STEIEL
yes, we watercare!

List of Products
2025

STEIEL
yes, we watercare!

Expert, attentive and competent. That's how we deal with water, we take care of water, and do it with care and passion, since 1973!

Water is our element and our mission; we design and manufacture analytical instruments, measuring sensors and dosing systems to treat all types of water.

Our instrumentation is suitable to several sectors, such as swimming pool water disinfection, process and wastewater treatment, automatic purging of cooling towers, sanitization in the agri-food industry, potabilization control, legionella prevention in domestic hot water circuits, disinfection in livestock sector, and fertigation water control.

STEIEL, Studio Tecnico Elettronico Industriale E Laboratorio (Industrial Electronic Technical Study & Lab), this is how in 1973 Eng. Ettore Pilotti starts one of the most historic Italian companies in its market.

That small reality, become more and more international, is now present in more than 30 countries, with a sales network consisting of distributors (even exclusive), direct and indirect customers, important OEM customers and plant manufacturers.

Furthermore, STEIEL was one of the first Italian companies to understand the importance of creating customized products and solutions tailored to specific application needs.

STEIEL is staffed by highly qualified electronic and mechanical designers; technicians who support the customer for plant start-up, scheduled maintenance, and technical courses; marketing and back-office professionals who take care of all customer requests; technical sales officers always attentive to the market needs.

yes, we watercare!
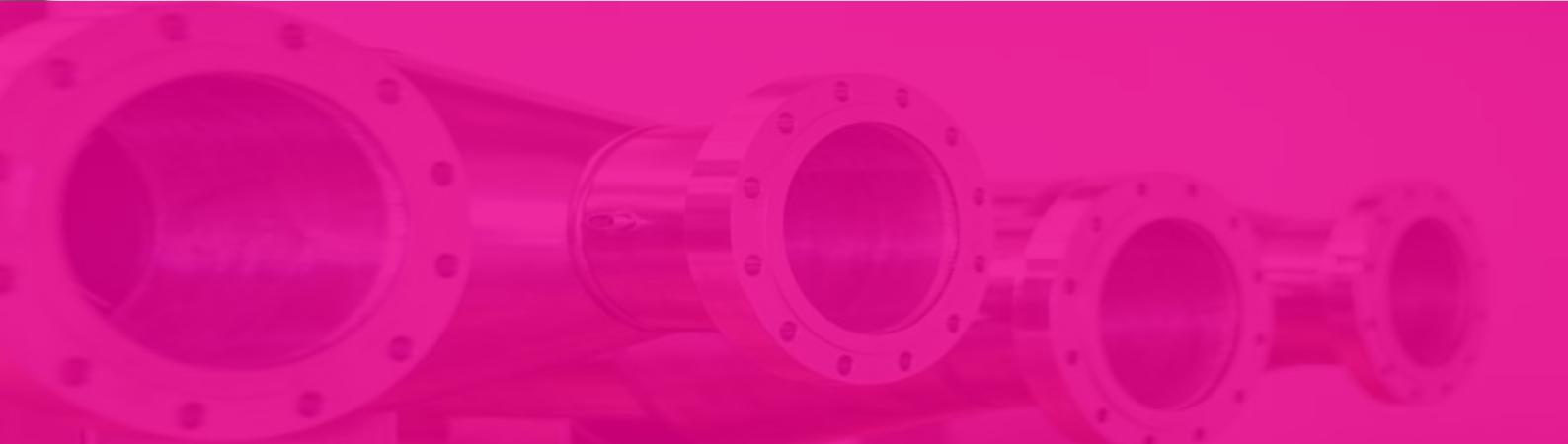
INSTRUMENTS FOR INDUSTRIAL APPLICATIONS

SENSORS AND ACCESSORIES

DOSING SYSTEMS

ANALYSIS AND CONTROL UNITS FOR SWIMMING POOLS

WATER DISINFECTION WITH UV RADIATIONS

EVOLUTION
IS NOW !

N^2

EVOLUTION EQ LINE

Upgrading and restyling of STEIEL panel-mounting instruments: measurement reliability wears a new look and is enriched with new functions.

See page 10

EVOLUTION EW / EW² LINE

The evolution of the wall-mounted instrumental line, in an exclusive STEIEL IP65 casing; one or two measurement channels, graphic display with RGB backlight for an immediate understanding of the system status, and many other functions.

See pages 11, 94

NOVA² POOL LINE

Compact system for managing chemical parameters in the pool, completely redesigned in an exclusive STEIEL IP65 casing and equipped with a graphic display with RGB backlight.

See page 98

SteieLynx GATEWAY & WEB APP

The gateway for remote data management takes on a new technological appearance and allows communication with a Web App compatible with any type of device.

See pages 17, 97

easy+fix SYSTEM

The heavy installation of measurement panels will be just a memory, thanks to easy+fix, the exclusive and patented STEIEL system, designed for the new EVOLUTION wall and NOVA² lines.

See pages 12, 95, 98

INTELLECTUAL PATENTED PROPERTY

INSTRUMENTS FOR INDUSTRIAL APPLICATIONS

STEIEL
yes, we watercare!

SINGLE MEASUREMENT DIGITAL UNITS
PANEL INSTALLATION

EVOLUTION EQ LINE

NEW

- Models with **pH / ORP / mA signal (user-selectable via software) or conductivity measurement input**
- Input for Pt100 or Pt1000 sensor, with **automatic detection** of sensor type; for temperature measurement and compensation
- **Easy-to-use interface** featuring intuitive configuration menu with four multifunction soft-keys
- Three-level configuration, protected by **three different passwords**
- **Inbuilt RTC** for time scheduling and date/time labelling of data
- Two adjustment outputs
- One analog (0/4-20 mA) output, fully configurable
- Pause digital input to disable all outputs
- **USB port** for parameter configuration, data downloading and system upgrading
- **RS485** serial port **with Modbus RTU protocol**
- Protection rate: IP52 with front cover (optional)
- Instrument dimensions: 96 x 96 x 115 mm; drilling template: 88 x 88 mm
- Power supply **100-240 V~** 50/60 Hz (on request, 24 V-/~ or 12 V- version)

Multifunction soft-keys

USB

Modbus

ITEM	DESCRIPTION	PART NO.
EQ pH/ORP/IN	Input for pH electrode / ORP electrode / mA signal + Pt100	83Q0010U
EQ CO	Input for 2-electrode conductivity probe + Pt100	83Q0020U
	PROT/3 - Transparent front cover for IP52 protection, for 96x96 mm casing	49000517
Additional cost for instruments with 24 V-/~ or 12 V- power supply		

