROKE LENGTH (mm)	Ø VALVE PASSAGE	MOTOR POWER (kW)		MAX PRESSURE (barg) * only version 0,37 KW 3 PH	THREADED CONNECTIONS STANDARD	FLANGED CONNECTIONS OPTIONAL (UNI / ANSI)	LIQUID ENDS CONFIGURATIONS LIST PRICE									
	MAX	MIN					3PH	1PH				AA (AISI)	BA (PP-PVC)								
P 0002	2	0,2	10	34	10 / 15	5	0,18	0,37	30	1/4" BSPf	DN15 / 1/2" ANSI 150	€ 892,00	€ 861,00								
P 004,5	4,5	0,5		71								€ 892,00	€ 861,00								
P 0007	7	0,7		106								€ 892,00	€ 861,00								
P 0010	10	1		150								€ 892,00	€ 861,00								
P 005	5	0,5		34	15 / 15	8,5						20	10	30	3/8" BSPf	€ 854,00	€ 820,00				
P 010,5	10,5	1,1		71												€ 854,00	€ 820,00				
P 0016	16	1,6		106												€ 854,00	€ 820,00				
P 0022	22	2,2		150												€ 854,00	€ 820,00				
P 0011	11	1,1		34	22 / 15	8,5										20	10	30	3/8" BSPf	€ 858,00	€ 820,00
P 0023	23	2		71																€ 858,00	€ 820,00
P 0034	34	3,4		106			€ 858,00	€ 820,00													
P 0048	48	4,8		150			€ 858,00	€ 820,00													
P 0019	19	2		34	29 / 15	8,5	20	10	30	3/8" BSPf										€ 864,00	€ 854,00
P 0040	10	4		71																€ 864,00	€ 854,00
P 0060	60	6		106								€ 864,00	€ 854,00								
P 0084	84	8,4		150								€ 864,00	€ 854,00								
P 0026	26	2,6		34	34 / 15	8,5						20	10	30	3/8" BSPf					€ 925,00	€ 937,00
P 0055	55	5,5		71																€ 886,00	€ 873,00
P 0082	82	8,2		106												€ 886,00	€ 873,00				
P 0116	116	11,6		150												€ 948,00	€ 961,00				
P 0046	46	4,6	34	45 / 15	8,5	20					10					30	3/8" BSPf	€ 948,00	€ 961,00		
P 0096	96	9,6	71															€ 920,00	€ 977,00		
P 0144	144	14,4	106				€ 989,00	€ 977,00													
P 0204	204	20,4	150				€ 1.027,00	€ 1.064,00													
P 0069	69	6,9	34	55 / 15	8,5		20	10	30	3/8" BSPf								€ 1.106,00	€ 1.064,00		
P 0145	145	14,5	71															€ 986,00	€ 1.139,00		
P 0215	215	21,5	106									€ 1.061,00	€ 1.241,00								
P 0305	305	30,5	150									€ 1.061,00	€ 1.139,00								
P 0095	95	9,5	34	65 / 15	8,5							20	10	30	3/8" BSPf			€ 1.187,00	€ 1.290,00		
P 0201	201	20,1	71															€ 1.024,00	€ 1.202,00		
P 0301	301	30,1	106			€ 1.099,00					€ 1.293,00										
P 0425	425	42,5	150			€ 1.229,00					€ 1.293,00										

Code configuration example: DS0061CA001 features PP liquid ends, 0,18 kW motor, max flow 61 l/h against max 7 bar



## H series

H series is a **plunger** actuated motor driven metering pumps for high performances in both flow rate and pressure.

H series design with a special technology FPS "Free Permanent Seal" which guarantees zero leakage while performances are constant also at high pressures: this feature makes it a unique pump in the market.

### Plunger actuated type pumps are suitable when:

- ✓ High pressure dosing is required
- ✓ Low stroke pumps suitable for high viscous liquids

MODEL	FLOW RATE (l/h)		MAX PRESSURE (barg)	STROKES / MIN	Ø PLUNGER (mm) STROKE LENGTH (mm)	Ø VALVE PASSAGE	MOTOR POWER (kW)		MAX PRESSURE (barg) * only version 0,37 KW 3 PH	THREADED CONNECTIONS STANDARD	FLANGED CONNECTIONS OPTIONAL (UNI / ANSI)	LIQUID ENDS CONFIGURATIONS LIST PRICE	
	MAX	MIN					3PH	1PH				AA (AISI)	BA (PP-PVC)
H 0345	345	34,5	/	106	90 / 9	17	0,37	10	1" Bspf	DN25 / 1" ANSI 150 RF	€ 1.972,00	€ 1.690,00	
H 0490	490	49		150							€ 1.972,00	€ 1.690,00	
H 0445	445	44,7		71	125 / 9						€ 2.394,00	€ 2.113,00	
H 0667	667	66,7		106							€ 2.394,00	€ 2.113,00	
H 0944	944	94,4		150							€ 2.394,00	€ 2.113,00	

