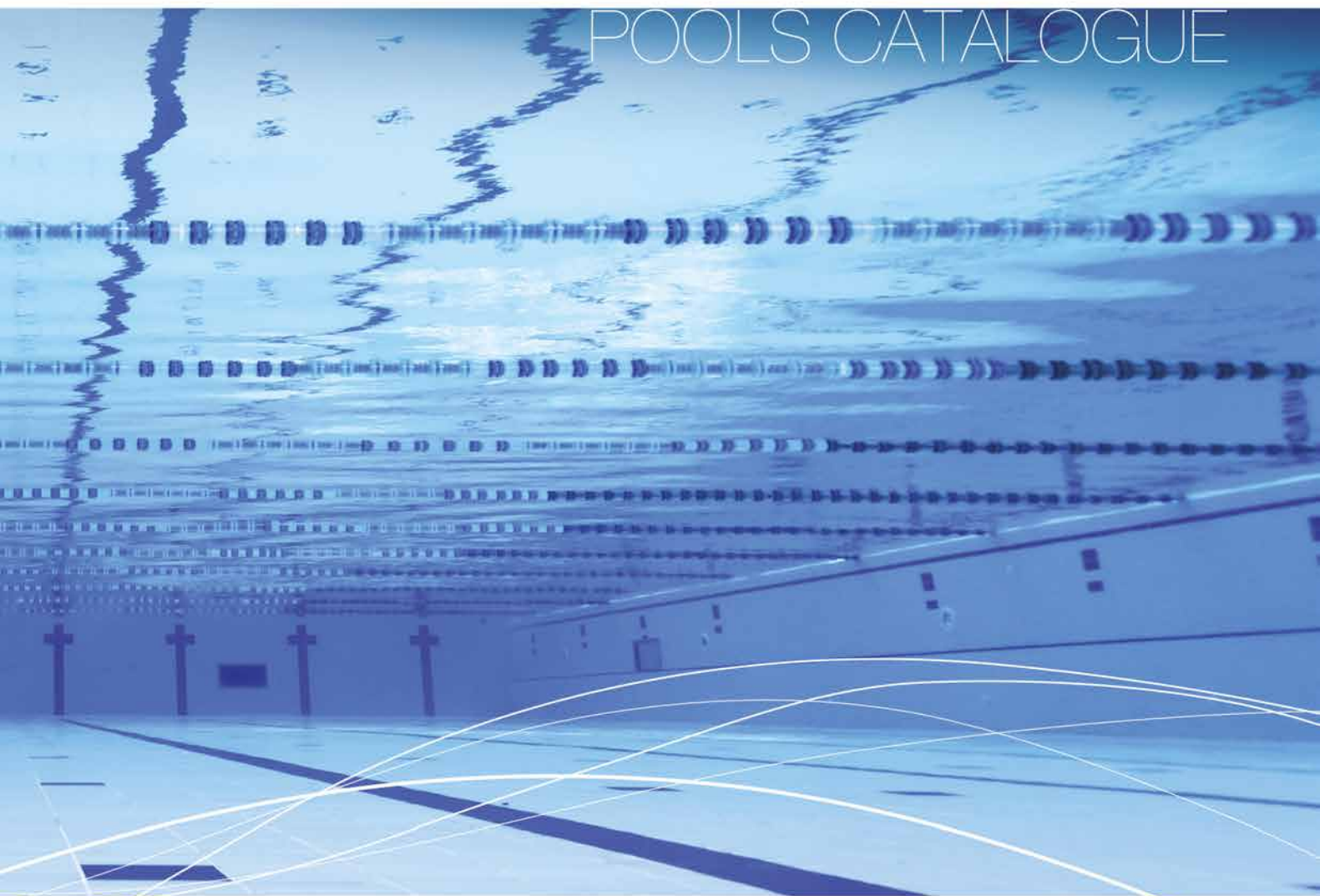


POOLS CATALOGUE



EMEC



INNOVATIVE EXPERIENCE

EMEC

THIRTY YEARS OF LEADERSHIP

EMEC ranks among Italy's top, consolidated industrial actors in the field of electronic control systems for fluids metering and management applications. Our products are designed and manufactured for both industrial and small-scale applications.

We are an all-Italian business entity with a clear strategic outlook, right from the outset, striving to merge design innovation with a long-term industrial footing. Our high-precision, hi-reliability products are entirely designed and assembled at our Rieti facilities.

EMEC's reputation as a market leader is expanding both in Italy and internationally, boosting demand for our quality, Italian designer products.

QUALITY FIRST

Our products are supported by passion and a solid industrial background. At EMEC, we have always sought to identify and seize investment opportunities, committing our resources to technology and human resources.

That key to our success - and what sets us apart from market competitors - is our complete control of the production cycle, reliant on specialist business set-ups and resources. Our approach feeds into all aspect ahead of end product delivery: systems design, component production and assembly, software programming and final testing. In line with total quality commitments, we provide installation and maintenance specialists with up-to-date training for both our household and industrial products.

Our retail and commercial units operate with a technical mindset, encompassing a firm grounding in all aspects of design and production; as such, they stimulate product innovation and enhancements based on Customer requirements, feedback and field experience. That approach makes us ideal partners when it comes to delivering targeted solutions to specific requirements. Our claims are anything but overstated: complete control, to us, is the only viable approach to ensuring total product quality and effective service delivery.

A CONSTANLY EVOLVING WORLD

Our 30-year industrial footing has bred constant improvements in all our products, expanding range and functions. Our range of products is currently implemented in a broad range of settings:

- Pools
- Saunas
- Industrial water treatment
- Drinking water treatment
- Irrigation
- Chemical industry
- Processing industry
- Cooling towers
- Refineries
- Car wash



100% MADE IN ITALY

All our products are manufactured in our factory in Italy.

SUSTAINABILITY

Respecting and safeguarding the environment are the core values underpinning our business. In keeping with that commitment we engage in and promote all actions designed to curb the environmental impact of our processes, products and raw materials, on a life-cycle basis. Our company implements an Environmental Management System compliant with UNI EN ISO 14001 standards, subject to ongoing updates.

Our goal is to curb atmospheric emissions, rationalise water consumption and enact appropriate waste management policies. Environmental impact assessments cover new products, process innovations and public tenders.

We are committed to providing our employees and staff with appropriate information and training concerning our company policy and its implementation with respect to both the workplace and our products.

CERTIFIED SKILLS AND VALUES

EMEC's values and reliability are the result of a long-standing commitment to quality and detail. We testify to that commitment through ongoing human resources training, rigorous abidance by production benchmarks, and concerted efforts to curb all employee health hazards.

Our pledge is a firm one and is backed by our policy implementation and investment goals. Our global quality approach matches our market standing and is certified by the world's leading certification institutes.



EMEC WORLDWIDE



WARRANTY

All our solenoid pump membrane have 5 years warranty.



POOLS CATALOGUE

1. DOSING PUMPS

2. CONTROLLERS

3. CONTROL AND DOSING SYSTEMS

4. ACCESSORIES



SWIMMING
POOL
MADE
SMART

POOLBRAVO



POOLBRAVO

The main innovation among the EMEC products for swimming pool is definitely the integrated system POOL BRAVO. An all-in-one, easy to use, highly accurate solution for eliminating the need of manual interventions on swimming pool water and for reducing the consumption of the chemicals. Moreover, its elegant cover makes POOL BRAVO suitable for any installation context and, besides safeguarding from accidental liquid loss, preserves at the same time the cleanliness of the inner components and their integrity.

POOLBRAVO is a turnkey product available in several configurations to immediately and easily manage the main parameters concerning water treatment in swimming pools, in order to optimize the dosing and consumption of the needed chemicals.

The chemical measurement parameters you can control include: **pH**, **Redox** (reduction-oxidation), **chlorine**, **hydrogen peroxide**, **ozone**, **turbidity**, **conductivity** and **bromine**.

COMPLETE CONTROL

The LD multiple reading digital system inside POOLBRAVO gives you the complete control over the measuring parameters and over the dosing of chemicals, besides being easy to use thanks to the LCD display and the ENCODER control knob that makes simple to browse through its configuration menus. Complete control also comes from the wide range of probes that can measure hydrogen peroxide, oxygen, bromine, chlorine, ozone, peracetic acid and chlorine dioxide.

A colored LED light is installed on PEF probe-holder in order to quickly signal, through an opening on the cover, specific operation statuses or possible alarms according to the color of the light.

EMEC V series dosing pumps complete POOL BRAVO dosing system.

REMOTE CONTROL

EMEC exclusive online system ERMES enables you to remotely control and regulate POOLBRAVO from any smartphone or PC, so to keep the status of your swimming pool always under control, wherever you are.



Dosing Pumps

Flow Control

MULTIFUNCTIONS MODE DOSING PUMPS

(Constant, Divide, Multiply, PPM, Batch, Volt, mA, %, ml/q), stand-by* and flow sensor input*, alarm output** and level control.

CONSTANT MODE DOSING PUMPS

Constant mode dosing pumps with level and flow control. Double frequency scale.

AMS MF



AMS PLUS



Stroke length adjustment Stroke speed adjustment

| PRESSURE | FLOW |
|----------|--------|
| 7 bar | 20 l/h |
| 3 bar | 40 l/h |
| 2 bar | 60 l/h |

KMS MF



K CL PLUS



Stroke length adjustment Stroke speed adjustment

| PRESSURE | FLOW |
|----------|--------|
| 2 bar | 18 l/h |
| 5 bar | 10 l/h |
| 20 bar | 1 l/h |

TMS MF



T CL



Stroke speed adjustment

| PRESSURE | FLOW |
|----------|--------|
| 4 bar | 20 l/h |
| 3 bar | 30 l/h |
| 1 bar | 50 l/h |

VMS MF



V CL



Stroke speed adjustment

| PRESSURE | FLOW |
|----------|--------|
| 5 bar | 1 l/h |
| 10 bar | 4 l/h |
| 3 bar | 10 l/h |
| 2 bar | 15 l/h |

*Not available on VMS MF

**Level Alarm option available on VMS MF and V CL

PH / ORP measurement & control

PROPORTIONAL DOSING PUMPS WITH PARAMETER MEASUREMENT

Proportional dosing pumps with pH and/or ORP measurement and control, with overdose alarm.

TMS PH & TMS RH



TMS PH

Proportional pump driven by internal built-in pH meter (0÷14pH) stand-by and level control, supplied without pH probe.

TMS RH

Proportional pump driven by internal built-in ORP meter (0÷1000mV) stand-by and level control, supplied without ORP probe.

PRESSURE

4 bar

3 bar

1 bar

FLOW

20 l/h

30 l/h

50 l/h

VMS PO



VMS PO

Proportional pump driven by internal built-in pH meter (0/14pH) or ORP meter (-1000mV/+1000mV). Parameter set by menu. Level control. PVDF pump head and accessories. Fast calibration on standard value. Restore last calibration.