SINGLE or DOUBLE MEASUREMENT DIGITAL UNITS
WALL INSTALLATION

EVOLUTION EW / EW² LINE

NEW
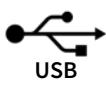
- Models with **measurement input(s) for pH electrode / ORP electrode / amperometric sensor / mA signal (user-selectable via software) or conductivity probe**
- Input for Pt100 or Pt1000 sensor, with **automatic detection** of sensor type; for temperature measurement and compensation
- **Easy-to-use interface** featuring intuitive configuration menu with four multifunction soft-keys
- Three-level configuration, protected by **three different passwords**
- Large **display with RGB backlight**, changing colour according to instrument status
- **Inbuilt RTC** for time scheduling and date/time labelling of data
- Each measurement channel is equipped with:
    - Four adjustment outputs (2x ON-OFF/PWM and 2x PFM)
    - One analog (0/4-20 mA) output, fully configurable
    - Two level inputs
- Pause digital input to disable all outputs
- Easily accessible **USB port**, protected by a watertight cover; can be used for parameter configuration, data downloading and system upgrading
- **RS485** serial port **with Modbus RTU protocol**
- Optional connectivity with **integrated SteieLynx gateway**
- **New exclusive STEIEL casing** with quick installation system, thanks to the fixing on a wall bracket, and safe attachment of the front cover for maximum ease of operations; IP65 protection, suitable for harsh environments
- Power supply: **100-240 V~** 50/60 Hz / **24 V-/~** / **12 V-**
- Cable with Schuko plug (other options on request)

- These instruments can be supplied with the sensor-holder fixed on the housing with **easy+fix** (see next pages) or on a panel, complete with dosing pumps

Multifunction soft-keys

Backlight RGB

USB

Modbus

SteieLynx int.+ext.

ITEM	DESCRIPTION	PART NO.
EW mV/mA	**Selectable** input for pH / ORP / amperometric sensor / mA signal + Pt100	83W1F10U
EW CO	Input for 2-electrode conductivity probe + Pt100	83W1F20U
EW² 2x mV/mA	Two pH/ORP/CAC/CLE/IN **selectable** inputs + Pt100	83W2F11U
EW² 2x CO	Two inputs for 2-electrode conductivity probe + Pt100	83W2F22U
EW² mV/mA + CO	One **selectable** input for pH/ORP/CAC/CLE/IN + one input for 2-electrode conductivity probe + Pt100	83W2F12U
Kit SteieLynx int.	Integrated SteieLynx WiFi/LAN module	83WM000Y
	Integrated SteieLynx module, with USB 3G/4G modem and antenna	83WM000G
SLP-A	Level probe with PUR cable 2 m and tips	97009030

easy+fix INSTALLATION SYSTEM

STEIEL exclusive and patented system for compact and space-saving assembly of the sensor-holder, directly fixed on the instrument housing.

The innovative **symmetrical installation plate allows the maximum flexibility for mounting the sensor-holder on the left or right side, depending on your needs**.

Examples of some possible combinations

ITEM	DESCRIPTION	PART NO.
EW pH easy+fix	EW easy+fix system with EURO2010-PH electrode and temperature sensor; cable with Schuko plug	83F1F10U310
EW CAC easy+fix	EW easy+fix system with CAC-CDX-B probe for chlorine dioxide and temperature sensor; cable with Schuko plug	83F1F10U3D0
EW² pH/ORP easy+fix	EW² easy+fix system with EURO2010-PH and EURO2110-RX/Pt electrodes, temperature sensor; cable with Schuko plug	83F2F11U315
EW² pH/CLE easy+fix	EW² easy+fix system with EURO2010-PH electrode, Cu/Pt open amperometric cell and temperature sensor; cable with Schuko plug	83F2F11U319
EW² pH/CAC easy+fix	EW² easy+fix system with EURO2010-PH electrode, CAC-CLI-B probe for free chlorine and temperature sensor; cable with Schuko plug	83F2F11U31C
EW² pH/CAC **Lynx** easy+fix	EW² easy+fix system with integrated SteielYnx module, complete with EURO2010-PH electrode, CAC-CLI-B probe for free chlorine and temperature sensor; cable with Schuko plug	83F2F11Y31C
easy+fix	Fixing plate to attach the sensor-holder on EVOLUTION casing	80610280

How to build the part number for EW / EW² with easy+fix system

83F☒ ☒ ☒ ☒ ☒ ☒ ☒ ☒

Measurement sensor for input 1

For pH/ORP/CAC/CLE/IN input
1 = EURO2010 pH glass
2 = EURO4111 pH plastic
5 = EURO2110 RX/Pt glass
6 = EURO4111 RX/Pt plastic
9 = CLE (Cu/Pt) cell
A = CAC-CLO-M1 probe (available chlorine)
C = CAC-CLI-B probe (free chlorine)
D = CAC-CDX-B probe (chlorine dioxide)
E = CAC-HT-B probe (chlorine & chlorine dioxide in hot water)
etc...

For conductivity input
1 = CCK probe
etc...

Measurement sensor for input 2
0 = Not provided (EW, 1 channel)
For pH/ORP/CAC/CLE/IN input
1 = EURO2010 pH glass
2 = EURO4111 pH plastic
5 = EURO2110 RX/Pt glass
6 = EURO4111 RX/Pt plastic
9 = CLE (Cu/Pt) cell
A = CAC-CLO-M1 probe (available chlorine)
C = CAC-CLI-B probe (free chlorine)
D = CAC-CDX-B probe (chlorine dioxide)
E = CAC-HT-B probe (chlorine & chlorine dioxide in hot water)
etc...

For conductivity input
1 = CCK probe
etc...

PT100 Temperature sensor
2 = No
3 = Yes (standard)

Communication type
U = RS485 Modbus RTU (standard)
Y = Integrated SteieLynx module

Measurement input 2
0 = Not provided (EW, 1 channel)
1 = pH/ORP/CAC/CLE/IN
2 = Conductivity

Measurement input 1
1 = pH/ORP/CAC/CLE/IN
2 = Conductivity

Power supply
F = cable with Schuko plug (standard)
G = cable with UK plug (tipo G)
B = cable with US plug (tipo B)

Insrument
1 = **EW** (single channel)
2 = **EW²** (dual channel)

SINGLE CHANNEL DIGITAL UNITS
PANEL INSTALLATION

S508 - PROFESSIONAL LINE

- Models with input for pH / ORP electrode, conductivity probe, amperometric sensor, turbidity cell or mA signal
- Input for Pt100 sensor, for temperature measurement and compensation
- Two relay outputs configurable as intervention threshold or alarm
- Analog (mA) output, fully configurable and galvanically separated
- Digital OFF/FLOW input, to disable all outputs
- Serial port for communication with PC, data recorder, RW14
- Multilingual menu
- Protection rate: IP52 with front cover (optional)
- Instrument dimensions: DIN72 x 144 x 140 mm; drilling template: 138 x 68 mm
- Power supply: 230 V~ 50/60 Hz (standard); upon request 115 V~, 24 V~, 24 V-

ITEM	DESCRIPTION	PART NO.
S508 pH/ORP/T	Input for pH or ORP electrode + Pt100	80050050
S508 CO	Input for 2-electrode conductivity probe + Pt100	80240050
S508 ACL	Input for CLE11/CLE12 cell, range to be specified	
S508 CAC	Input for CAC probe, range to be specified	
S508 TU	Input for turbidity cell	85700050
S508 IN	Indicator with 0/4-20 mA input, range to be specified	80710180
	PROT/2 - Transparent front cover for IP52 protection, for 72x144 mm casing	49000516