## MOTOR DRIVEN DOSING PUMPS

## EXTRA CONFIGURATIONS

	ASI	PVC / PP
Double ball check valve (only connection 1/4" and 3/8")	€ 189,00	€ 170,00
Flange 1/2" ANSI o DN 15 standard configurations	€ 318,00	€ 109,00
Flange 1" ANSI o DN 25 UNI standard configurations	€ 419,00	€ 159,00
Connections NPT 3/8"	€ 151,00	€ 23,00
Connections NPT 1"	€ 201,00	€ 67,00
o-ring in EPDM	€ 32,00	€ 32,00
Pumps without motor	<b>DEDUCT</b>	<b>- € 84,00</b>
motor 0,37 KW (where not standard)		€ 109,00
motor 0,37 KW single phase		€ 260,00
motor 0,37 KW suitable for inverter applications		€ 336,00
motor Eex-d zone 1 3ph 230-400 V 50 Hz		€ 1.152,00
Electric actuator servo motor VM321S: D series 18-500, H series 6-340		€ 1.575,00
Electric actuator servo motor AVM234S: D series 700-1000, P series, H series 110-944		€ 2.100,00
ISPEL TEST		€ 241,00
PED TEST		€ 161,00
ATEX DECLARATION OF CONFORMITY		€ 228,00

### AVAILABLE UPON REQUEST

- PULSATION DAMPERS ▪ RELIEF / BACKPRESSURE VALVES ▪ SAFETY VALVES
- FOOT VALVES – STRAINERS ▪ INJECTION VALVE ▪ ACCESSORY KIT

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Revision 01-0316







**Application Fields1:**  
**Application Fields2:**  
 Measuring method:  
 Chlorinating agents:  
 Interference parameters:  
 Compatibility:  
 Range:  
 Resolution:  
 Signal (nominal slope):  
 Output:  
 Operating temperature:  
 pH range:  
 Flow / Pressure:  
 Slope adjustment:  
 Available upon request:

**CC1H Free Inorganic-Organic chlorine**

**standard (CLS2-CLS20) ECC1 Gel: water treatment (also drinking), swimming pools with Gel ECC1S (upon request) sea water**

membrane ion selective amperometric 3 electrodes system, integrated electronics  
 NaOCl (sodium hypochlorite); Ca (OCI)<sub>2</sub> (calcium hypochlorite), chlorine gas, electrolytically generated chlorine, organic chlorine compounds on isocyanuric acid bases (tested > 500 mg/l)  
 ClO<sub>2</sub> is measured at 100% / O<sub>3</sub> is measured  
 with Tensides: Isocyanuratic / Surfactants / Flocculants  
 0.005 ..... 2 ppm (mg/l) free chlorine  
 0.001 ppm (mg/l)  
 -1000 mV/ppm / analog signal  
 0 .... -2000 mV / Out resistance 1 KΩ  
 > 5 ... < 45°C; automatic compensation by integrated resistor  
 pH 4÷ pH 12 (low pH dependency)  
 approx.30 l/h / 0,5 bar, no sudden pressure surges, impulses and/or vibrations or fluctuations  
 reference method DPD1  
 available on request 2 , 5, 10 ppm ranges, mA output/slope **with Galvanic isolation**

**CC1N Free Inorganic-Organic chlorine**

**standard (CLS2-CLS20) ECC1 Gel: water treatment (also drinking), swimming pools with Gel ECC1S (upon request) sea water**

0.05 ..... 20 ppm (mg/l) free chlorine  
 0.01 ppm (mg/l)  
 -100 mV/ppm / analog signal

Part n°	Model	Description	List price
3326102	<b>CLS2-1H</b>	Inorganic-Organic Free chlorine, comp.Surfactants, 0.005-2ppm, 4÷12 pH, 45°	<b>€ 1.458,00</b>
3326090	<b>CLS20-1N</b>	Inorganic-Organic Free chlorine, comp.Surfactants, 0.05-20ppm, 4÷12 pH, 45°	<b>€ 1.247,00</b>
9026003	<b>M48.1</b>	Membrane Cap spare	<b>€ 175,00</b>
9026067	<b>ECC1/G</b>	Electrolyte GEL, spare bottle 100 ml	<b>€ 116,00</b>
9026069	<b>ECC1S/G</b>	Electrolyte GEL, spare to order separately for sea/brine water bottle 100ml	<b>€ 143,00</b>



**Application Fields1:**  
**Application Fields2:**  
 Measuring method:  
 Chlorinating agents:  
 Interference parameters:  
 Range:  
 Resolution:  
 Signal (nominal slope):  
 Operating temperature:  
 pH range:  
 Flow / Pressure:  
 Slope calibration:  
 Notes:  
 Available upon request:

**CLST2.1Hun Total (free-compound)chlorine** **CLST20.1N Total (free-compound)chlorine**  
**with electrolyte ECP1.3/GEL drinking water, swimming pools (NOT compatible with surfactants fats/oil)**