PRESSURE

5 bar

10 bar

3 bar

2 bar

FLOW

1 l/h

4 l/h

10 l/h

15 l/h

VPHE & VRHE



VPHE

Proportional pump driven by internal built-in pH meter (6.8÷7.4pH) and level control, supplied without pH probe. LED display. PVDF pump head and accessories.

VRHE

Proportional pump driven by internal built-in ORP meter (660÷740mV) and level control, supplied without pH probe. LED display. PVDF pump head and accessories.

PRESSURE

2 bar

FLOW

2 l/h

FMS EV



Proportional controller for ORP with output for disinfectant or salt chlorine generator.

EV Output

230 VAC

MAX LOAD

10 A

NEW PERISTALTIC PUMPS

PRECISE. RELIABLE. ABOVE ALL, NOISELESS



WDPHxx series has been created by EMEC to provide a complete and small-sized solution for swimming pool water treatment. WDPHxx systems are all-in-one, compact instruments which integrate two dosing pumps and a control instrument into a single, easy to use, highly precise system, capable of measuring pH and another parameter that depends on the chosen model: chlorine, bromine, Redox, antialgae, flocculant, active oxygen. A wide range of products for the highest flexibility.

WDPHxx proportional dosing systems in the versions with peristaltic dosing pumps are the best solution to be installed where silent operation and high reliability are required, like in spa and wellness facilities. The integrated peristaltic pumps are indeed the most suitable for micro-dosing needs with lower pressure, ensuring at the same time an absolutely constant and accurate flow rate. Moreover, peristaltic pumps promise to have low power consumption thanks to low voltage.

A clear reading of data and an easy browsing through function menus are made simple by a wide backlit LCD display and by the "Encoder" control knob, in order to quickly program the working modes you need, to set alarms and to manage outputs. You can also remotely control WDPHxx systems from any smartphone or PC with EMEC exclusive online systemERMES, so to keep the status of your plant always under control wherever you are.

Your pool had never been so relaxing.

Dosing Pumps

Multi-parameters measurement and control

WDPHCL



pH & Chlorine

Swimming pool controller with 2 dosing pumps for acid (pH) and chlorine (Cl_2). Liquid ends and pump head made of PVDF.

Also available with peristaltic pumps (WDPHCL PER).

Wheel control system

Alarm output

RS485 output

Measurement range:
from 0 to 14 pH
from 0 to 10 mg/l Cl_2

WDPHCL

| PRESSURE | FLOW |
|----------|--------|
| 5 bar | 1 l/h |
| 3 bar | 10 l/h |

WDPHCL PER

| PRESSURE | FLOW |
|----------|-------|
| 1 bar | 3 l/h |



WDPHRH



pH & ORP

Swimming pool controller, 2 dosing pumps for acid (pH) and disinfectant (ORP).

Liquid ends and pump head made of PVDF.

Also available with peristaltic pumps (WDPHRH PER).

Wheel control system

Alarm output

RS485 output

Measurement range:
from 0 to 14 pH
from 0 to 1000 mV

WDPHRH

| PRESSURE | FLOW |
|----------|-------|
| 5 bar | 1 l/h |
| 3 bar | 5 l/h |

WDPHRH PER

| PRESSURE | FLOW |
|----------|-------|
| 1 bar | 3 l/h |



WDPHCLS & WDPHRHS



pH and ORP, Bromine, Chlorine

Proportional controller with 1 dosing pump driven by internal built-in pH, Redox and Chlorine/Bromine meter. Output: (SCHUKO plug) for sterilisers or Cl/Br feeders. Liquid ends and pump head made of PVDF.

Also available with peristaltic pump (WDPHCLS PER & WDPHRHS PER).

Measurement range:
from 0 to 14 pH
from 0 to 10 mg/l Cl_2 / Br_2

Also available: pH /ORP (WDPHRHS)

Measurement range:
from 0 to 14 pH
from 0 to 1000 mV

Option: free of voltage EV contact.

WDPHCLS

| PRESSURE | FLOW |
|----------|--------|
| 5 bar | 1 l/h |
| 3 bar | 10 l/h |

WDPHCLS PER

| PRESSURE | FLOW |
|----------|-------|
| 1 bar | 3 l/h |

| EV OUTPUT | MAX LOAD |
|-----------|----------|
| 230 VAC | 10 A |



Dry feeder and salt chlorine generator measurement and control Bromine, pH and active oxygen measurement and control

WDPHCA



Proportional controller with 2 dosing pumps for **pH and anti algae**. 230VAC EV proportional or on/off output for Cl/Br feeders. Weekly anti algae timer and level probe. Liquid ends and pump head made of PVDF.

Also available with peristaltic pumps (WDPHCA PER).

Wheel control system

Alarm output

RS485 output

Measurement range:

from 0 to 14 pH

from 0 to 10 mg/l Cl₂

Option: free of voltage EV contact.

WDPHCA

PRESSURE

3 bar

FLOW

10 l/h

WDPHCA PER

PRESSURE

1 bar

FLOW

3 l/h

WDPHCF



Proportional controller with 2 dosing pumps for pH (acid-base) and flocculant. 230VAC EV proportional or on/off output for Cl/Br feeders. Level probe and gr/day flocculant dosing. Liquid ends and pump head made of PVDF.

Also available with peristaltic pumps (WDPHCF PER).

Wheel control system

Alarm output

RS485 output

Measurement range:

from 0 to 14 pH

from 0 to 10 mg/l Cl₂

Option: free of voltage EV contact.

WDPHCF

PRESSURE

3 bar

FLOW

10 l/h (for pH)

WDPHCF PER

PRESSURE

1 bar

FLOW

3 l/h

WDPHOS



Proportional controller with 2 dosing pumps for pH (acid-base) and active oxygen. Level probe. Temperature reading with enclosed probe. Weekly or daily (hr) active oxygen dosing. Liquid ends and pump head made of PVDF.

Also available with peristaltic pumps (WDPHOS PER).

Settings:

- daily or weekly timer
- temperature compensation
- pool size

Wheel control system

Alarm output

RS485 output

Measurement range:

from 0 to 14 pH

WDPHOS

PRESSURE

3 bar

FLOW

10 l/h
(for pH)

3 bar

4 l/h
(for active oxygen)

WDPHOS PER

PRESSURE

1 bar

FLOW

3 l/h

Dosing Pumps

Anti algae, active oxygen, flocculant measurement and control Scent and essences dosing for health spa

VMS EN



Anti algae

Anti algae pump with weekly timer for shock-type water treatment. Quantities adjustable in cc units.

Level probe included.

PRESSURE

3 bar

FLOW

10 l/h

VMSA H₂O₂



Active oxygen

Active oxygen pump.

Also available with peristaltic pump (VMSA H₂O₂ PER).

Settings:

- day/week timer
- temperature compensation
- pool size

Level and temperature probes included.

VMSA H₂O₂

PRESSURE

3 bar

FLOW

4 l/h

VMSA H₂O₂ PER

PRESSURE

2 bar

FLOW

10 l/h

VCOG & VCLG



Flocculant

Metering pump for flocculant.

Double scale (24h):

- 0 to 300 gr/day
- 0 to 3000 gr/day

Level probe included.

PRESSURE

5 bar

FLOW

3000 gr/24h

VCLS



Scent and essences dosing

Silenced pump for scent and essences dosing at spas and hammam centres.

Double scale:

- 0 to 100 g/hr
- 0 to 1000 g/hr

Level probe included.

PRESSURE

7 bar

FLOW

1 l/h

VCLSE



C.E. Scent and essences dosing

Silenced pump for scent and essences dosing at spas and hammam centres. Contact (N.O.) for external control.

Double scale:

- 0 to 100 g/hr
- 0 to 1000 g/hr

Level probe included.

PRESSURE

7 bar

FLOW

1 l/h

Foot-bath disinfection systems

Dechloration system for filters cleaning waters

VMS MF + CTFI



Foot-bath disinfection system.

It works with a pulser sender water meter (1/2" size).

% control with level probe.

PRESSURE

5 bar

FLOW

12 l/h

CTFI

1/2"

TMS MF + CTFI



Foot-bath disinfection system.

It works with a pulser sender water meter (1/2" size).

% control with level probe.

PRESSURE

3 bar

FLOW

30 l/h

CTFI

1/2"

VCLD



Dechlorination system for waters filters (chlorine). Level meter.
SEFT C contact less water sensor (fittings 3/4").
SEFT P flow sensor (fittings 1/2").

Settings:

- 0-800 gr/h

- 0-8000 gr/h

Level probe included.

SEFT C and SEFT P are optional.

PRESSURE

3 bar

FLOW

10 l/h

VMS MF + CTFI



Dechloration system for water filters.

It works with a pulse sender water meter (1.1/2" or 2" size).

Proportional volume control (product ppm) with level meter.

PRESSURE

3 bar

2 bar

FLOW

10 l/h

15 l/h

CTFI

1.1/2" and 2"

CWFA

3" and 4"

Single parameter digital controllers

pH - ORP - Cl_2 - Br_2 - O_3 - Total Chlorine - H_2O_2 - Inductive conductivity - Turbidity + Temperature measurement and control

LDS Series



Wheel with "EASY-NAV" control, flow control, local & Remote Control, ERMES web communication, permanent data storage with system log, PT100 temperature probe, Stand-by input, Alarms: damaged probes - max dosage - threshold - levels - flow, Programmable delay at dosing start-up (up to 60 minutes), Priority dosage, Automatic temperature compensation, Probe readout menu (LDSCDIND), Working modes: on/off, impulsive proportional, proportional PWM and fixed PWM, Automatic or manual dosing activity, mA output (option).

LDSPH - LDSPH PLUS pH measurement and control
LDSRH - LDSRH PLUS ORP measurement and control
LDSCl - LDSCl PLUS Chlorine measurement and control (reading scale based on probe)
LDSCD - LDSCD PLUS Conductivity measurement and control
LDSCDIND - LDSCDIND PLUS Inductive conductivity measurement and control (ECDINDPT probe)
LDSTORBH - LDSTORBH PLUS Turbidity measurement and control (ETORBH probe)
LDSTRC - LDSTRC PLUS Fluorescence measurement and control
LDSFL - LDSFL PLUS Fluorine measurement and control

Options:

- USB for data log recording
- Current Output (0/4 - 20 mA)
- Ethernet
- 2G/3G modem
- MODBUS
- WIFI

PLUS Features:

- 5 relais (2 setpoint; alarm; probe cleaning; circulation)
- Probe Cleaning
- PID
- mA output

Rack mounting controllers

Controller for: pH, ORP, Chlorine (Total chlorine, Free Chlorine, Chlorine Dioxide, Hydrogen Peroxyde, Ozone, Bromine, Peracetic Acid depending on the probe), Conductivity (Probes not included). 2 On-Off/proportional setpoints, Flow alarm, Flow sensor stand-by input, 0÷20 mA or 4÷20 mA output proportional to read measured value and programmable in the reading range.