C902 - COMPACT CONDUCTIVITY METER

- Conductivity range up to 9.99, 99.9 or 999 µS/cm (to be specified)
- Measurements in µS/cm or ppm (to be specified upon order)
- Input for 2-electrode conductivity cell, with cell constant depending on the full-scale value
- One relaty output with threshold adjustable through trimmer
- Protection rate: IP40 for panel-mounted unit
- Instrument dimensions: DIN36 x 72 x 110 mm; drilling template: 32 x 68 mm
- Power supply: 230 V~ 50/60 Hz (standard); upon request 115 V~, 24 V~, 24 V-

ITEM	DESCRIPTION
C902	C902, measure unit and range to be specified

SINGLE CHANNEL DIGITAL UNITS
INSTALLATION ON DIN SLOT

S504 LINE

- Models with pH / ORP, conductivity or mA signal measurement input
- Input for Pt100 sensor, for temperature measurement and compensation
- Two relay outputs configurable as intervention threshold or alarm
- Analog (mA) output, fully configurable and galvanically separated
- Digital OFF input, to disable all outputs
- Standard unit: IP20 casing; 6 modules according to DIN 43880 standards
- "Box" versions: IP56 casing; for single instrument: dimensions 200 x 220 x120 mm, fixing template 145 x 88 mm; double: 265 x 220 x 120 mm, template 210 x 88 mm
- Power supply: 100-240 V~ 50/60 Hz (standard), 24 V~, 24 V-

ITEM	DESCRIPTION	PART NO.
S504 pH/ORP/T	Input for pH or ORP electrode + Pt100	80050130
S504 CO	Input for 2-electrode conductivity probe + Pt100	80240120
S504 IN	Indicator with 0/4-20 mA input, range to be specified	80710165
S504 box	Additional cost for version in closed housing, single instrument	
	Additional cost for version in closed housing, double instrument	
Additional cost for 24 V~ / V- versions		

SG18 SERIES - GALVANIC SEPARATORS AND SIGNAL AMPLIFIERS
Items available while stock lasts!

- Series of devices that work as **signal converters** and **pre-amplifiers**
- Signals are **galvanically isolated**
- The ideal device in case of signal transmission problems due to long distances or "noisy" environments
- Input options: pH electrode (0-14 pH), ORP electrode (0-1000 mV), conductivity cell (K=5 or K=1, range to be specified)
- Thermo-compensation of pH readings with separated Pt100 probe, of conductivity measurements with NTC sensor integrated in the cell
- Output: 4-20 mA (standard), or 0-20 mA
- Models with **watertight housing** (IP65, dimensions: 159 x 118 x 76 mm) **or support for installation on DIN slot** (75 x 120 x 60 mm)
- Power supply: 230 V~ 50/60 Hz (standard); upon request 115 V~, 24 V~, 24 V-

ITEM	DESCRIPTION
SG18	Wall-mounting series; input and output to be specified
SG18/DIN	DIN series; input and output to be specified

MULTI-PARAMETRIC DIGITAL UNITS
WALL INSTALLATION

MC14 EVO CONTROL UNITS

SteieLyxn ext.

- **Inputs for 5 simultaneous readings** (temperature always provided)
- Measurements of pH, ORP, chlorine, conductivity, turbidity (even with control of self-cleaning), etc.
- Available double input for CAC probe
- **Two configuration levels** (standard and advanced), with password
- Multilingual menu
- **Four** (ON/OFF or proportional) **adjustment relays**, and one alarm relay
- **Two current outputs**, configurable as 0-20 or 4-20 mA
- **OFF input, configurable NO or NC** to disable the outputs
- **Input for flow sensor** to disable the outputs in case of water flow lack to the sensors
- Two level inputs to monitor the products to be dosed
- **Data log downloadable** via serial line (internal data logger)
- **Serial port**, choice between:
  - RS232, with galvanic insulation, for communication with PC and RW14
  - RS485 with Modbus RTU communication protocol, even for connection to SteieLynx gateway
- The unit can be supplied pre-wired and assembled on panel, complete with measurement sensors, dosing pumps and data recording system (see specific section)
- IP65 housing; dimensions: 320 x 270 x 120 mm
- Power supply: 230 V~ (standard), 115 V~
- **Upon request, version with K4 and K5 pulse outputs for PFM control**

| ITEM	DESCRIPTION
MC14 /3 std.	MC14 EVO, 3 channels + temperature (Pt100), RS232 or RS485
MC14 /4 std.	MC14 EVO, 4 channels + temperature (Pt100), RS232 or RS485

DESCRIPTION	PART NO.
Spare electronic board for RS232 communication	82590200
Spare electronic board for RS485 communication	82590201

DATA RECORDING / MANAGING

SteieLynx - GATEWAY & WEB APP

NEW

- **Supervising unit** to monitor and manage STEIEL instruments through the **dedicated Web App**
- Internet connection via LAN port, WiFi module or 3G/4G network (SIM card in USB modem)
- RS485 port for communication with STEIEL instruments and dosing pumps equipped with RS485 interface
- Also available as **module to be integrated in the instrument** for the new EVOLUTION EW / EW² and NOVA² instrumental lines
- IP56 housing for wall installation; dimensions: 150 x 110 x 70 mm
- Power supply: 100-240 V~ 50/60 Hz, cable with Schuko plug (other options on request)

ITEM	DESCRIPTION	PART NO.
SteieLynx EXT	Supervising unit Wi-Fi/LAN, with one RS485 port and cable with Schuko plug	81831000
	Supervising unit , complete with 4G USB modem and antenna, with one RS485 port and cable with Schuko plug	81831G00
SteieLynx INT	Module to be integrated in EVOLUTION EW /EW² and NOVA² units	8183Y000
CAV/RW-M8-1	Serial cable with M8 connector for EF315/RS485 control units, 1.5 m	80099041
CAV/RW-M8-10	Serial cable with M8 connector for EF315/RS485 control units, 10 m	80099045
CAV/RW-MP-1	Serial cable with connector for multi-parametric units EF214 / MC14 / MCO14 / EVOLUTION with RS485 port, 1.5 m	80099111
CAV/RW-MP-10	Serial cable with connector for multi-parametric units EF214 / MC14 / MCO14 / EVOLUTION with RS485 port, 10 m	80099115
CAV/Lynx-WP-1	Serial cable with connector for NOVA NSP pumps and NOVA² units, 2 m	80099202
CAV/Lynx-WP-1	Serial cable with connector for NOVA NSP pumps and NOVA² units, 10 m	80099205
Kit modem	Modem USB 3G/4G + antenna with cable + connectors	81839001

READY TO USE CONTROL SYSTEMS
CUSTOMIZED ASSEMBLIES ON SUPPORT

STEIEL offers a wide range of "turnkey" solutions, available on neutral panel (white), with STEIEL logo or with customer logo (even for a few units).
In addition, it is possible to have industrial equipment mounted inside closed fibreglass or steel cabinets (equipped with door with transparent window) or on painted metal frames (also with laser-cut logo).
For these particular solutions or other types of customization, contact STEIEL for a specific evaluation.