**with electrolyte ECP2S/GEL sea water (tensides are partly tolerated)**  
 membrane-covered amperometric 3-electrodes system with integrated electronics  
 NaOCl (sodium hypochlorite), Ca (OCI)<sub>2</sub>, chlorine gas, electrolytically generated chlorine, organic chlorine compounds on isocyanuric acid based chlorine compounds  
 ClO<sub>2</sub> measured at 100% / O<sub>3</sub> measured with slope approx 130% (factor 1,3 to Cl slope)  
 0.005 .... 2 ppm (mg/l) total chlorine  
 0.001 ppm (mg/l)  
 -1000 mV/ppm / analog signal  
 > 5 ... < 45°C; automatic compensation by integrated NTC resistor  
 pH 4 ÷ pH 12 (low pH dependency, linear decrease approx.5% per unit increase in pH)  
 approx.30 l/h / 0,5 bar, no sudden pressure surges, impulses and/or vibrations or fluctuations  
 reference method DPD4 (DPD1+DPD4)  
 flocculation must function perfectly (DIN 19643)  
 20 ppm sensor +2000mV output; also mA output sensors **with Galvanic isolation**

0.005 ..... 20 ppm (mg/l) total chlorine  
 0.01 ppm (mg/l)  
 -100 mV/ppm / analog signal

Part n°	Model	Description	List price
3326029	<b>CLST2-1HUn</b>	Total Chlorine, 0.005-2 ppm (mg/l), 4÷12 pH 45°	<b>€ 1.404,00</b>
3326026	<b>CLST20-1N</b>	Total Chlorine, 0.05 -20 ppm (mg/l), 4÷12 pH 45°	<b>€ 1.294,00</b>
9026003	<b>M48.1</b>	Membrane Cap spare for CLST20.1N	<b>€ 175,00</b>
	<b>M48.1D</b>	Membrane Cap spare for CLST2-1HUn	<b>€ 194,00</b>
	<b>ECP1.3/G</b>	Electrolyte GEL, spare bottle 100 ml	<b>€ 116,00</b>
	<b>ECP2S/G</b>	Electrolyte GEL, spare to order separately for sea/brine water bottle 100ml	<b>€ 143,00</b>

**Chlorine sensor CN1 to verify the absence of free chlorine; pH dependent**

**Applications Fields:** **to verify the absence of chlorine in water with drinking-water quality (e. g. reverse osmosis)**  
 Suitable chlorinating agents: NaOCl (= sodium hypochlorite), Ca(OCI)<sub>2</sub>, chlorine gas, electrolytically generated chlorine  
 Operating temperature: > 5 ... < 40°C / automatic compensation  
 pH range: pH 6,5 ÷ pH 9  
 Flow / Pressure: approx.30 l/h / 0,5 bar, no sudden pressure surges, impulse vibrations or fluctuations

Part n°	Model	Description	List price
	<b>CLS CN1H-A12n</b>	Absence chlorine, 0.005 – ca 2 ppm, resolution 0,001 ppm, 6,5÷9 pH, 40°C	<b>€ 2.039,00</b>
	<b>CLS CN1N-A12n</b>	Absence chlorine, 0.05 – ca 20 ppm, resolution 0,01 ppm, 6,5÷9 pH, 40°C	<b>€ 2.039,00</b>
	<b>M48.1G</b>	Membrane Cap spare with G holder	<b>€ 114,00</b>
	<b>ECN1/Gel</b>	Electrolyte GEL spare bottle 100 ml	<b>€ 237,00</b>

## MEMBRANE SENSORS



### CLS AS2N-CL Inorganic Free chlorine    CLS AS3H/N-CL Inorganic Free chlorine

**Applications AS2N:** *drinking water, services for cold and hot water up to max 70°C, high pressure*

**Measuring method AS2N:** *open probe, amperometric potentiostatic 3-electrode system.*

**Chlorinating agents:** *NaOCl (sodium hypo.); Ca(OCl)2 calcium hypochlorite; Chlorine gas; electrolytically chlorine*

**Interference parameters:** *Chlorine, Chlorite are measured with less than 2% of their value*

**Range/Resolution/Signal:** **AS2H-CL** 0.03...10 ppm (mg/l) / Resolution 0.01 ppm / Signal -100 mV/ppm.

**Range/Resolution/Signal:** **AS3H-CL** 0.005...2 ppm (mg/l) / Resolution 0.001 ppm / Signal -1000 mV/ppm.

**Range/Resolution/Signal:** **AS3N-CL** .03...10 ppm (mg/l) / Resolution 0.01 ppm / Signal -100 mV/ppm.

**Operating temperature:** **AS2** > 5...< 50°C; **AS3** 0...< 70°C; automatic compensation; max changes 30°C

**pH range/Flow/Pressure:** pH 5 ÷ pH 9; stability material: pH1-pH12 / approximately 80 l/h / 8 bar

**Note:** for AS2 bear in mind dissociation chlorine equilibrium and ensure correct pH level

**Available upon request:** mA output/slope sensors **with** Galvanic isolation

Part n°	Model	Description	List price
3326110	<b>CLS AS2N-CL</b>	Inorganic Free chlorine, 0.03-10 ppm (mg/l), 5÷9 pH 50°C	€ 1.859,00
	<b>CLS AS3H-CL</b>	Inorganic Free chlorine, 0.005-2 ppm (mg/l), 5÷9 pH 70°C	€ 2.123,00
	<b>CLS AS3N-CL</b>	Inorganic Free chlorine, 0.03-10 ppm (mg/l), 5÷9 pH 70°C	€ 2.123,00
	<b>EAS1/G</b>	Electrolyte GEL, spare bottle 50 ml	€ 89,00