JA & JA PRO Series



Options

- 9-18VDC or 18-36VDC low-voltage power supply available
- Available with IP54 protection

JA control instruments are a series of rack mounting (96x96) single reading systems with temperature reading, mA module and native modbus

(JA PRO). On/Off, impulsive proportional and PID are main working modes.

It can set and monitor: pH, ORP, chlorine (depending on the probe: total chlorine, free chlorine, chlorine dioxide, hydrogen peroxide, ozone, bromine or paracetic acid) and conductivity with automatic range and select probe / product (Ohm - H_3PO_4 - H_2SO_4 - HNO_3 - HCl - NaOH - NaCl - TDS / PPM) for best results. Probes are not included.

PRO Features:

- mA module
- MODBUS serial communication

DIN DIGITAL Series



Rail mounting controller
6 modules

J DIGITAL Series



Rack mounting controller
48x96x140mm

Multi parameters digital controllers

Simultaneous parameters measurement and control

LDPHXX Series



pH / Total Chlorine / Free chlorine / Combined Chlorine / ORP / Turbidity Conductivity / Inductive conductivity / Bromine / Ozone + Temperature

Controller for acid (pH) and a second parameter. Wheel with "EASY-NAV" control, Flow control, Local & Remote Controlled, ERMES web communication, Permanent data storage with system log, PT100 temperature probe, Stand-by input, Alarms: damaged probes - max dosage - threshold - levels - flow, Programmable delay at dosing start-up (up to 60 minutes), Priority dosage, Probe readout menu, Probes check up, Multiple probe readings can be viewed, Working modes: on/off, impulsive proportional, proportional PWM and fixed PWM, Automatic or manual dosing activity, Chlorine/Bromine selection with ECL6 (LDPHCL), mA output (option)

Options:

- USB for data log recording
- Current Output (0/4 - 20 mA)
- Ethernet
- 2G/3G modem
- MODBUS
- WIFI

- LDPHRH** pH (0÷14) - ORP (0÷1000mV) - °C (0÷99,9)
- LDPHCL*** pH (0÷14) - Chlorine (0÷10 mg/l Cl₂) - °C (0÷99,9)
- LDPHBR** pH (0÷14) - Bromine (0÷10 mg/l Br) - °C (0÷99,9)
- LDPHDO** pH (0÷14) - O₂ (0÷200 mg/l H₂O₂) - °C (0÷99,9)

PLUS Features:

- 5 relays (2 setpoint; alarm; probe cleaning; circulation)
- Probe Cleaning
- PID
- mA output

MAX5 Series



pH / Total Chlorine / Free chlorine / Combined Chlorine / ORP / Turbidity Conductivity / Inductive conductivity / Bromine / Ozone + Temperature

Multiple digital controller system for managing up to 5 channels that can be programmed to control:

- pH
- ORP (ORP)
- Chlorine (total, free and combined)
- Chlorine Dioxide
- Hydrogen Peroxyde
- Ozone
- Peracetic acid
- Turbidity
- Conductivity
- Dissolved oxygen
- Temperature (on all models, regardless of the configuration)

Options:

- USB for data log recording
- Current Output (0/4 - 20 mA)
- Ethernet
- 2G/3G modem
- MODBUS
- WIFI

Ranges:

pH: from 0 to 14 pH
ORP (ORP): from 0 to 1000 mv
Total Chlorine: from 0 to 10 mg/l
Free chlorine: from 0 to 10 mg/l
Combined Chlorine: from 0 to 10 mg/l
Bromine: from 0 to 10 mg/l
Turbidity: from 0 to 9,999 NTU
Temperature: from 0 to 100 °C
Conductivity: from 0 to 300 mS

Its versatility enables different programming solutions: each channel can be programmed on user needs. All information are provided through a widescreen LCD display (240x64). Instrument has:

- 6 setpoints output (on/off, PID or PWM) and 6 proportional output
- 1 probe cleaning output
- 5 level tank input
- 5 timer for flocculant/algicide dosing
- Water meter input for water restore
- Temperature probe input
- Alarm output
- Wheel with "EASY-NAV" control
- ERMES web communication
- Local & Remote Controlled
- Multiple probe readings can be viewed
- Probe readout menu
- Probes check up
- Permanent data storage with system log
- Stand-by input
- Alarms: damaged probes - max dosage - 2 overflow alarms per channel - 5 product level alarms - flow alarm
- Totalizer for instant flow rate

*On order please specify parameters and chlorine probe model.

Remote measurement and control



Web based application ERMES allows plants remote control: read, analyze and modify instruments parameters from PC, smartphone or tablet.

ADVANTAGES

- It reduces plant intervention and inspections.
- It reports on the current status of the network's devices and connections (probes, outputs, alarms, setpoints)
- It instantly gives notification of alarms by sms or email
- It generates an up to date report of all plant instruments
- It can display the instruments activity log as line graphs and charts and it can download it to your pc in excel or pdf format

HOW DOES ERMES WORK?

Enter the website **www.ermes-server.com** and, after registration, set your plants.
EMEC instruments with ETHERNET or 2G/3G Configuration will be immediatly connected and available for remote control.
Furthermore, with ERMES you can receive alarm messages via email, with different report option on instrument status.
If your instrument has a 2G/3G Configuration you can receive SMS report on your mobile.

All EMEC latest controllers are ERMES ready:

- MAX5
- LD MULTICHANNEL
- LD WITH ENCODER (wheel)
- MTOWER
- WD

How to select a configuration

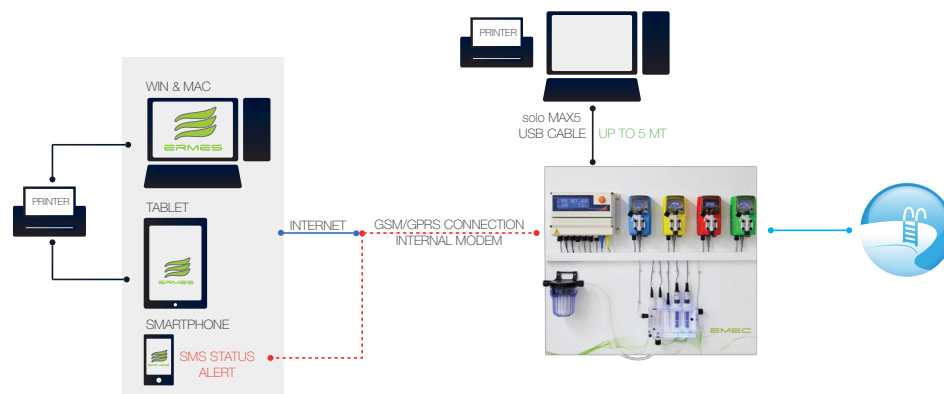
| CONFIGURATION | FEATURES | CONNECTION TYPE | REQUIREMENTS | FUNCTIONS |
|---------------|---|---|------------------|--|
| BASIC | / | LOCAL CONTROLLER NETWORK | / | RS485 link to EMEC instruments |
| ADVANCED USB | USB | Download data log from controller to Usb drive | / | RS485 link to EMEC instruments Data Log recording on USB drive |
| ETHERNET | LAN | Remote control via WEB APP ERMES (www.ermes-server.com) | LAN (RJ-45) | RS485 link to EMEC instruments ERMES Web App (PC, smartphone, tablet) Email Alarm messages |
| 2G/3G | MOBILE | Remote control via WEB APP ERMES (www.ermes-server.com) | Network Coverage | RS485 link to EMEC instruments ERMES Web App (PC, smartphone, tablet) Email / SMS Alarm messages |
| MODBUS | PLC connection to other devices via RS485 or TCP/IP | PLC plant management | / | PLC connection output for parameters reading/setting |
| WIFI | WIFI network between instrument and web | Remote control via WEB APP ERMES (www.ermes-server.com) | Network coverage | RS485 output to link other EMEC instruments Web ERMES remote control (PC, smartphone or tablet) Alarm messages via email |

You can CUSTOMIZE configurations adding external modules.

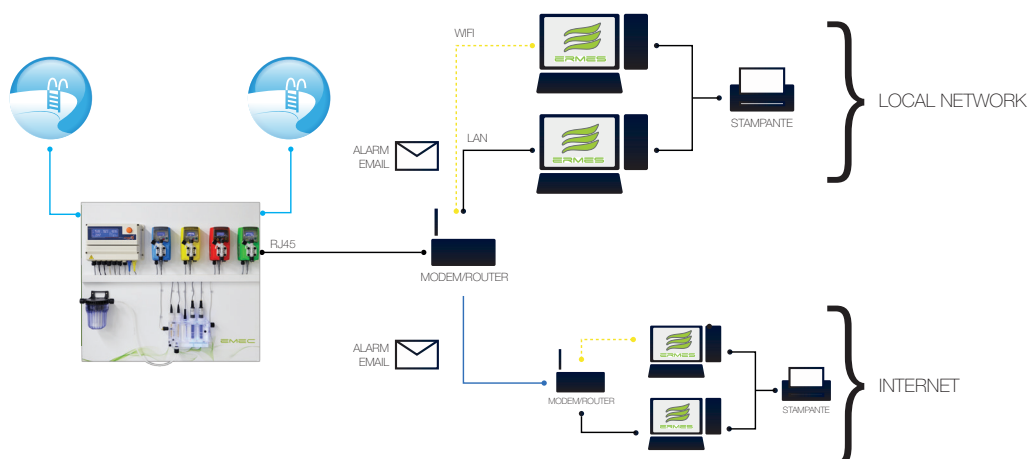
Mixed configurations allows to connect instruments to ERMES software in multiple ways: directly, locally and remotely. Those configurations extend connection capacity.

If you already use EMEC instruments and you want use ERMES web application, contact our customers service.

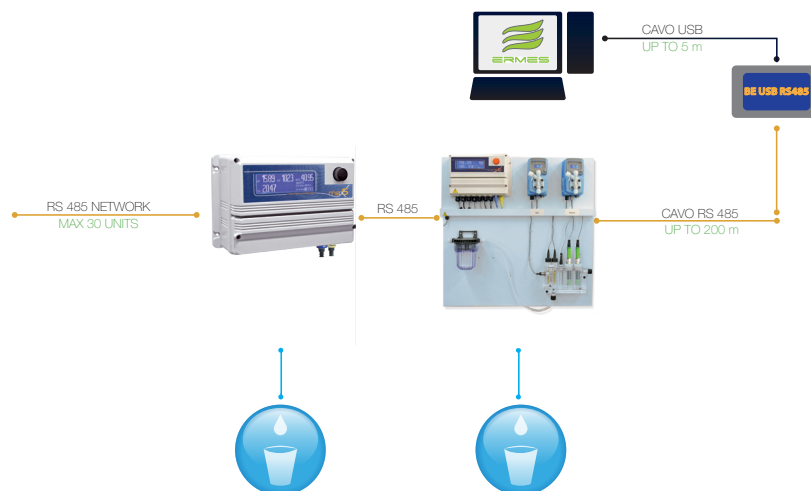
CONFIGURATION EXAMPLE 2G/3G



CONFIGURATION EXAMPLE ETHERNET



CONFIGURATION EXAMPLE BASIC



Remote measurement and control

Modem and external adapters for remote control of: LD, MAX5 and WDPHXX controller series

BT CEL



Modem for mobile network. IP65.