How to build an assembled and ready-to-use system

The type and dimensions of the support depend on the components to be mounted and the application for which the system is intended.
Examples:

- Assembly on panel with filter, without pumps: PNL PVC 500x600 mm
- Assembly on panel with filter and two PSP pumps: PNL PP 900x700 mm
- System for food industry, without pumps: steel cabinet 500x600 mm

Electronic Unit
- Evolution EW
- Evolution EW²
- MC14 EVO

Accessories
- Probe-holder
- Flow Sensor
- PT100 Sensor
- Filter for cold water
- Filter for hot water
- etc.

Pump(s)
- Quantity (0, 1, 2, 3)
- Type (NOVA, PSP)
- Flow Rate
- Dosing head/Seals

Measurement Sensor(s)
- pH Electrode
- ORP Electrode
- CLE Cell
- CAC Probe
- CCK Cond. Probe
- CMK Cond. Probe
- etc.

Assembly Support
- easy+fix Plate
- PNL PVC
- PNL PP
- Steel cabinet
- Fibreglass cabinet

18
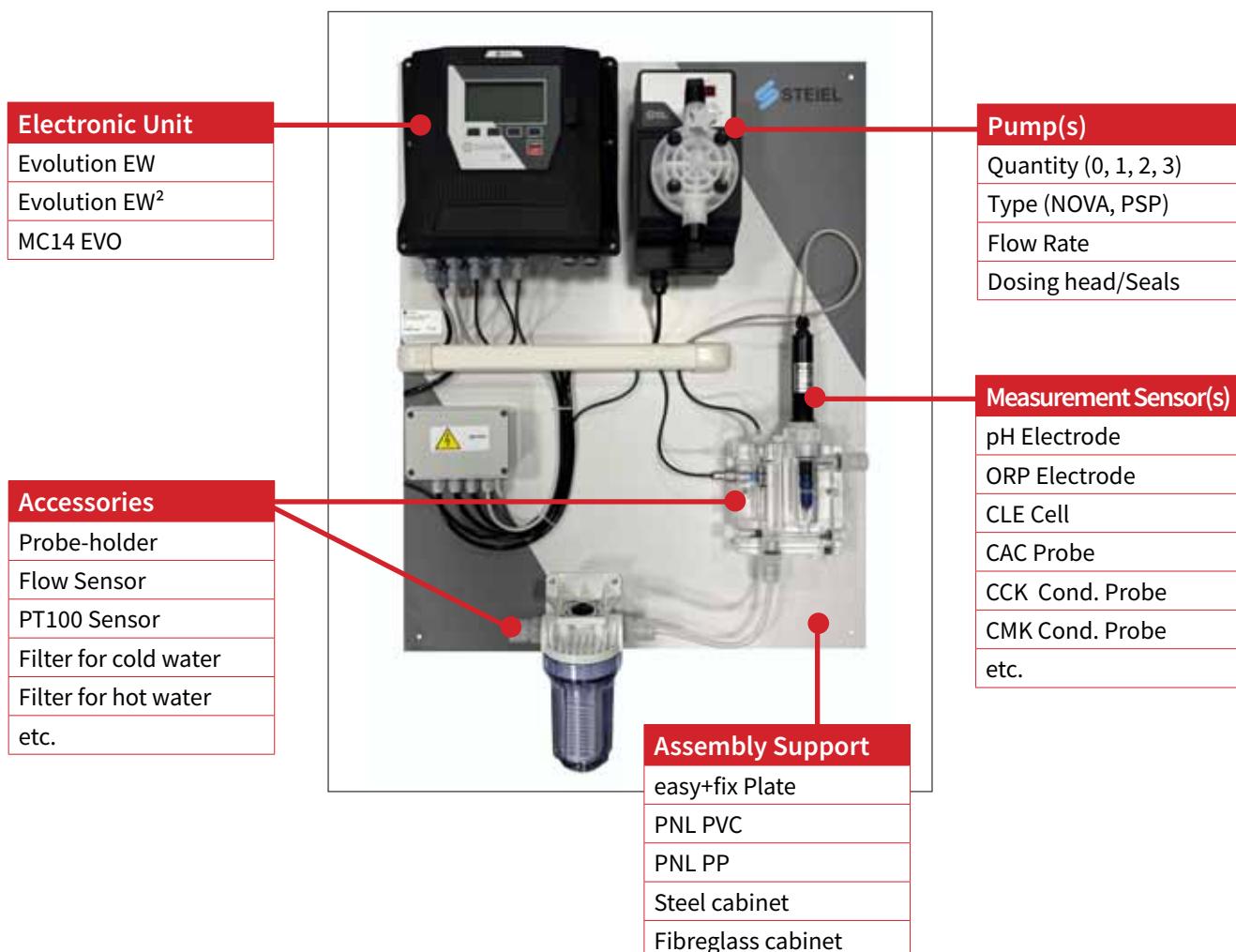
MOUNTING EXAMPLE	DESCRIPTION
	Innovative, exclusive and patented STEIEL bracket to fix the sensor-holder directly on the housing of EVOLUTION EW and NOVA^2 instruments or double NOVA pump systems. Overall dimensions max 400 x 230 mm.
	High density expanded PVC panel, 650x290 mm.
	High density expanded PVC panel, 500x600 mm.
	PP panel, 495x660 mm.
	High density expanded PVC panel, 595x750 mm.
	High density expanded PVC panel, 900x700 mm.
	PP panel, 900x700 mm (to be used in case of systems with at least two PSP pumps).
	AISI 304 steel cabinet, 500x600 mm, complete with steel mounting plate and transparent door.
	AISI 304 steel cabinet, 900x700 mm, complete with steel mounting plate and transparent door.
	Assembly on electrical panel with transparent door and support terminal board; supplied with wiring diagram and certificate.

READY TO USE CONTROL SYSTEMS
PRE-ASSEMBLED PANELS

Add to the cost of panel + assembly the costs of the electronic unit, measurement sensor(s) and optional elements such as temperature sensor, probe-holder, flow sensor, dosing pump(s), etc.

See example here below.

Electronic unit
Evolution EW-mV/mA
€ 930.00

Pump(s)
1x NSE157 C0512 PKT
€ 447.00

Measurement Sensor(s)
CAC-CLI-B Probe
€ 1848.00

Accessories

SD-CAC1 Probe-holder	€ 421.00
NPN Flow sensor	€ 69.00
PT100 Sensor	€ 81.00
PF17 Filter	€ 87.00
TOT.	€ 658.00