### CLS CD4H chlorine-dioxide    CLS CD4N chlorine-dioxide

**Application Fields CD4:** *Swimming-pool, drinking water, process water; It must not contain tensides*

**Measuring method:** *membrane-covered amperometric 2-electrodes system with integrated electronics*

**Interference parameters:** *Cl2 is measured with factor 0.03 of its measurement value; O3 is measured*

**Range:** 0.005 ...2 ppm (mg/l) chlorine dioxide    0.05 ...20 ppm (mg/l) chlorine dioxide

**Resolution:** 0.001 ppm (mg/l)    0.01 ppm (mg/l)

**Signal (nominal slope):** -1000 mV/ppm / analog signal    -100 mV/ppm / analog signal

**Operating temperature:** > 5...< 45°C; automatic compensation

**pH range/Flow/Pressure:** pH 1 ÷ pH 11 (very low pH dependency) / approximately 30 l/h / 1 bar

**Available upon request:** CD4MA mA output/slope sensors **with** Galvanic isolation

Part n°	Model	Description	List price
3326041	<b>CLS CD4H</b>	Chlorine Dioxide, 0.005-2 ppm, -1000 mV/ppm, 1÷11 pH, 45°	€ 1.268,00
3326040	<b>CLS CD4N</b>	Chlorine Dioxide, 0.05-20 ppm, -100 mV/ppm, 1÷11 pH, 45°	€ 1.268,00
	<b>M20</b>	Membrane Cap spare	€ 114,00
	<b>EDC4/W- EDC7M</b>	Electrolyte GEL spare, bottle 100 ml for CD4-CD7	€ 81,00



### CLSCD7H chlorine-dioxide    CLSCD7N chlorine-dioxide    CLSCD7L chlorine-dioxide

**Application Fields CD7:** *All types of water treatment, bottle washer, CIP plant, rinser; Tensides ARE tolerated*

**Measuring method:** *membrane-covered amperometric 2-electrodes system with integrated electronics*

**Interference parameters:** *Cl2 not disruptive; O3 is measured 25 times the sensitivity as ClO2*

**Range:** 0.005...2 ppm chlorine dioxide    0.05 ...20 ppm chlorine dioxide    0 ...200 ppm chlorine dioxide

**Resolution:** 0.001 ppm (mg/l)    0.01 ppm (mg/l)    0.1 ppm (mg/l)

**Signal (nominal slope):** -1000 mV/ppm / analog signal    -100 mV/ppm / analog signal    -10 mV/ppm / analog signal

**Operating temperature:** > 5...< 50°C; automatic compensation

**pH range/Flow/Pressure:** pH 1 ÷ pH 11 (very low pH dependency) / approximately 30 l/h / 1 bar

**Available upon request:** CD7MA mA output/slope sensors **with** Galvanic isolation

Part n°	Model	Description	List price
3326049	<b>CLS CD7H</b>	Chlorine Dioxide, 0.005-2 ppm, -1000 mV/ppm, 1÷11 pH, 50°	€ 1.552,00
3326044	<b>CLS CD7N</b>	Chlorine Dioxide, 0.05-20 ppm, -100 mV/ppm, 1÷11 pH, 50°	€ 1.511,00
	<b>CLS CD7L</b>	Chlorine Dioxide, 0-200 ppm, -10 mV/ppm, 1÷11 pH, 50°	€ 1.552,00
	<b>M7N</b>	Membrane Cap spare	€ 175,00
	<b>M7L</b>	Membrane Cap spare for CD7L	€ 175,00
	<b>EDC4/W- EDC7M</b>	Electrolyte GEL spare, bottle 100 ml for CD4-CD7	€ 81,00

### Chlorite sensor MST1N for measurement of chlorite

**Applications Fields:** *drinking water, swimming pool, process water*

**Suitable chlorite agents:** *Acid/chlorite method; chlorine/chlorite-method (chlorite/oxidizer-method in test)*

**Operating temperature:** > 5 ... < 40°C / automatic compensation

**pH range / Flow / Pressure:** pH 6 ÷ pH 9 / approx.30 l/h / 0,3 bar, no sudden pressure surges, impulse vibrations or fluctuations

	<b>CLS MST1N</b>	Chlorite, 0.05 – 2 ppm, resolution 0,01 ppm, 6÷9 pH, 40°C	€ 1.828,00
9026003	<b>M48.1</b>	Membrane Cap spare for CLST20.1N	€ 155,00
	<b>EMST1N/Gel</b>	Electrolyte GEL CHLORITE spare bottle 100 ml	€ 140,00

## MEMBRANE SENSORS



### Applications Fields:

Measuring method:

Interference parameters:

Range / Resolution:

Signal (nominal slope):

Operating temperature:

pH range/Flow/Pressure:

Upon request:

### CLS WP7Hun Hydrogen Peroxide

**all types of water treatment; tensides ARE tolerated**

membrane-covered, amperometric 2 electrodes system with integrated electronics

NO interferences from surfactants; Cl<sub>2</sub>, PES, O<sub>3</sub>, must not be present; Sulphides poison measurements, Phenol aqueous solution >3% phenol, it destroys the membrane system

0.0 ... 200 ppm / 0.1 ppm

-10 mV/ppm

> 5 ... < 45°C / automatic compensation; changes at temperature <5°C

pH 2 ÷ pH 12 / approx. 30 l/h / 1 bar

upon request 200, 500, 1000, 2000, 10.000 ppm ranges, mA output/slope with Galvanic isolation

### CLS WP7Un Hydrogen Peroxide

**all types of water treatment; tensides ARE tolerated**

membrane-covered, amperometric 2 electrodes system with integrated electronics

NO interferences from surfactants; Cl<sub>2</sub>, PES, O<sub>3</sub>, must not be present; Sulphides poison measurements, Phenol aqueous solution >3% phenol, it destroys the membrane system

0.0 ... 2.000 ppm / 1.0 ppr.

-1 mV/ppm

> 5 ... < 45°C / automatic compensation; changes at temperature <5°C

pH 2 ÷ pH 12 / approx. 30 l/h / 1 bar

upon request 200, 500, 1000, 2000, 10.000 ppm ranges, mA output/slope with Galvanic isolation

Part n°	Model	Description	List price
3326073	CLS WP7Hun	Hydrogen Peroxide, 0.0-200 ppm, 2÷12 pH, 45°C	€ 1.511,00
3326070	CLS WP7Un	Hydrogen Peroxide, 0.0-2000 ppm, 2÷12 pH, 45°C	€ 1.511,00
	M7N	Membrane Cap spare	€ 175,00
	EWP7/W	Electrolyte GEL spare bottle 100 ml	€ 101,00



### Applications Fields:

Measuring method:

Interference parameters:

Range:

Resolution:

Signal (nominal slope):

Operating temperature:

pH range/Flow/Pressure:

### CLSWP10 L-A12n Hydrogen Peroxide

**all water treatment, high H<sub>2</sub>O<sub>2</sub> concentrations; tensides ARE compatible**

membrane-covered, amperometric 2 electrodes system with integrated electronics

NO interferences from surfactants; Cl<sub>2</sub>, PES, O<sub>3</sub>, must not be present; Sulphides poison measurements, Phenol aqueous solution >3% phenol, it destroys the membrane system

0.0-2% (20.000 ppm)

0.001% (10 ppm)

-1000 mV/% (-0,1 mV/ppm)

> 5 ... < 45°C / automatic compensation; changes at temperature <5°C

pH 2 ÷ pH 11 / approx. 30 l/h / 1 bar, no sudden pressure surges, impulse vibrations

### WP10-20%A12n Hydrogen Peroxide

**all water treatment, high H<sub>2</sub>O<sub>2</sub> concentrations; tensides ARE compatible**

membrane-covered, amperometric 2 electrodes system with integrated electronics

NO interferences from surfactants; Cl<sub>2</sub>, PES, O<sub>3</sub>, must not be present; Sulphides poison measurements, Phenol aqueous solution >3% phenol, it destroys the membrane system

0.0-20% (200.000 ppm)

0.01% (100 ppm)

-100 mV/ppm (-0,01 mV/ppm)

> 5 ... < 45°C / automatic compensation; changes at temperature <5°C

pH 2 ÷ pH 11 / approx. 30 l/h / 1 bar, no sudden pressure surges, impulse vibrations

Part n°	Model	Description	List price
3326300	WP10L-A12n	Hydrogen Peroxide, 0.1% - 20.000 ppm, 2÷11 pH, 45°C	€ 1.885,00
3326301	WP10-20%A12n	Hydrogen Peroxide, 0.1% - 200.000 ppm, 2÷11 pH, 45°C	€ 1.771,00
	EWP7/W	Electrolyte GEL spare bottle 100 ml	€ 101,00

## Bromine sensor BR1 for measurement of bromine

### Applications Fields:

Suitable bromine agents:

pH range / Flow / Pressure:

Part n°

Model

Description

**drinking water, swimming pool, process water**

Hypobromous acid (HOBr) 1-Bromo-3-chloro-5.5-dimethyl-hydantoin (BCDMH)

pH 6,5 ÷ pH 9,5 / approx. 30 l/h / 0,5 bar, no sudden pressure surges, impulse vibrations

List price

	CLS BR1N	Bromine, 0.05 – 20 ppm, resolution 0,01 ppm, 6,5÷9 pH, 45°C	€ 1.349,00
	EBR1/Gel	Electrolyte GEL BROMINE spare bottle 100 ml	€ 141,00

## Ozone sensor OZ1 for dissolved ozone in water

### Applications Fields:

Operating temperature:

pH range / Flow / Pressure:

Part n°

Model

Description

**swimming pools, drinking water, process water; water must NOT contain surfactant**

> 5 ... < 45°C / automatic compensation

pH 2 ÷ pH 11 / approx. 30 l/h / 1 bar, no sudden pressure surges, impulse vibrations or fluctuations