BT ETH



Ethernet controller for standard RJ45 network. IP65.

BT WiFi



Module for WIFI connection. IP65

BT USB



USB module for USB datalog recording. IP65.

BT MODBUS



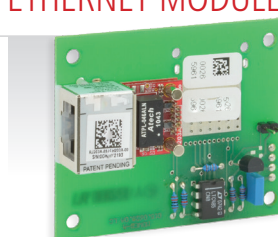
Serial communication module for PLC connection.

2G/3G MODULE



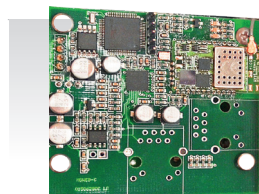
Internal 2G/3G modem for LD encoder and MAX5 controllers.

ETHERNET MODULE



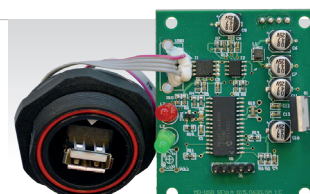
Internal standard ETHERNET (RJ45) controller for LD encoder and MAX5 controllers.

WiFi MODULE



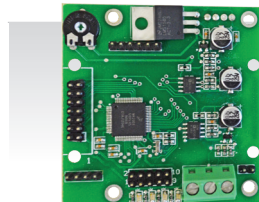
Module for WIFI network. IP65.

USB MODULE

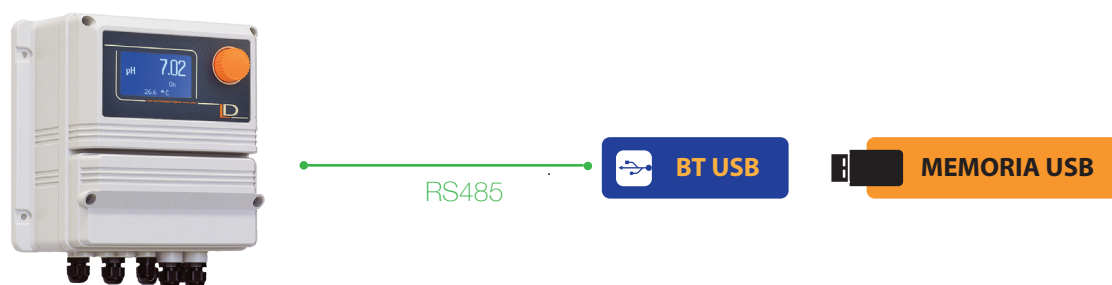
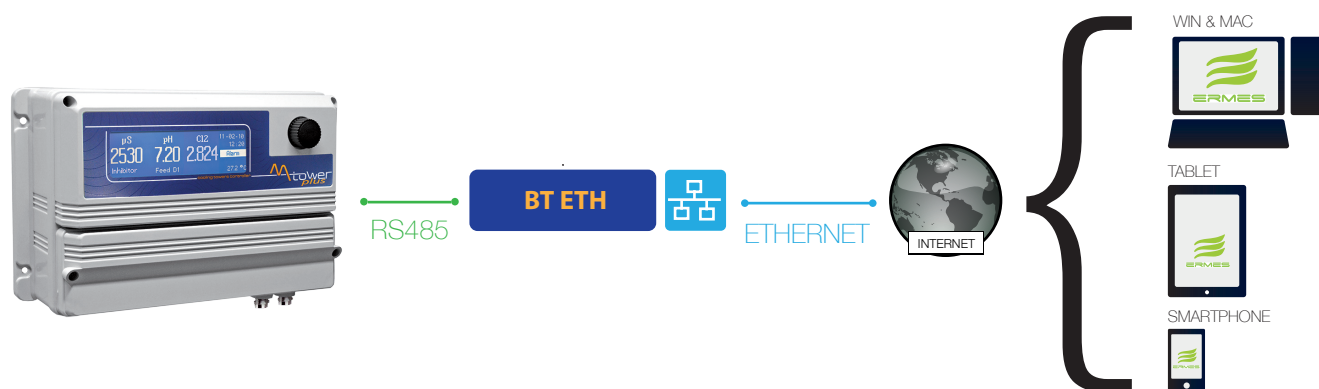
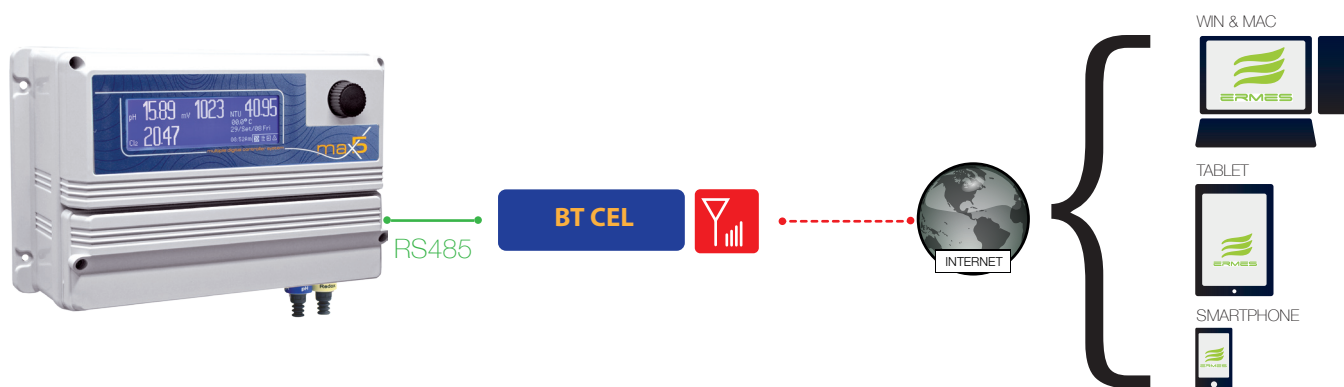


Module for USB connection. IP65.

MODBUS MODULE



MODBUS RTU module.



Control and dosing systems

PA-LDPHRH

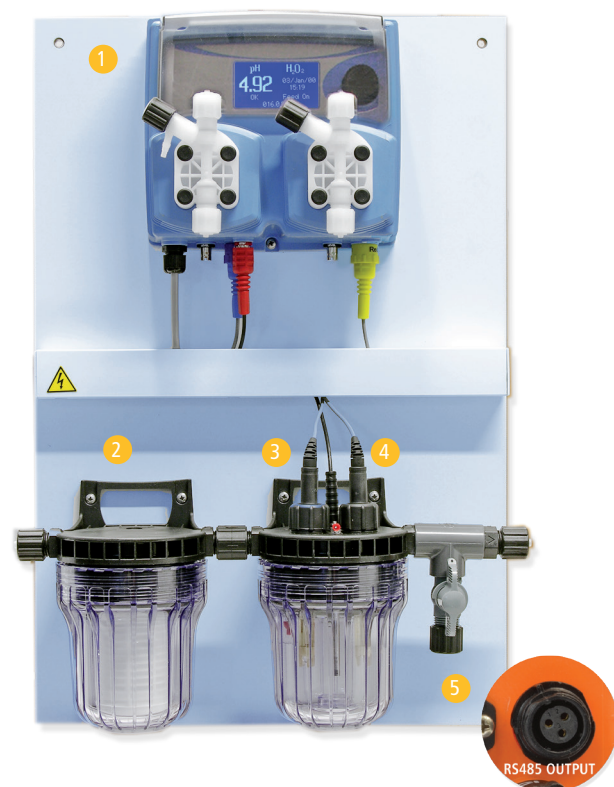


pH and ORP proportional control

1. Controller LDPHRH
2. Dosing pump VMS MF 03 10 (10 l/h)
3. Dosing pump VMS MF 03 10 (10 l/h)
4. Filter NFIL
5. Probe pH EPHS
6. Probe ORP ERHS
7. Probes holder NPED4

Size: 600x650 mm
Customized coloured background on demand

PA-WDPHOS



pH and Active Oxygen proportional control

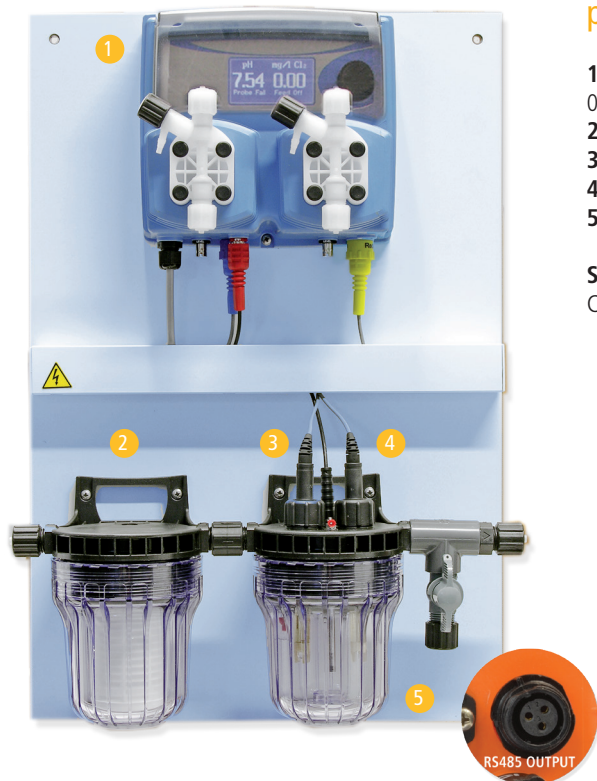
1. Controller WDPHOS 03 10 (10 l/h) and 03 04 (4 l/h), or WDPHOS PER 01 03 (with peristaltic dosing pumps).
2. Filter NFIL
3. Temperature probe ETEPTCH18
4. Probe pH EPHS
5. Probes holder NPED4

Size: 400x600 mm
Customized coloured background on demand.