Support Type
PNL PVC 500x600 mm
€ 214.00

Total cost of the system: € 4097.00
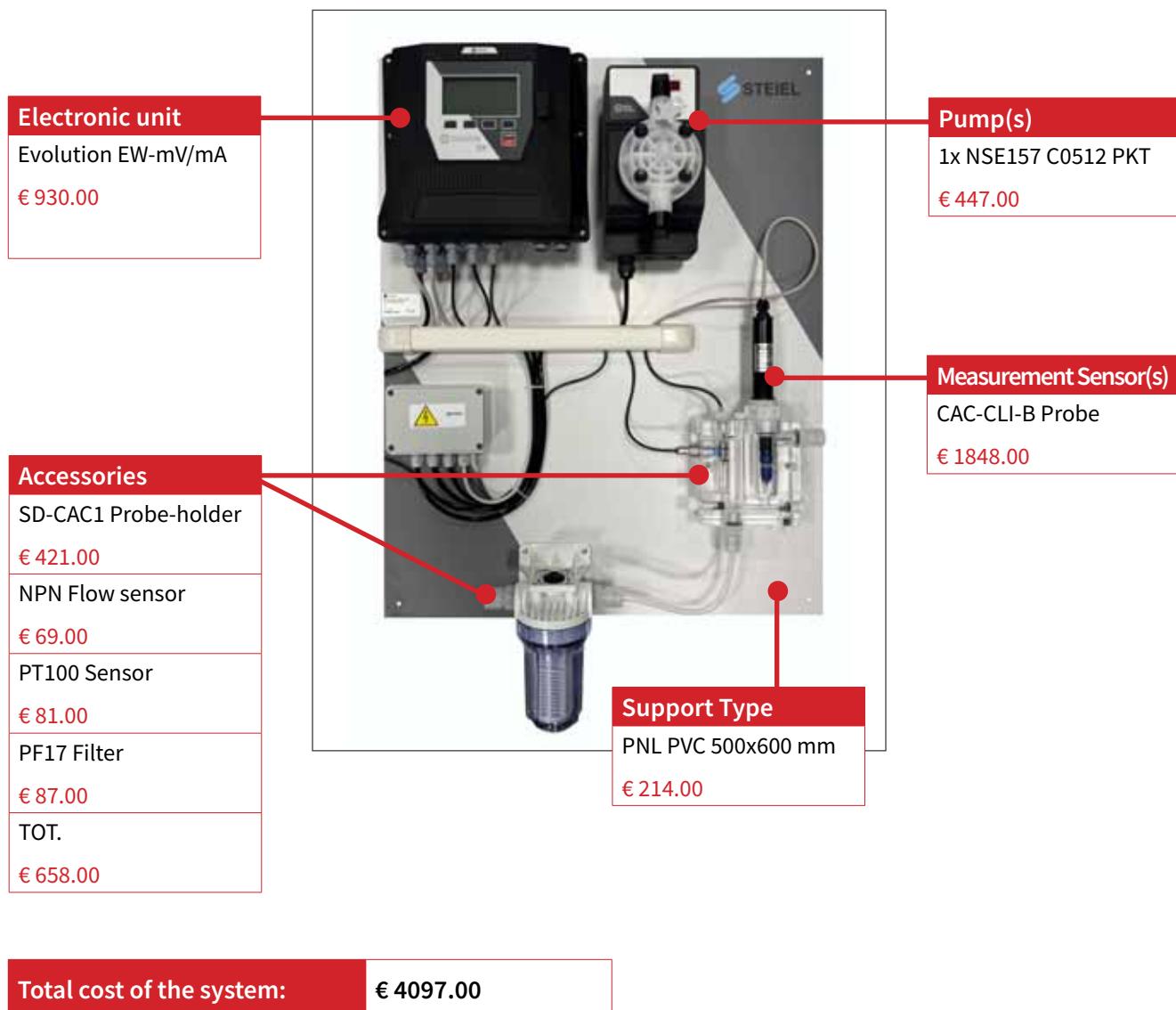
READY TO USE CONTROL SYSTEMS
AUTOMATIC BLEEDING SYSTEMS FOR COOLING TOWERS

- Complete systems including conductivity controller, conductivity cell, motorized valve and hydraulic kit, with or without dosing pump
- Economic version with pump with inbuilt conductivity meter, conductivity cell, solenoid valve and hydraulic kit
- Versions available with different sizes for hydraulic kit; assembled on panel, closed cabinet or painted metal skid
- Standard cell with K=1 and range 20 mS/cm
- Standard power supply: 230 V~

| Panel with PSP161 | Panel with water recovery and ORP measurement | Panel without pump, with water recovery | Cabinet without pump |

ITEM	DESCRIPTION	PART NO.
STANDARD PANEL with PSP161	PP panel (495x660 mm) with S506 unit, PSP161-PKT 0510 pump, CCK1GT-PT100 probe, motorized valve and 1" hydraulic kit	S24040503018
PNL with water recovery and ORP measurement	PP panel (900x700 mm) with S507-CO unit, CCK1GT-PT100 probe, motorized valve and 1" hydraulic kit with water recovery, NSP162 C0512 pump and EURO2015-RX ORP electrode	S24140505099
PNL without pump, with water recovery	PP panel (495x660 mm) with S506 unit, CCK1GT-PT100 probe, motorized valve and 1" hydraulic kit with water recovery	S24040504
STD CABINET without pump	Fibreglass cabinet (805x615x315 mm), door with transparent window and galvanized steel mounting plate; with S506 unit, CCK1GT-PT100 cell, motorized valve and 1" hydraulic kit	S04040503
S506	Conductivity controller with software for automatic bleeding of cooling towers	80250001
EV STD/PVC	Spare 1" PVC motorized valve, glued assembly type, for standard panels and cabinets	54500264
EV STD	Spare 1" brass motorized valve for standard panels, for productions until January 2020	54500255
EV ECO	Spare solenoid valve for ECO panels (¾", 24 V~)	54500259
CCK1GT-PT100	Conductivity cell with PTFE body, K=1, built-in PT100 sensor - spare cell for standard panels	80290003
CCK1G-5S / M8	Conductivity cell with PVC body, K=1 - spare cell for ECO panels	80290045
KIT BOOSTER	Kit booster relay for PSP164 pump 230 V~ (10 VA), dry contact	97003082

Panels are also available on request, with different power supply, 2" hydraulic kit, different configuration;.

READY TO USE CONTROL SYSTEMS
LEGION Series - INTEGRATED SYSTEMS for LEGIONELLA PREVENTION

The LEGION line includes various dosing and measuring solutions, designed for the constant and complete disinfection of domestic hot water circuits (max 70°C @ 3 bar or 55°C @ 6 bar), for the safe prevention of legionella, without wasting sample water. The variety of combinations allows to manage, according to the needs, the dosage of a biocide product (chlorine dioxide, sodium hypochlorite, hydrogen peroxide) proportionally to the flow rate, even with integrated measuring system. The biocide (oxidant) is always combined with the dosage of a protective (filming) product for the hydraulic circuit.