List price

	CLS OZ1H	Dissolved Ozone, 0.005 – 2 ppm, resolution 0,001 ppm, 2÷11 pH, 45°C	€ 1.438,00
	CLS OZ1N	Dissolved Ozone, 0.05 – 20 ppm, resolution 0,01 ppm, 2÷11 pH, 45°C	€ 1.438,00
	M20	Membrane Cap spare	€ 114,00
	EOZ1	Electrolyte GEL OZONE spare bottle 100 ml	€ 76,00

## Ozone sensor OZ7 for dissolved ozone in water with tensides-resistant membrane

### Applications Fields:

Operating temperature:

pH range / Flow / Pressure:

**water treatment, swimming pools, Bottle washer, CIP plants, rinsers; tensides are tolerated**

> 5 ... < 50°C / automatic compensation, changes of temperature: <5 °C per hour

pH 2 ÷ pH 12 / approx. 30 l/h / 1 bar, no sudden pressure surges, impulse vibrations or fluctuations

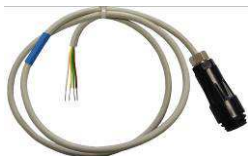
	CLS OZ7H	Dissolved Ozone, 0.005 – 2 ppm, resolution 0,001 ppm, 2÷12 pH, 50°C	€ 1.511,00
	CLS OZ7N	Dissolved Ozone, 0.05 – 20 ppm, resolution 0,01 ppm, 2÷12 pH, 50°C	€ 1.560,00
	M7N O3	Membrane Cap spare OZ7H	€ 203,00
	M7D O3	Membrane Cap spare OZ7N	€ 239,00
	EOZ7/W	Electrolyte GEL OZONE spare bottle 100 ml	€ 101,00

**Peracetic acid sensor PES7** for the measurement of peracetic acid; with tenside-resistant diaphragm

**Applications Fields:** *all types of water treatment, conductivity acids are tolerated, Tensides must not be present*  
 Suitable chlorite agents: O3: is measured with a factor of 2.500; ClO2: is measured with a factor of 1;  
 H2O2: is measured with a factor of 0.005  
 Operating temperature: > 5 ... < 45°C / automatic compensation, changes of temperature: <5 °C per hour  
 pH range: pH 1 ÷ pH 7  
 Flow / Pressure: approx. 30 l/h / 1 bar, no sudden pressure surges, impulse vibrations or fluctuations

Part n°	Model	Description	List price
	<b>CLS PES7H</b>	Peracetic Acid, 0–200 ppm, resolution 0,1 ppm, 1÷7 pH, 45°C	<b>€ 1.609,00</b>
	<b>CLS PES7N</b>	Peracetic Acid, 0–2000 ppm, resolution 1 ppm, 1÷7 pH, 45°C	<b>€ 1.609,00</b>
	<b>CLS PES7L</b>	Peracetic Acid, 0-2%; 0–20.000ppm, resolution 0,001%10 ppm, 1÷7 pH, 45°C	<b>€ 1.649,00</b>

**CABLES 4 WIRES + CONNECTORS FOR ALL CLS SENSORS**



Part n°	Description	List price
3188070	CABLE 4 WIRES NOT WIRED CLS 0,7m	<b>€ 116,00</b>
3188054	CABLE 4 WIRES NOT WIRED CLS 2m	<b>€ 127,00</b>
3188056	CABLE 4 WIRES NOT WIRED CLS 5m	<b>€ 137,00</b>
	CABLE 4 WIRES NOT WIRED CLS 15m	<b>€ 184,00</b>

**DISSOLVED OXYGEN SENSOR**



**Applications Fields:** *Water treatment, Waste water treatment, fish farms; composting facilities*  
 Measuring Method: Measurement of the electrical current affected by the partial pressure of oxygen  
 Range: 40 ppb ... 40 ppm of dissolved oxygen / Current in air at 25 °C: 40 ... 80 nA  
 Electrode system: Silver platinum combination / membrane  
 Oxygen consumption: Ca. 20 ng/h in air at 25 °C  
 Operating temperature: -10 ... 60°C / automatic compensation by NTC 22kOhm  
 Flow / Pressure: approx. ± 0.03 m/s / 4 bar, no sudden pressure surges, impulse vibrations or fluctuations

Part n°	Model	Description	List price
32371501	<b>SENSOXY</b>	DISSOLVED OXYGEN+TEMP 40ppb SATUR.0-40mg/lit 60°C 5m CABLE	<b>€ 1.120,00</b>

**AMPEROMETRIC CHLORINE CELLS OPEN SYSTEM**



**CLC1-N** Metacrylate Amperometric chlorine cell, self-cleaning with glass balls • Max 5 bar  
 • Range 0÷10 ppm • Max temperature 5÷60°C • Flow rate 40÷50 l/h

Part no.	Model	List price
99210057	<b>CLC1-N</b>	<b>€ 896,00</b>



**CLC1** Metacrylate Amperometric chlorine cell, self-cleaning with glass balls  
 • In-coming water flow adjustment • Housing for proximity switch • Housing for temperature sensor  
 • Range 0÷10 ppm • Max temperature 5÷60°C • Flow rate 40÷50 l/h  
**CLC1/P with Proximity switch** • On request Temperature probe