PA-WDPHRH

pH and ORP proportional control



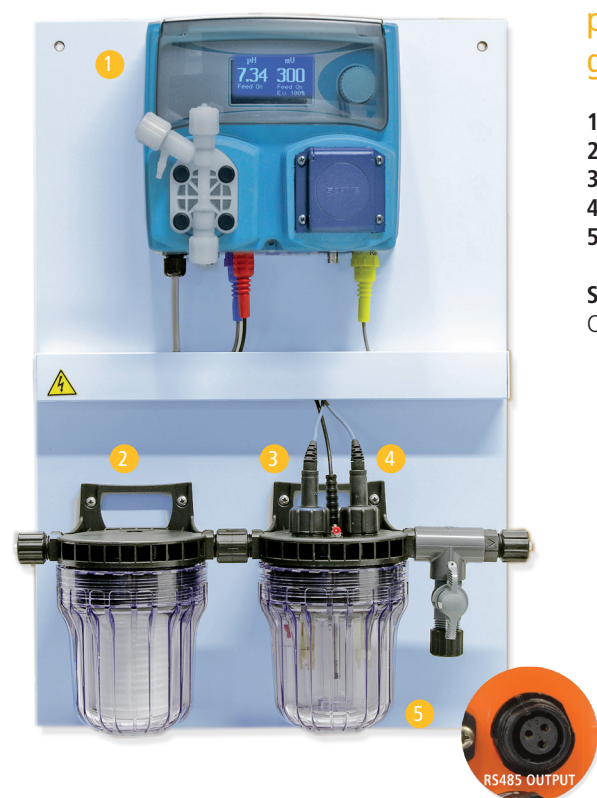
1. Controller WDPHRH 03 10 (10 l/h), 05 01 (1 l/h) and 10 04 (4 l/h), or WDPHRH PER 01 03 (with peristaltic dosing pumps).
2. Filter NFIL
3. Probe ORP ERHS
4. Probe pH EPHS
5. Probes holder NPED4

Size: 400x600 mm
Customized coloured background on demand



PA-WDPHEV

pH or ORP proportional control, Dry feeder solenoid valve or salt generator (230VAC / 10A) output

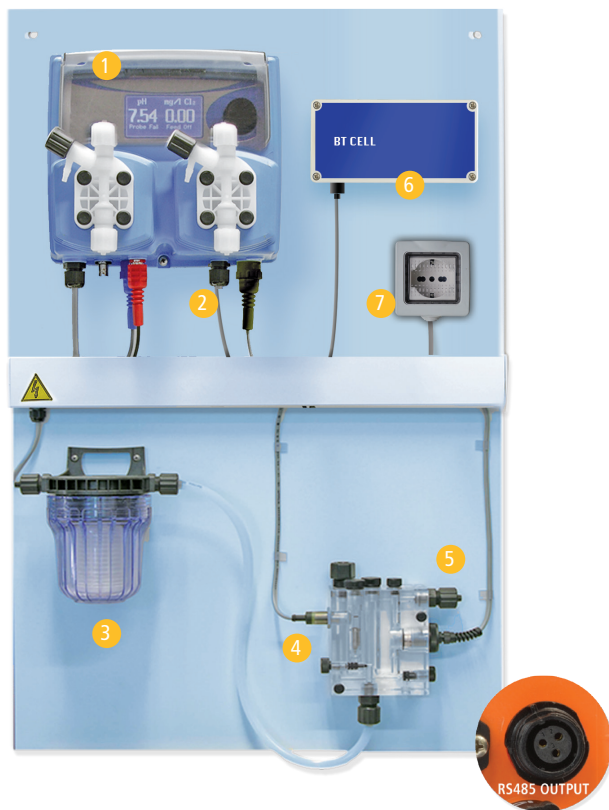


1. Controller WDPHRHS 07 06 (6 l/h) or 05 01 (1 l/h)
2. Filter NFIL
3. Probe ORP ERHS
4. Probe pH EPHS
5. Probes holder NPED4

Size: 400x600 mm
Customized coloured background on demand

Control and dosing systems

PA-WDPHCFA & PA-WDPHCASA



Salt chlorine generator version:

- Flocculant with continuous dosing PA-WDPHCFA
- Anti algae with weekly timer PA-WDPHCASA

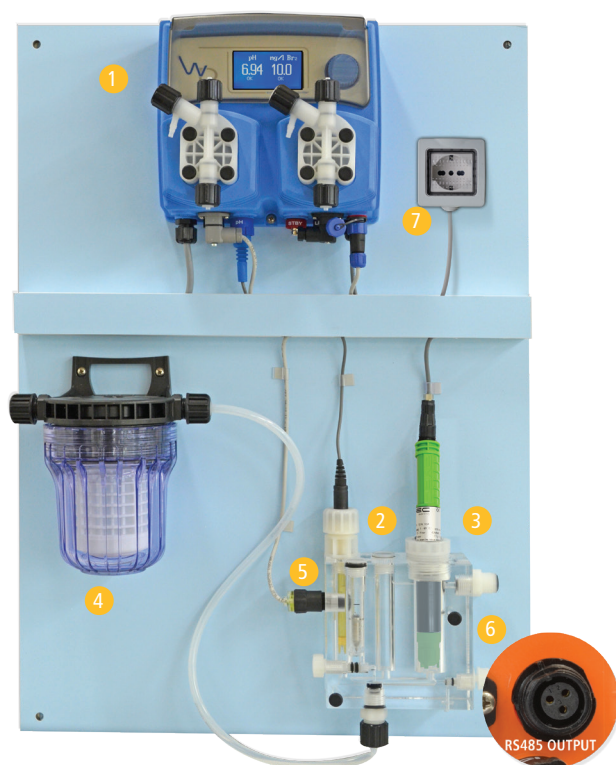
1. Controller WDPHCA 07 06 (6 l/h), 05 01 (1 l/h) or 10 04 (4 l/h)
2. Probe pH EPHS
3. Filter NFIL
4. Proximity sensor SEPR
5. Open amperometric cell ECL6
6. Modem BT CEL
7. Output 10 A 220 VAC

Option: Free of voltage EV contact.

Size: 500x700 mm

Customized coloured background on demand

PA-WDPHCA / PA-WDPHCF & PA-WDPHBA / PA-WDPHBF



Chlorine / Bromine dry feeder:

- Flocculant with continuous dosing PA-WDPHCFBF
- Anti algae with weekly timer PA-WDPHCABA

1. Controller WDPHCL 07 06 (6 l/h), 05 01 (1 l/h) or 10 04 (4 l/h)
2. Probe pH EPHS
3. Chlorine probe SCL3S/20 o Probe Bromo SBR 1/20
4. Filter NFIL
5. Proximity sensor SEPR
6. Probes holder PEF1R
7. Output 10 A 220 VAC

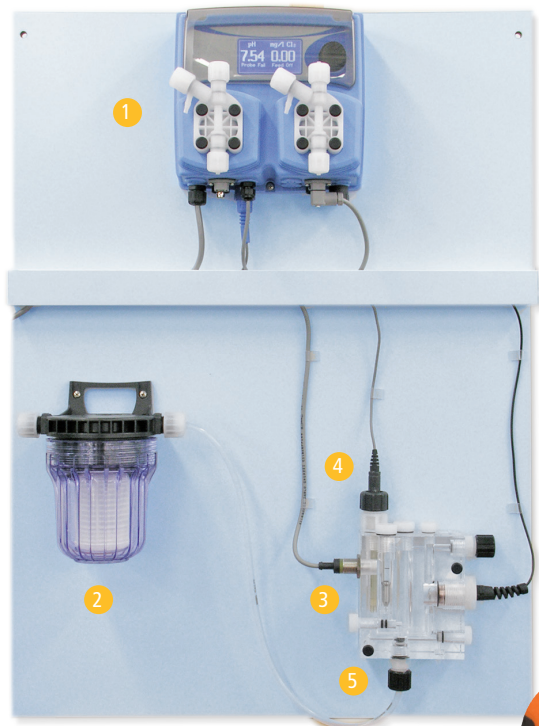
Option: Free of voltage EV contact.

Size: 500x700 mm

Customized coloured background on demand

PA-WDPHCL

pH and Chlorine proportional control



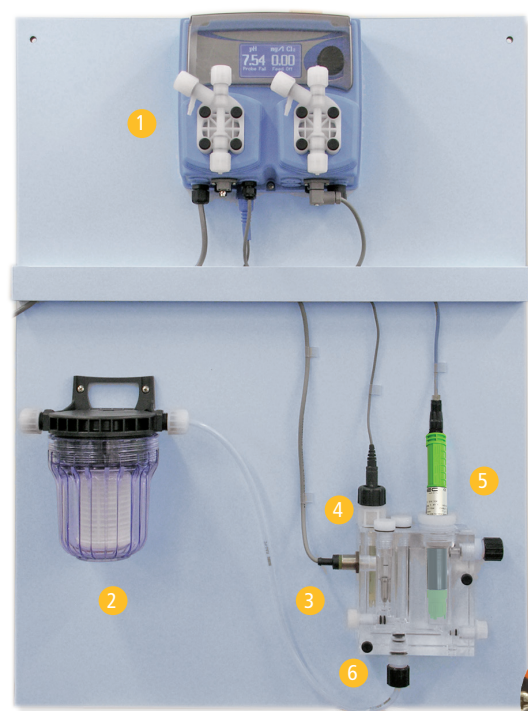
1. Controller WDPHCL 07 06 (6 l/h), 05 01 (1 l/h) or 10 04 (4 l/h), or WDPHCL PER 01 03 (with peristaltic dosing pumps).
2. Filter NFIL
3. Proximity sensor SEPR
4. Probe pH EPHS
5. Open amperometric cell ECL6

Size: 500x700 mm
Customized coloured background on demand



PA-WDPHCLO

pH and Chlorine proportional control (inorganic/organic)



1. Controller WDPHCL 07 06 (6 l/h), 05 01 (1 l/h) or 10 04 (4 l/h), or WDPHCL PER 01 03 (with peristaltic dosing pumps).
2. Filter NFIL
3. Proximity sensor SEPR
4. Probe pH EPHS
5. Chlorine probe SLC3S/20
6. Probes holder PEF1R

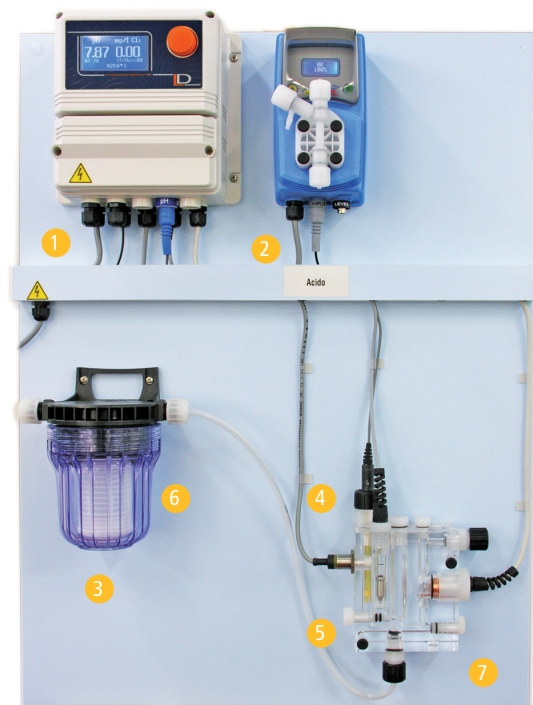
Size: 500x700 mm
Customized coloured background on demand.