Standard pumps for biocide dosing: PSP161-PKTT/AS 0310; for protective product: PSP161-PKT 0510.
For pumps and / or configurations other than the standard ones listed below, please contact STEIEL.

| Kit LEGION 1 | Panel LEGION 2 | Panel LEGION 2+M | PNL-RAC |

ITEM	DESCRIPTION
Kit LEGION 1	Kit for dosing ClO_2 from hermetic drum, including: dosing pump PKTT/AS, with relay output and FLW input; Flow Control sensor assembled on aluminium support; SMP18 bracket with rotating support; injection valve and PTFE hose (10 m); bottles for ClO_2 correct disposal (collection and neutralization).
PNL LEGION 2	Panel (600x500 mm) with pumps for dosing ClO_2 from hermetic drum and a protective product, including: dosing pump PKTT/AS, with relay output and FLW input + Flow Control sensor assembled on aluminium support + injection valve and PTFE hose (10 m); dosing pump with relay output and FLW input + Flow Control sensor + standard accessories for dosing pump + suction lance for 25 L tank; bottles for ClO_2 correct disposal (collection and neutralization).
PNL LEGION 2+M	Panel (700x900 mm) with pumps and accessories for dosing ClO_2 from hermetic drum and a protective product, as PNL LEGION 2; integrated measurement system, composed of control unit, CAC-HT-B probe in probe-holder with proximity sesnor and PT100, filter for hot water; bottles for ClO_2 disposal; signal splitter
PNL LEGION 3+M	Panel (900x700 mm) with pumps and accessories for dosing ClO_2 from hermetic drum and a protective product, as PNL LEGION 2; second pump for dosing ClO_2 from hermetic drum, with related accessories; integrated measurement system, composed of control unit, CAC-HT-B probe in probe-holder with proximity sesnor and PT100, filter for hot water; bottles for ClO_2 disposal; signal splitter
Note: _In case of biocide in standard tank, please order proper suction lance, foot filter and level probe._	

ITEM	DESCRIPTION	PART NO.
PNL-RAC	System for the recovery of sample water in the analysis cells of disinfectant product - **Useful for applications in sanitary hot water circuits** (max 70 °C @ 3 bar or 55 °C @ 6 bar). PP panel with bypass line with PVC-C DN20 pipes and valves, brass hydraulic connection (½" G F), analysis water connection for PE / PTFE hose 6x8 mm. **Variable speed circulation pump, IP44**, protected by a magnetothermic switch, pressure max 4 m with 0.7 m^3/h flow rate, powr supply 230 V~. IN-OUT manometers for 0-10 bar measurements. Limits of use: temperature max 100 °C, pressure max 16 bar @ 35 °C.	9AR00000

PROGRAMMERS
PRG11 - PROGRAMMER FOR REVERSE OSMOSIS SYSTEMS

- Can be **wall-mounted or assembled on** the osmosis system **frame**
- **Internal RTC** powered by buffer battery, for scheduling filter cleaning
- **Two inputs for** two-electrode **conductivity probes**, for monitoring water both entering and exiting the osmosis unit
- **Thermo-compensation** of readings with NTC sensor in-built in the cell
- Optional RS232 **serial port**
- Outputs: direct control of filter pump and dosing pump, and alarm
- Digital input for 3-wire sensors (magnetic or capacitive)
- IP65 housing; dimensions: 237 x 212 x 125 mm; mounting template: 220 x 185 mm
- Power supply: 230 V~ 50 Hz (standard), 115 V~

ITEM	DESCRIPTION	PART NO.
PRG11 standard	Programmer for reverse osmosis (RO) plants, power supply 230 V~, output for 24 V~ solenoid valve. Conductivity measurement of inlet water: K=5, range 2000 µS/cm. Conductivity measurement of outlet water: K=5, range 200 µS/cm.	812021312

How to build the part number

812 ☒ ☒ ☒ ☒ ☒ ☒

Conductivity range of outlet water
0 = 0-2 µS/cm
1 = 0-20 µS/cm
2 = 0-200 µS/cm
3 = 0-2000 µS/cm   = 0-2 mS/cm
4 = 0-20'000 µS/cm   = 0-20 mS/cm
5 = 0-200'000 µS/cm   = 0-200 mS/cm

Cell constant for measurement of outlet water
0 = K=1
1 = K=5

Conductivity range of inlet water
0 = 0-2 µS/cm
1 = 0-20 µS/cm
2 = 0-200 µS/cm
3 = 0-2000 µS/cm   = 0-2 mS/cm
4 = 0-20'000 µS/cm   = 0-20 mS/cm
5 = 0-200'000 µS/cm   = 0-200 mS/cm

Cell constant for measurement of inlet water
0 = K=1
1 = K=5

Output for solenoid valve
1 = 230 V~ / 115 V~ (same as instrument power supply)
2 = 24 V~

Power supply / Serial port
0 = **230 V~**   5 = 230 V~ + RS232 serial port
1 = 115 V~   6 = 115 V~ + RS232 serial port

![STEIEL - yes, we watercare!]

CDG - CHLORINE DIOXIDE GENERATORS

- **Line of generators** for "in situ" production of chlorine dioxide in aqueous solution, through an acidification process of chlorite
- Multilingual user interface with **PLC unit** for the full management of the system, equipped with 7" touch-screen with **intuitive graphical menus**
- **Access** system **with different authorization levels and Service menu**
- **Four alarm relays** (general, gas, alert, maintenance), configurable as NO/NC
- **Dosing pumps of the NOVA series** with PVDF hydraulics and PTFE diaphragm, controlled by PLC
- Proportional **dosing** up to max two injection points, with **3 or 5 l/h pumps** (to be specified upon order)
- **External tank for water suction** made of heat-sealed polypropylene sheet, complete with minimum level and overflow sensors, available in two versions:
  - Compact container with water compartment and housings for two 25 L reagent tanks
  - Water tank only, to be used in case of reagent tanks with higher volumes
- Optional measurement system, for readings in hot or cold water
- **Input for gas sensor included**; gas detector to be ordered separately
- Manual priming function for pumps maintenance and calibration
- Safety controls: level sensors, flow meters and gas detector of chlorine dioxide in air
- Remote **control and management of the PLC** through Internet
- Power supply: 230 V~ 50/60 Hz (115 V~ upon request)
- **Wall mounting or installation on** painted **metal frame**, with wheels and support base for water / reagents tanks
- Can be combined with an external measurement system, with instrument and sensor for readings in cold or hot water

CDG GENERATORS
CDG generator with one 3 l/h pump for chlorine dioxide dosing
CDG generator with one 5 l/h pump for chlorine dioxide dosing
CDG generator with two 3 l/h pumps for chlorine dioxide dosing
CDG generator with two 5 l/h pumps for chlorine dioxide dosing

ACCESSORI PER GENERATORI CDG	PART NO.
Compact container with water compartment (capacity 13 L) and housings for two 25L reagent tanks, complete with water minimum and overflow sensors	82300002
Water tank, 40 L, complete with water minimum and overflow sensors	82300003
Suction lance for CDG with level sensor, for 25/50 L tank, red pipe (acid)	82700000
Suction lance for CDG with level sensor, for 25/50 L tank, blue pipe (chlorite)	82700100
Suction lance for CDG with level sensor, for 100 L tank, red pipe (acid)	82700010
Suction lance for CDG with level sensor, for 100 L tank, blue pipe (chlorite)	82700110
Suction lance for CDG with level sensor, for 300 L tank, red pipe (acid)	82700030
Suction lance for CDG with level sensor, for 300 L tank, blue pipe (chlorite)	82700130
Graduated plastic cylinder (500 ml) for pump calibration	35999120
Pressure reducing kit for sampling outlet	80610080
Plexiglas protective shield for CDG generators	
Painted metal frame, equipped with wheels and support base	70201007