Part no.	Model	List price
PSCLC00140000	<b>CLC1</b>	<b>€ 1.233,00</b>
PSCLC00120000	<b>CLC1/P</b>	<b>€ 1.337,00</b>



**CLC2 MULTIFUNCTION** Metacrylate Amperometric chlorine cell, self-cleaning with glass balls  
 • Housing for 2 electrodes • In-coming water flow adjustment  
 • Housing for proximity switch • Housing for temperature sensor  
 • Range 0÷10 ppm • Max temperature 5÷60°C • Flow rate 40÷50 l/h  
**CLC2/P with Proximity switch** • On request Temperature probe

Part no.	Model	List price
PSCLC00170000	<b>CLC2-N</b>	<b>€ 977,00</b>
PSCLC00150000	<b>CLC2-N/P</b>	<b>€ 1.103,00</b>
SPS0002201FT	<b>CLC2/PX</b> for solenoid dosing pumps with controller <b>FX-MX CTRL3*</b>	<b>€ 1.139,00</b>

\*NOTE: to use Amperometric open cell with FX-MX CTRL3, please use Signal Adapter for connecting dosing pumps to cell





### CLEANING KIT CLC solution for good maintenance of CLC series:

FWT has come up with a simple solution for maintenance for the oxidation of platinum and copper electrodes, especially if in contact with substances which quickly deteriorate the electrodes thus interfering with measurements and optimal functioning: the operator, must simply let the peristaltic inject acid for 2/3 minutes (commercial HCL around 10% concentration) or at least a simple detergent. This until copper electrode is restored to natural colour.

**CTRL+ controller series features automatic operations function.**

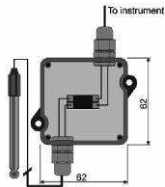
**€ 140,00**



#### Signal adapter for CLC chlorine cell

To connect CLC to dosing pump with controller series MX-FX CTRL3

**€ 76,00**



#### Impedance Adaptor for pH-Rx electrodes, to install electrodes

at long distance (up to 200mtr) from the controller without problems of interference on the signal transmission. Enclosed into plastic box (IP65). The adaptor is powered by an internal battery with several years' operating life.

**€ 263,00**

## CONDUCTIVITY PROBES / ELECTRODES BUFFER SOLUTIONS

### CONDUCTIVITY SENSORS provided with 4 m cables (except SCD3T)



Part no.	Model	Range	Electrodes	Body/Connection	List price
99210018	<b>SEC K1</b>	0÷20.000 uS	AISI	PVC 1/2"	<b>€ 84,00</b>
99210019	<b>SEC K5</b>	0÷200/2000 uS	AISI	PVC 1/2"	<b>€ 84,00</b>
99210008	<b>STEC K1</b>	0÷20.000 uS	AISI	PTFE 1/2"	<b>€ 143,00</b>
99210009	<b>STEC K5</b>	0÷200/2000 uS	AISI	PTFE 1/2"	<b>€ 143,00</b>
99210007	<b>STGEC K1</b>	0÷20000uS-200mS	GRAPHITE	PTFE 1/2"	<b>€ 148,00</b>
99210014	<b>STGEC K5</b>	0÷200/2000 uS	GRAPHITE	PTFE 1/2"	<b>€ 148,00</b>

**PROXIMITY SWITCH** to detect in-coming flow, suitable for amperometric chlorine cell CLC3/4 and holder for CLS potentiostatic sensors

SProx



Part no. ICB18SN08NO	model <b>SPROX N.O. for controllers</b>	<b>€ 40,00</b>
Part no. ASO0000702	model <b>SPROX N.O. for CTRL3 dosing pump</b>	<b>€ 40,00</b>
Part no. ASO0000703	model <b>SPROX N.C. for CTRL2 dosing pump</b>	<b>€ 49,00</b>

### PT100 TEMPERATURE PROBES with cables, PVC, AISI or GLASS body



Part no.	Model	Temperature range	List price
ASO0000302	<b>SPT100P PVC</b> (for BASE MODULE series)	0÷60°C	<b>€ 211,00</b>
ASO0002501	<b>SPT100G GLASS</b> (for CLS holders series)	0÷60/80°C	<b>€ 217,00</b>
ASO0002601	<b>SPT100A AISI316</b> (for CLS holders series)	0÷100°C	<b>€ 342,00</b>

## ELECTRODES BUFFER SOLUTIONS



Part no.	Model	Description	List price
32383123	<b>SoI PH4</b>	Buffer solution pH 4, bottle of 75 ml	<b>€ 5,00</b>
32383133	<b>SoI PH7</b>	Buffer solution pH 7, bottle of 75 ml	<b>€ 5,00</b>
32383143	<b>SoI PH9</b>	Buffer solution pH 9, bottle of 75 ml	<b>€ 5,00</b>
32383163	<b>SoI RX</b>	Buffer solution 468 mV, bottle of 75 ml	<b>€ 7,00</b>
32383103	<b>SoI RX</b>	Buffer solution 650 Mv, bottle of 75 ml	<b>€ 7,00</b>