Control and dosing systems

Controller based system with open amperometric cell ECL6

PA-LDPHCL

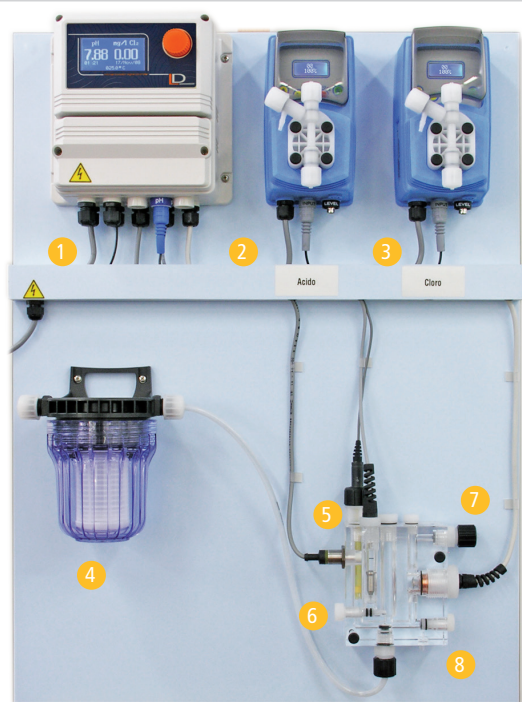


For dry feeder usage (Chlorine / bromine) or salt chlorine generator
Medium size pool

1. Controller LDPHCL
2. Dosing pump for acid VMS MF 03 10 (10 l/h)
3. Filter NFIL
4. Probe pH EPHS
5. Proximity sensor SEPR
6. Temperature probe ETEPTCH18
7. Open amperometric cell ECL6

Size: 600x800 mm
Customized coloured background on demand

PA-LDPHCLO

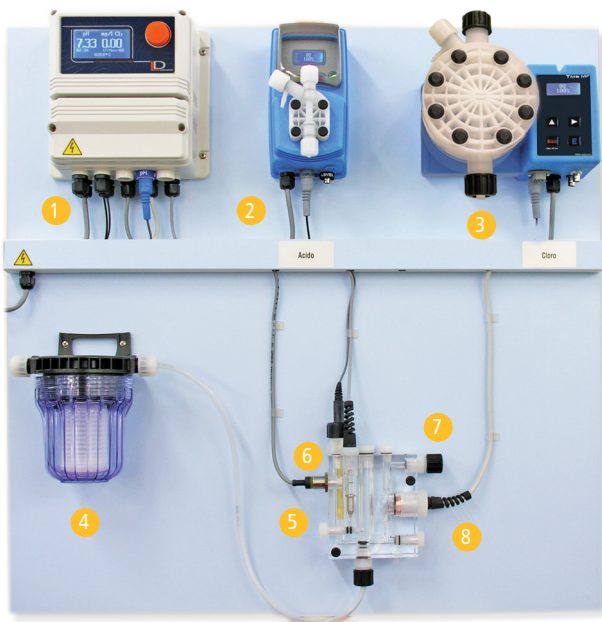


pH and Chlorine proportional control
Medium size pool

1. Controller LDPHCL
2. Dosing pump for acid VMS MF 03 10 (10 l/h)
3. Dosing pump for chlorine VMS MF 02 15 (15 l/h)
4. Filter NFIL
5. Probe pH EPHS
6. Proximity sensor SEPR
7. Temperature probe ETEPTCH18
8. Open amperometric cell ECL6

Size: 600x800 mm
Customized coloured background on demand

PA-LDPHCLOB

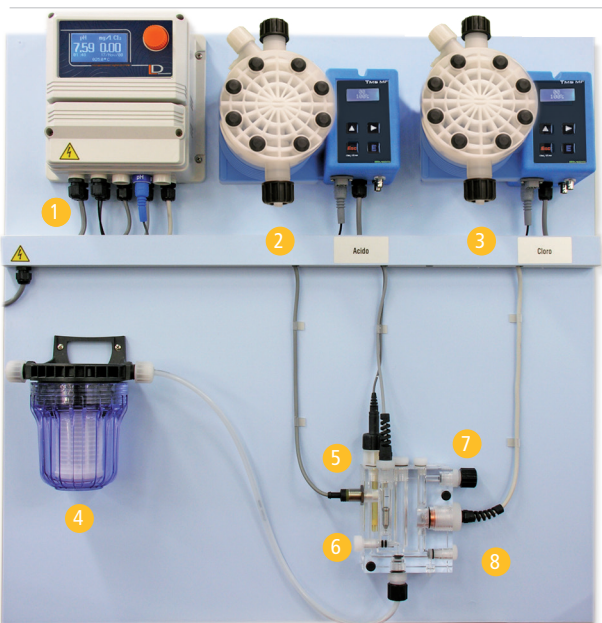


For pH and chlorine proportional control Large size pool

1. Controller LDPHCL
2. Dosing pump for acid VMS MF 02 15 (15 l/h)
3. Dosing pump for chlorine TMS MF 03 30 (30 l/h)
4. Filter NFIL
5. Probe pH EPHS
6. Proximity sensor SEPR
7. Temperature probe ETEPTCH18
8. Open amperometric cell ECL6

Size: 800x800 mm
Customized coloured background on demand

PA-LDPHCLOBG



For pH and chlorine proportional control Large size pool

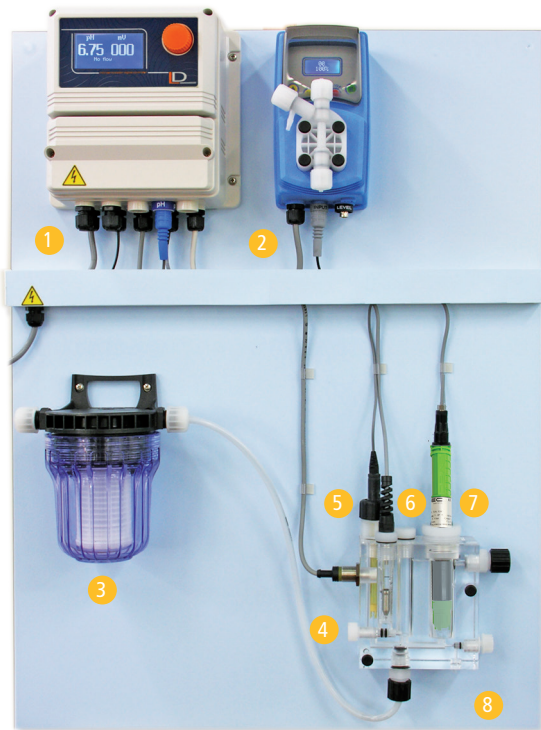
1. Controller LDPHCL
2. Dosing pump for acid TMS MF 03 30 (30 l/h)
3. Dosing pump for chlorine TMS MF 01 50 (50 l/h)
4. Filter NFIL
5. Probe pH EPHS
6. Proximity sensor SEPR
7. Temperature probe ETEPTCH18
8. Open amperometric cell ECL6

Size: 800x800 mm
Customized coloured background on demand

Control and dosing systems

Controller based system with closed amperometric cell SCL3S/20 and PEF1

PA-LDPHCLV & PA-LDPHBR



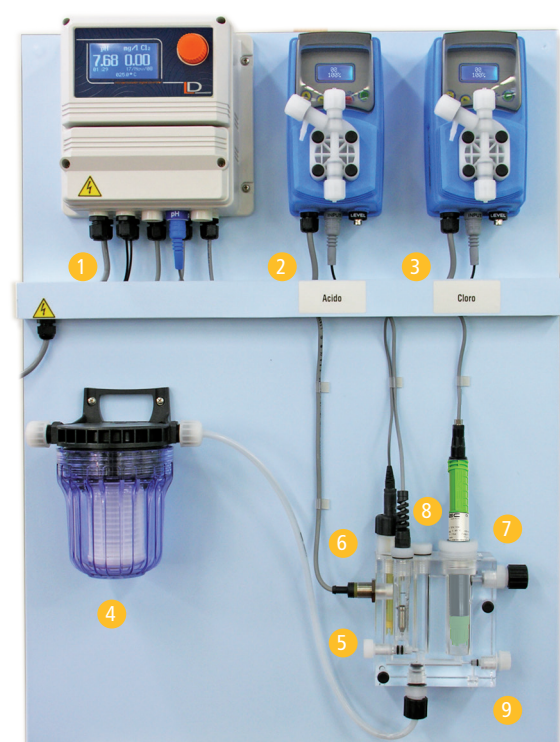
For dry feeder or salt chlorine generator
Medium size pool

1. Controller LDPHCL
2. Dosing pump for acid VMS MF 03 10 (10 l/h)
3. Filter NFIL
4. Proximity sensor SEPR
5. Probe pH EPHS
6. Chlorine probe SCL3S/20
7. Temperature probe ETEPTCH18
8. Probes holder PEF1R

PA-LDPHBR: Also available with bromine probe EBR 1/20.