Self-standing metal frame with support base

Compact container with water compartment and housings for reagent tanks

Water tank (40 L), complete with solenoid valve and level sensors

SPARE PARTS AND MAINTENANCE KITS FOR CDG GENERATORS	REF.	PART NO.
Flow Control sensor for reagent pumps, without cable	1	948B126100
Flow Control sensor for reagent pumps, w/ 2 m cable and M8 connector	1	948B126131
Spare green weight for Flow Control sensor of reagent pumps	1.1	94800001
Flow Control sensor for water pump, without cable	2	948C126100
Flow Control sensor for water pump, with 2 m cable and M8 connector	2	948C126131
Cable with M8 connector for Flow Control sensors	1 / 2	80099222
Reactor group	3	77020036
Outlet kit for CDG reactor	4	82702100
Spare carbons for tank filter, 120 g pack	5	80509112
Complete NOVA NSD, 3 l/h, for chlorine dioxide dosage	6	910C1B0310E000
Complete NOVA NSD, 5 l/h, for chlorine dioxide dosage	6	910C1C0512E000
"Full PTFE" diaphragm for ClO_2 dosing pumps, 3 l/h	6	97003017
"Full PTFE" diaphragm for ClO_2 dosing pumps, 5 l/h	6	97003018
Complete NOVA NSD pump for reagent dosage	7 / 9	910C0B02202000
Complete NOVA NSD pump for water dosage	8	910C3E15042000
Brass solenoid valve for water tank	10	54500248
Six-month maintenance kit for CDG generators	-	80509126
Yearly maintenance kit for CDG generators with one ClO_2 pump, 3 l/h	-	82701010
Yearly maintenance kit for CDG generators with one ClO_2 pump, 5 l/h	-	82701020
Yearly maintenance kit for CDG generators with two ClO_2 pumps, 3 l/h	-	82701111
Yearly maintenance kit for CDG generators with two ClO_2 pumps, 5 l/h	-	82701122
PTFE hose, 4x6 mm, 100 m coil, price per meter	-	36506003

Note:	For the full list of spare parts for the maintenance of dosing pumps, please refer to the "Dosing Systems" section.

3 4 5 6

1 2 1

7 8 9

Flow Control

10

1.1
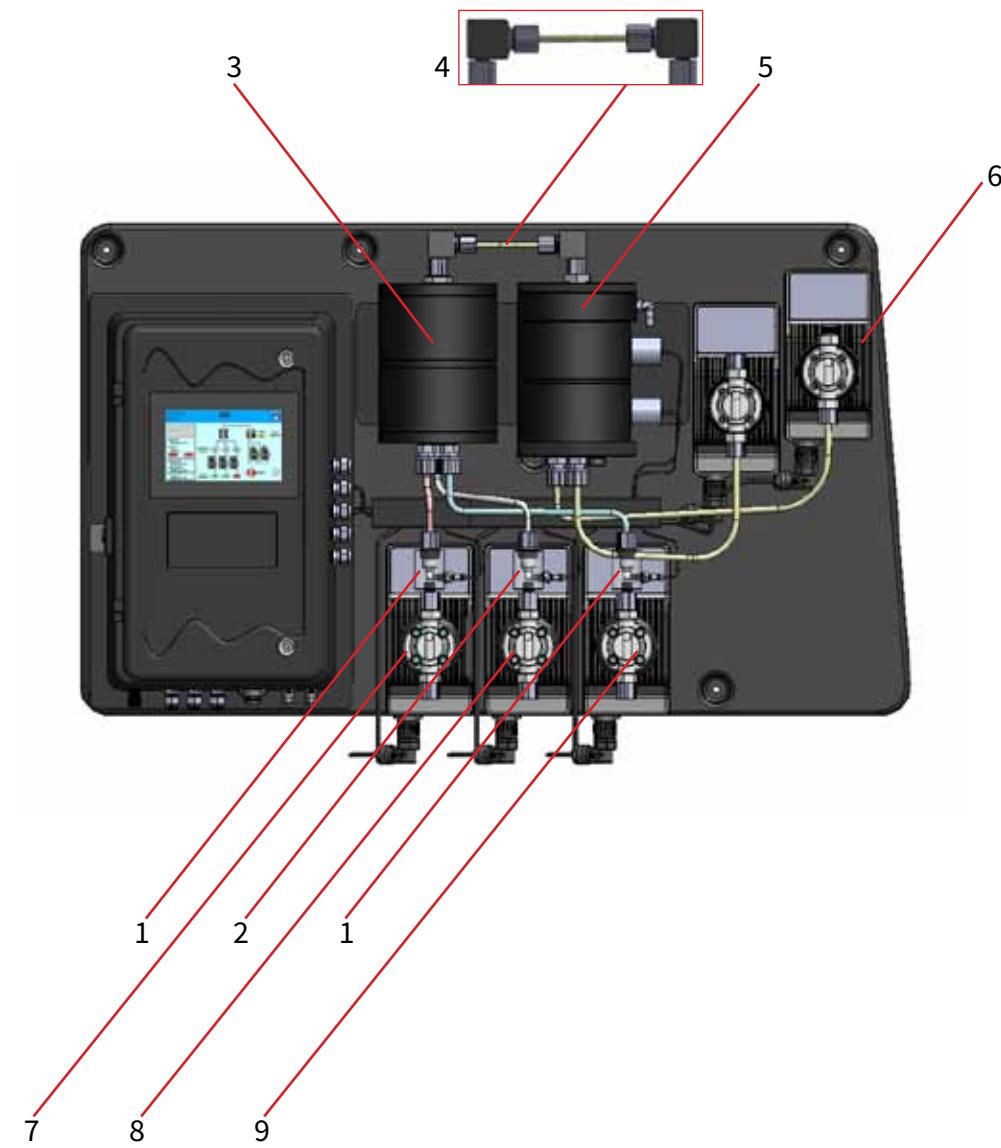
Water tank, 40 L

Compact container with water compartment

27
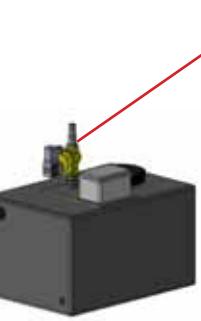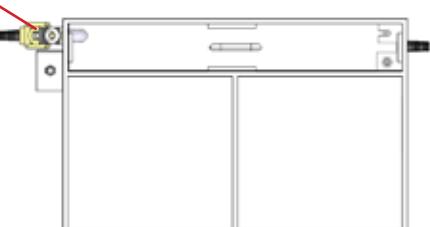
ACCESSORIES AND SPARE PARTS FOR BG08 GENERATORS	PART NO.
Suction lance with level sensor, for 25/50 L tank, red pipe (acid)	77020040
Suction lance with level sensor, for 25/50 L tank, blue pipe (chlorite)	77020041
Suction lance with level sensor, for 100 L tank, red pipe (acid)	80509100
Suction lance with level sensor, for 100 L tank, blue pipe (chlorite)	80509101
Suction lance with level sensor, for 300 L tank, red pipe (acid)	80509104
Suction lance with level sensor, for 300 L tank, blue pipe (chlorite)	80509105
Safety / drip vessel for 25 L reagent tank, red	36000080
Safety / drip vessel for 25 L reagent tank, blue	36000081
Flow Control sensor for reagent pumps, without cable; replaces 94831110	948B111100
Spare hydraulic part for reagent pump Flow Control; replaces 94831100	948B111000
Spare green weight for Flow Control sensor of reagent pumps	94800001
Flow Control sensor for water pump, without cable; replaces 94851010	948C110100
Spare hydraulic part for water pump Flow Control; replaces 94851000	948C110000
Cable with M8 connector for Flow Control sensors	80099222
Graduated plastic cylinder (500 ml) for pump calibration	35999120
Spare carbons for tank filter, 120 g pack	80509112
Float valve	80509115
Reactor group	77020036
Reactor outlet valve for BG08	97000179
Complete spare pump for reagent or chlorine dioxide dosing	95700417
Spare dosing head for reagent or chlorine dioxide pumps	97000276
Spare pump for water dosing	80509189
Six-month maintenance kit for CDG/BG08 generators	80509126
Periodic maintenance kit for BG08 generators with one external pump	80509123
Periodic maintenance kit for BG08 generators with two external pumps	80509124
Periodic maintenance kit for BG08 generators with three external pumps	80509125
PF17 - Filter-holder for cold water (max 50 °C), with 80 µm mesh cartridge	80710026
PF16-HT - Filter-holder for hot water (max 80 °C), with 50 µm mesh cartridge	80710030
PTFE hose, 4x6 mm, 100 m coil, price per meter	36506003
Pressure reducing kit for sampling outlet	80610080
Plexiglas protective shield for BG08 generators	80509116
Painted metal frame, equipped with wheels and support base	70201007