## CONDUCTIVITY BUFFER SOLUTIONS



Part no.	Model	Description	List price
32383123	<b>SoI EC 1413</b>	Buffer 1413 uS/cm25°C(1278 uS/cm 20°), bottle 500ml	<b>€ 32,00</b>
32383133	<b>SoI EC 12880</b>	Buffer 12880 uS/cm25°C(11670 uS/cm 20°), bottle 500ml	<b>€ 32,00</b>

# ELECTRODE AND SENSOR HOLDERS

**NEW**

## IN-LINE MODULAR ELECTRODE HOLDER



**ELECTRODE MODULE** The electrode cell module is designed for hosting the following electrodes in use within FWT range:

- pH and RX electrodes; Temperature sensors PT100; Dissolved Oxygen SENS OXY.
- Water sampling fitting: by turning the fitting operator can withdraw a water sample for analysis.



Description	List price
ECELL ELECTRODE MODULE pH / RX	€ 41,00
ECELL1 ELECTRODE MODULE pH / RX with hose nipples 10x14	€ 51,00
ECELL1+P ELECTRODE MOD.+ BASE MOD.+ PROXIMITY	€ 125,00
ECELL2 TWO ELECTRODE MODULES pH / RX with hose nipples 10x14	€ 103,00
ECELL2+P TWO ELECTRODE MODULES + BASE MODULE + PROXIMITY	€ 275,00
ECELL3+P THREE ELECTRODE MODULES + BASE MODULE + PROXIMITY	€ 327,00

*\*Note: in case electrode holder is used with other modules, it will not feature the Inlet/Outlet fittings but two couplings to connect the other units. In case is used only with the Base module, it will feature only the coupling and one Outlet fitting*

## MEMBRANE ION SELECTIVE SENSORS MODULE

- This module is a sensor holder designed for hosting the standard Membrane Ion Selective sensor in use within FWT range: Free and Total Chlorine, Hydrogen Peroxide, Chlorine Dioxide and others.
- Water sampling fitting upon request.



Description	List price
CLS CLS SENSORS MODULE	€ 63,00
CLS1 CLS SENSORS MODULE with hose nipples 10x14	€ 73,00
CLS1+P CLS SENSORS MODULE+BASE MODULE+PROXIMITY	€ 250,00
CLS2+P CLS SENSORS MODULE+BASE MODULE+PROXIMITY+ECELL1	€ 302,00
CLS3+P CLS SENSORS MODULE+BASE MODULE+PROXIMITY+ECELL2	€ 353,00
CLS4+P TWO CLS SENSORS MODULE+BASE MODULE+PROXIMITY+ECELL2	€ 426,00

*\*Note: in case electrode holder is used with other modules, it will not feature the Inlet/Outlet fittings but two couplings to connect the other units. In case is used only with the Base module, it will feature only the coupling and one Outlet fitting*

## BASE MODULE

**Base module** can also be used by itself for the functions above mentioned of flow regulator, proximity switch and temperature sensor holder. It includes a water filter cartridges (replaceable)



Description	List price
BASE MODULE CELL+P + PROXIMITY SWITCH + WATER FILTER CARTRIDGE	€ 182,00
WATER FILTER CARTRIDGE SPARE	€ 5,00
KIT CONNECTION 2 MODULES	€ 11,00
KIT HOSE NIPPLES+HOSE NUT 10X14	€ 11,00

*\*Note: in case base holder is used with other modules, it will feature only the Inlet fitting and a coupling to connect to the module sensor holders.*

## ELECTRODE AND SENSORS HOLDERS



### ELECTRODES HOLDERS

- **ELINE1 PP / ELINE2 AISI316 / ELINE3 PVC:** In-line holder 1/2"
- **ELINE2:** In-line holder, PP, connection 1/2"
- **ESUB:** submersible holder, PVC body, 50 cm
- *Ask for pipe fitting ELINE installations*

Part no.	Model	List price
CMRAC00010100	<b>ELINE1</b> PP 1/2" PG3,5	€ 13,00
RCRAC00010100	<b>ELINE1</b> PP 1/2" KIT 5	€ 61,00
RCRAC00010101	<b>ELINE1</b> PP 1/2" KIT 10	€ 117,00
DPS0001601	<b>ELINE2</b> AISI316 1/2" PG3,5	€ 121,00
2143001	<b>ELINE3</b> PVC 1/2" PG3,5	€ 42,00
2143002	<b>ESUB 0,5m</b>	€ 97,00
2143003	<b>ESUB 1 m</b>	€ 127,00
2143004	<b>ESUB 1,5 m</b>	€ 175,00



### INJECTION VALVE/ IN-LINE ELECTRODE CLAMP SADDLE

Part no.	Model	List price
AFA0000601	Clamp saddle DN50 fitting for injection valve 1/2" or IN-line electrode holder ELINE. Material PP 1/2" complete with bolts+nuts	€ 9,00
AFA0000801	Clamp saddle DN63 fitting for injection valve 1/2" or IN-line electrode holder ELINE. Material PP 1/2" complete with bolts+nuts	€ 10,00
1RAC011	Reduction fitting PP for injection valves up to 20 l/h 1/2"- 3/8"	€ 4,00