Size: 600x800 mm
Customized coloured background on demand

PA-LDPHCLVD

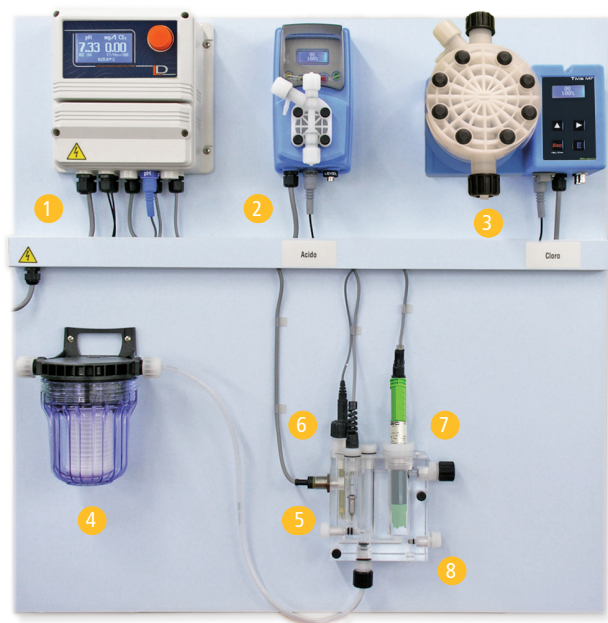


pH and Chlorine proportional control (inorganic/organic)
Medium size pool

1. Controller LDPHCL
2. Dosing pump for acid VMS MF 03 10 (10 l/h)
3. Dosing pump for chlorine VMS MF 02 15 (15 l/h)
4. Filter NFIL
5. Proximity sensor SEPR
6. Probe pH EPHS
7. Chlorine probe SCL3S/20
8. Temperature probe ETEPTCH18
9. Probes holder PEF1R

Size: 600x800 mm
Customized coloured background on demand

PA-LDPHCLVG

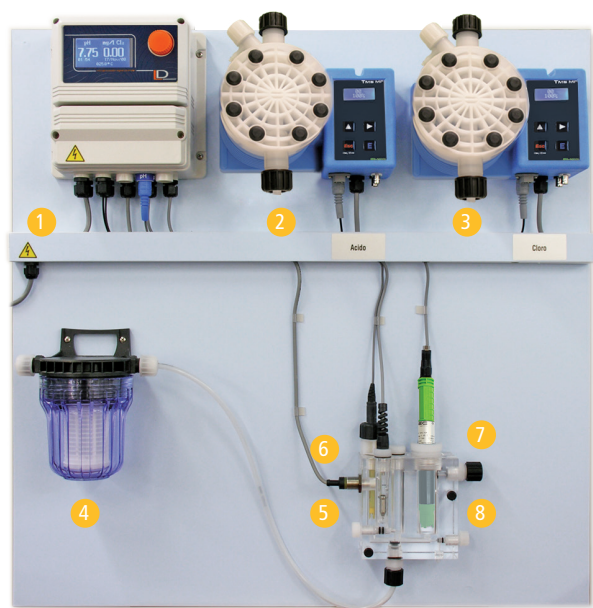


pH and Chlorine proportional control (inorganic/organic) Big size pool

1. Controller LDPHCL
2. Dosing pump for acid VMS MF 02 15 (15 l/h)
3. Dosing pump for chlorine TMS MF 03 30 (30 l/h)
4. Filter NFIL
5. Proximity sensor SEPR
6. Probe pH EPHS
7. Chlorine probe SCL3S/20
8. Probes holder PEF1R

Size: 800x800 mm
Customized coloured background on demand

PA-LDPHCLGD



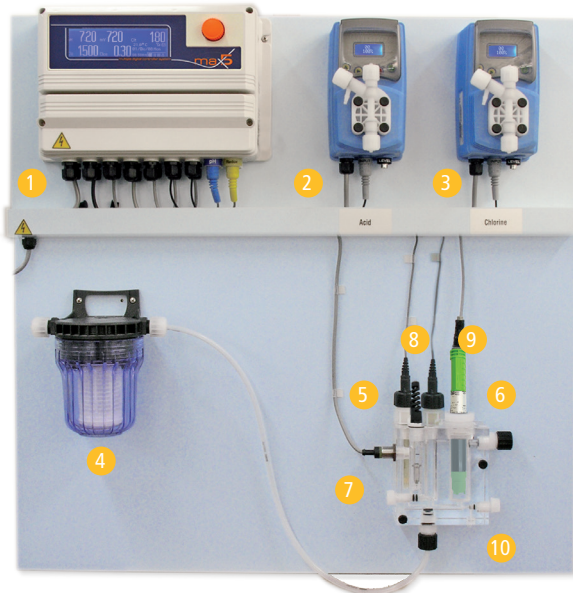
pH and Chlorine proportional control (inorganic/organic) Big size pool

1. Controller LDPHCL
2. Dosing pump for acid TMS MF 03 30 (30 l/h)
3. Dosing pump for chlorine TMS MF 01 50 (50 l/h)
4. Filter NFIL
5. Proximity sensor SEPR
6. Probe pH EPHS
7. Chlorine probe SCL3S/20
8. Probes holder PEF1R

Size: 800x800 mm
Customized coloured background on demand

Advanced controller based systems

PA-M5D

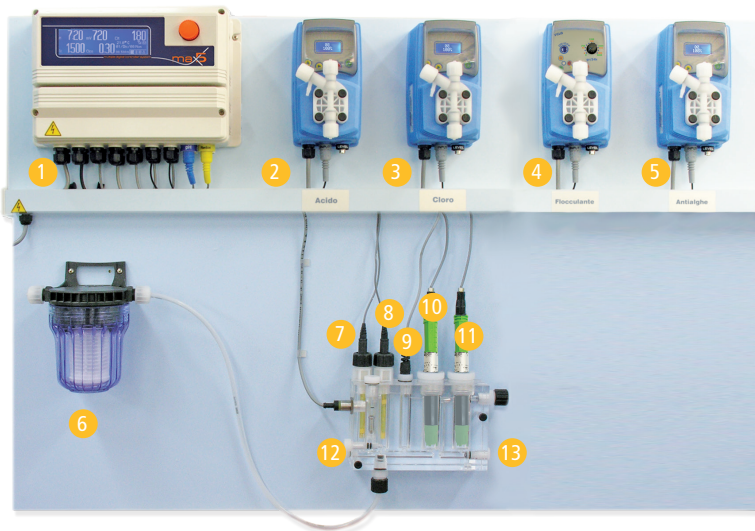


pH, ORP, Free chlorine and Temperature control

1. Controller MAX5
2. Dosing pump for acid VMS MF 03 10 (10 l/h)
3. Dosing pump for chlorine VMS MF 02 15 (15 l/h)
4. Filter NFIL
5. Probe EPHS di pH
6. Probe SCL3S/20 Free chlorine
7. Proximity sensor SEPR
8. Temperature probe ETEPTCH18
9. Probe ERHS di ORP
10. Probes holder PEF1R

Size: 800x800 mm
Customized coloured background on demand

PA-MD5DB

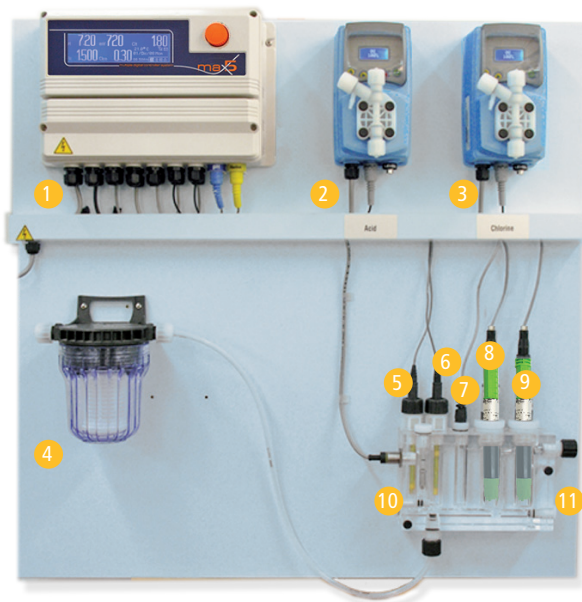


pH, ORP, Free chlorine, Total Chlorine, Combined Chlorine and Temperature Anti algae and flocculant treatment

- | | |
|--|----------------------------------|
| 1. Controller MAX5 | 8. ORP probe ERHS |
| 2. Dosing pump for acid VMS MF 03 10 (10 l/h) | 9. Temperature probe ETEPTCH18 |
| 3. Dosing pump for chlorine VMS MF 02 15 (15 l/h) | 10. Free chlorine probe SCL3S/20 |
| 4. Dosing pump for flocculant VCLG | 11. Total chlorine probe SCL8/20 |
| 5. Dosing pump for anti algae VMS MF 07 06 (6 l/h) | 12. Proximity sensor SEPR |
| 6. Filter NFIL | 13. Probes holder PEF22R |
| 7. Probe di pH EPHS | |

Size: 1000x800 mm
Customized coloured background on demand

PA-MD5DV

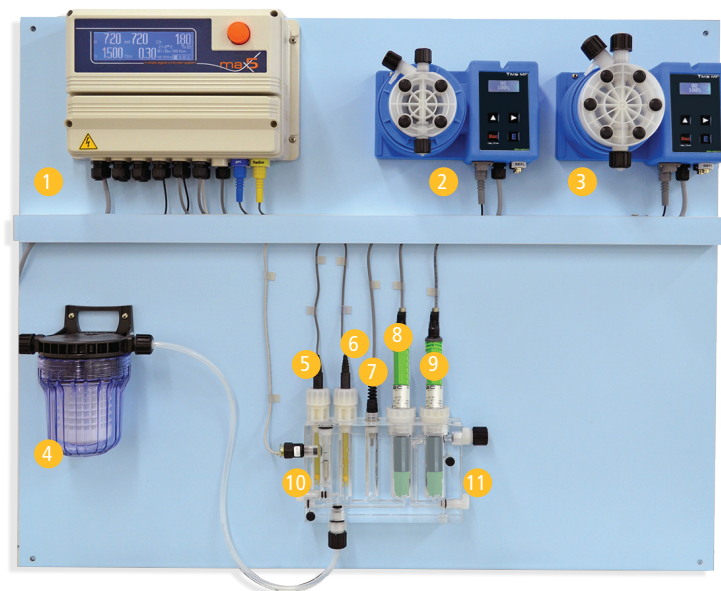


pH, ORP, Free chlorine, Total Chlorine, Combined Chlorine and Temperature

1. Controller MAX5
2. Dosing pump for acid VMS MF 03 10 (10 l/h)
3. Dosing pump for chlorine VMS MF 02 15 (15 l/h)
4. Filter NFIL
5. Probe di pH EPHS
6. ORP probe ERHS
7. Temperature probe ETEPTCH18
8. Free chlorine probe SCL3S/20
9. Total chlorine probe SCL8/20
10. Proximity sensor SEPR
11. Probes holder PEF22R

Size: 800x800 mm
Customized coloured background on demand

PA-MD5DT



1. Controller MAX5
2. Dosing pump for acid TMS MF 03 30 (30 l/h)
3. Dosing pump for chlorine TMS MF 01 50 (50 l/h)
4. Filter NFIL
5. Probe di pH EPHS
6. ORP probe ERHS
7. Temperature probe ETEPTCH18
8. Free chlorine probe SCL3S/20
9. Total chlorine probe SCL8/20
10. Proximity sensor SEPR
11. Probes holder PEF22R

Size: 800x800 mm
Customized coloured background on demand

Accessories

EPHS



pH electrode for pressures up to 7bar/70°C (3.5bar/80°C).
0.8m cable. Epoxy body.
Minimum 100µS.

ERHS



ORP electrode for pressures up to 7bar/70°C (3.5bar/80°C).
0.8m cable. Epoxy body.
Minimum 100µS.

BUFFER SOLUTIONS



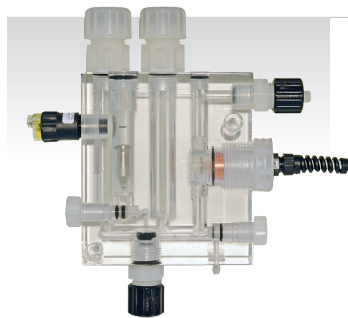
Buffer solutions for probes calibration.

SCL8



Total chlorine amperometric cell (organic and inorganic),
from 0 to 2 mg/l;
from 0 to 20 mg/l, pH and temperature compensated.

ECL6 - ECL12



Free chlorine / bromine amperometric cell (organic and inorganic),
from 0 to 10 mg/l.
Flow switch and flow adjustment.
Electrodes holder for pH, Redox and temperature.
With proximity switch mod. SEPR. 6x8 fittings.

With LED light sold as option

SCL3S/20



Free chlorine amperometric cell (organic and inorganic),
from 0 to 10 mg/l, pH and temperature compensated.

ETEPTCH18



Temperature probe PT100 (0°C÷100 °C, max 10bar).
Suitable for LDxx, LDPHxx and Max5 series instruments.

PEF22R



Holder for Chlorine, pH, Redox, free Chlorine, total Chlorine and temperature probes. Provided type SEPR flow controller. Suited for operations with MAX5 controller.

With LED light sold as option

PEF1R



Off-line probes holder for ECL1/2/3/8/9/10/11 and pH, Redox and temperature, with flow switch and regulation. With proximity switch mod. SEPR. 6X8 fittings.

With LED light sold as option

NFIL CA



Activated 5" filter with carbon filter cartridge. 6x8 fittings.

With LED light sold as option

NFIL



Filter with cartridge. Washable. PET (60 µ). 6x8 fittings.

With LED light sold as option

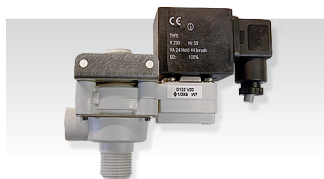
NPED4



Off-line electrode holder for EPH and ERH electrodes. Epoxy Ø12 casing. Max temperature 50° C, max pressure 5bar with flow sensor, N.O. switch, 6x8 fittings.

With LED light sold as option

EVLA



Electrovalve for dry feeder (chlorine / bromine). 1/2" fitting.

PELC



PVDF in-line electrode holder for pH / Redox electrodes with 1/2" or 3/4" thread. For saddle connection.

PEL



PVDF in-line electrode holder for pH / Redox electrodes with 1/2" or 3/4" thread. For "T" connection.

SBR1/20



Amperometric cell for bromine (reading range from 0 to 20 mg/l), pH and temperature compensated.

Accessories

MIXVN/8



High speed mixer 1400 RPM.
AISI shaft-PVC coated,
different lengths available
(630-730-830-930 mm).
Marine impeller, diameter 70mm.

MIXN/8



Slow speed mixer 70/200 RPM.
AISI shaft-PVC coated, different
lengths available
(630-730-830-930 mm).
3-blade impeller, diameter 150mm.

MIXN/MAN



Manual mixer.
PVC shaft, different
lengths available
(500-600 and 700-800 mm).
Impeller diameter 130 mm.

MIX "PISTON"



Manual mixer.
PVC shaft, different lengths available
(500-600 and 700-800 mm).
Impeller diameter 130 mm.

LASP



Suction lances with level control,
for tanks up to 25 liters.

LASP



Suction lances with level control,
for tanks up to 1000 liters.

LINIR



1/2" injection lance for dosing
sodium hypochlorite in hard water.
Self cleaning. FKM B o-ring. PVC
body.

PVDF INJECTION VALVE



PVDF made injection valve with
1/2" or 3/4" fittings.

MF MULTIFUNCTION VALVE



Multifunction valve (pressure, safety, antisiphon and bleed) 1/2" connections for different hoses diameters. FKM B or EPDM o-ring. PVDF body.

LEVEL PROBE with FOOT FILTER



Level probe with REED TYPER CONTACT. High temperature resistant, not influenced by viscosity, opacity, conductivity or dielectric constant (0 e 60°C).

CHEMICAL TANKS & SAFETY BUNDS

Chemical tanks made of polyethylene, UV resistant with safety bunds. For dosing pumps and mixers.



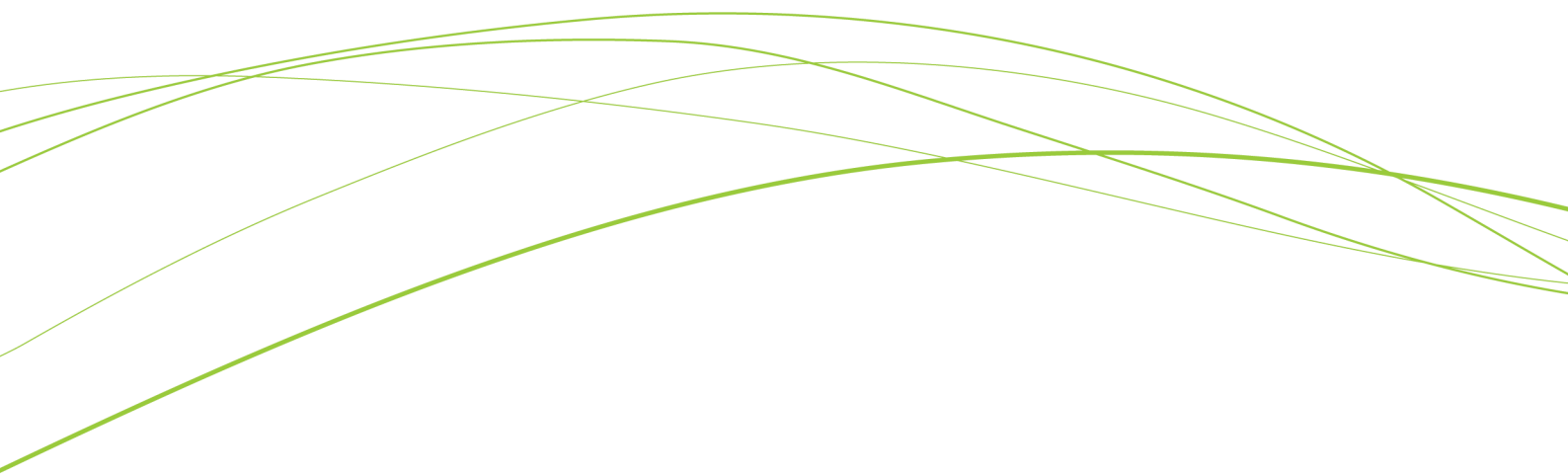
CALCIUM HYPOCHLORITE DOSING STATIONS

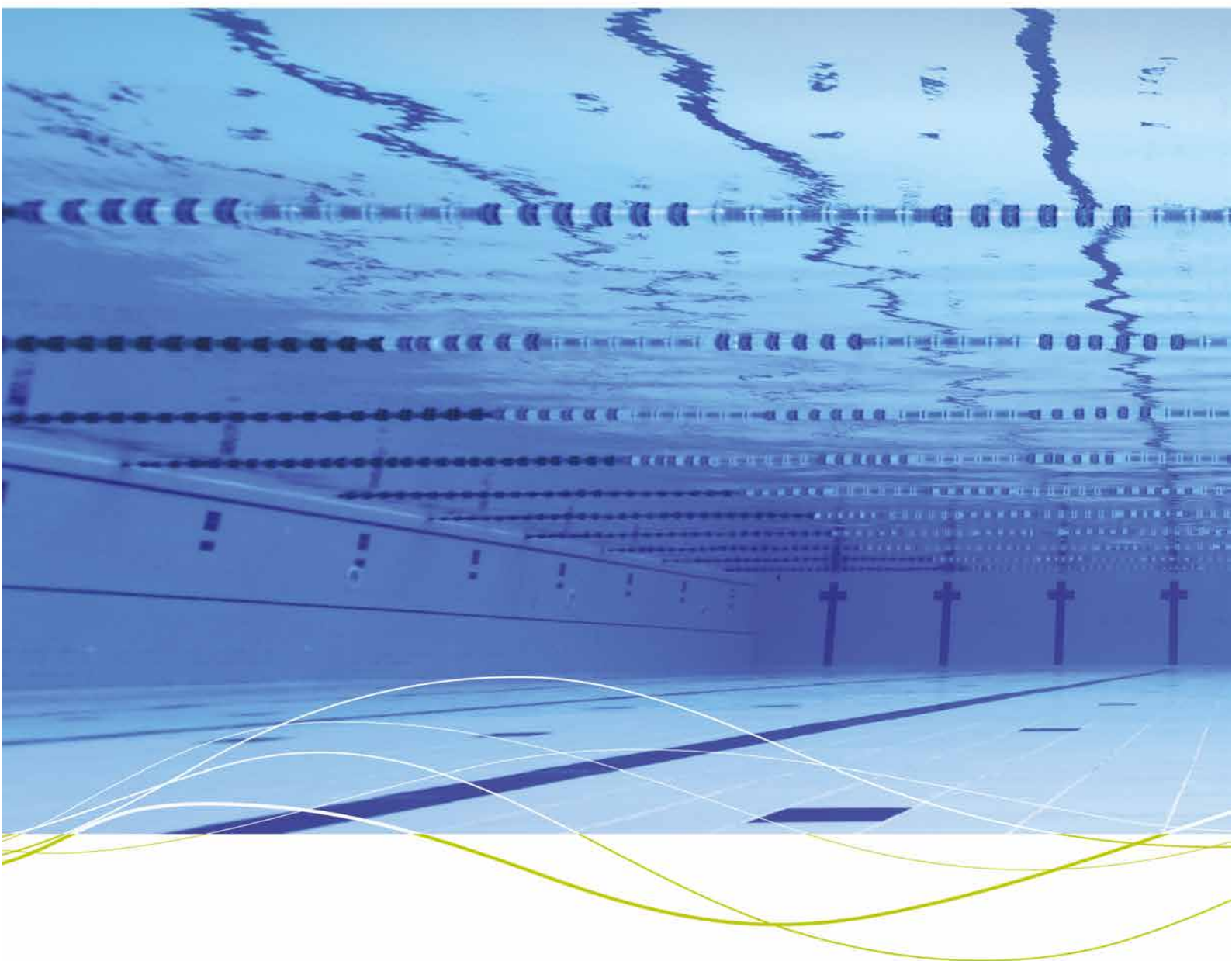


Our chemical tanks can be assembled with:

- 1 Dosing pump (or 2 without mixer)
- 1 mixer
- 1 water loading faucet
- 1 outgassing valve
- 1 or 2 suction lances
- 1 water purging faucet
- 2 level probes with filter (without mixer)

Assembling made with two dosing pumps must use a double-suction lance and KDPV kit for connecting both the pumps.





202.0014.0

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info@emecpumps.com - www.emecpumps.com