Note: For the full list of spare parts for the maintenance of dosing pumps, please refer to the *"Dosing Systems"* section.

PROFESSIONAL WATER HARDNESS ANALYSER

- Qualitative control of the softening system
- Microprocessor-based unit
- Graphic display
- Four relay outputs configurable as alarms, commands of connected devices (washing valve, pump, cooler) or remote signal of fault conditions)
- One analog (0/4-20 mA) output and two digital inputs
- Data transfer through CAN connection or SD card
- Power supply: 230 V~ (standard) or 24 V~/V-
- Supplied plate-mounted in IP56-rated closed housing

DESCRIPTION	PART NO.
Analyser supplied in IP56-rated closed housing; reagents not included	86204100
Pre-filter for hardness analysers	86200154
Set for equipment cleaning (road transport)	86200153
Set for equipment cleaning (air transport)	86200152

REAGENT (500 ml)	MEASUREMENT RANGE PROFESSIONAL VERSION		ALARM THRESHOLDS BASIC VERSION		
	TOTAL HARDNESS				
500S/500	0.04 ... 0.21 °f	0.02 ... 0.12°dH	0.04 °f	0.02 °dH	0.4 ppm CaCO$_3$
500/500	0.04 ... 0.36 °f	0.02 ... 0.2 °dH	0.09 °f	0.05 °dH	0.9 ppm CaCO$_3$
501/500	0.05 ... 0.54 °f	0.03 ... 0.3 °dH	0.18 °f	0.1 °dH	1.8 ppm CaCO$_3$
502/500	0.11 ... 1.07 °f	0.06 ... 0.6 °dH	0.36 °f	0.2 °dH	3.6 ppm CaCO$_3$
503/500	0.16 ... 1.61 °f	0.09 ... 0.9 °dH	0.54 °f	0.3 °dH	5.4 ppm CaCO$_3$
505/500	0.27 ... 2.68 °f	0.15 ... 1.5 °dH	0.9 °f	0.5 °dH	9.0 ppm CaCO$_3$
510/500	0.54 ... 5.36 °f	0.3 ... 3.0 °dH	1.8 °f	1.0 °dH	18 ppm CaCO$_3$
520/500	1.07 ... 10.71 °f	0.6 ... 6.0 °dH	3.6 °f	2.0 °dH	36 ppm CaCO$_3$
530/500	1.61 ... 16.07 °f	0.9 ... 9.0 °dH	5.4 °f	3.0 °dH	54 ppm CaCO$_3$
550/500	2.68 ... 26.79 °f	1.5 ... 15 °dH	9.0 °f	5.0 °dH	90 ppm CaCO$_3$
600/500	5.36 ... 53.57 °f	3.0 ... 30 °dH			
	CARBONATE HARDNESS				
C-710/500	0.54 ... 5.36 °f	0.3 ... 3.0 °dH	1.8 ° f	1.0 °dH	
C-715/500	0.80 ... 8.04 °f	0.45 ... 4.5 °dH	2.7 °f	1.5 °dH	
C-720/500	1.07 ... 10.71 °f	0.6 ... 6.0 °dH	3.6 °f	2.0 °dH	
C-730/500	1.61 ... 16.07 °f	0.9 ... 9.0 °dH	5.4 °f	3.0 °dH	

SENSORS AND ACCESSORIES

pH ELECTRODES
INDUSTRIAL LINE

S7   S7 + PG13.5

- Combined electrodes with glass body, diameter 12 mm
- Gel electrolyte (unless otherwise indicated)
- Range 0…14 pH, minimum conductivity of sample 50 µS/cm

ITEM	MEMBRANE	CONNECTION (THREAD)	FEATURES / APPLICATION	WORKING TEMPERATURE	PRESSURE MAX	PART NO.
EURO2005-pH	Glass S	S7 + PG13.5	Single ceramic diaphragm, plastic body	0 … 80 °C	8 bar	80092005
EURO2010-pH	Glass S	S7 screw head	Single ceramic diaphragm	0 … 80 °C	6 bar	80092010
EURO2015-pH	Glass S	S7 + PG13.5	Single ceramic diaphragm	0 … 80 °C	6 bar	80092015
EURO2025-pH	Glass S	S7 + PG13.5	Refillable electrode with liquid electrolyte, ground diaphragm, suitable for measurements in conditions of low conductivity (0.2 µS/cm)	-10 … 50 °C	Ambiente	80092025
EURO2030 -pH	Glass S	S7 + PG13.5	Triple ceramic diaphragm, for use in low conductivity solutions (min 2.5 µS/cm)	0 … 100 °C	6 bar	80092030
EURO2050-pH	Glass HA	S7 screw head	Triple ceramic diaphragm and salt bridge	0 … 120 °C	6 bar	80092050
EURO2051-pH	Glass HA	Cable 5 m + tips	Triple ceramic diaphragm and salt bridge	0 … 120 °C	6 bar	80092051
EURO2052-pH	Glass HA	Cable 5 m + BNC	Triple ceramic diaphragm and salt bridge	0 … 120 °C	6 bar	80092052
EURO2055-pH	Glass HA	S7 + PG13.5	Triple ceramic diaphragm and salt bridge	0 … 120 °C	6 bar	80092055
EURO2065-pH	Glass HF resistant	S7 + PG13.5	Single ceramic diaphragm, HF resistant glass body	0 … 100 °C	6 bar	80092065
EURO2085-pH	Glass HA	S7 screw head	Single ceramic diaphragm, electrolyte for solutions at pH > 12.5	0 … 120 °C	6 bar	80092085
EURO2090-pH	Glass S	S7 + PG13.5	Open annular diaphragm, polymeric electrolyte, for use in dirty water	0 … 100 °C	6 bar	80092090

Note: *Electrodes with screw head are supplied without cable. For a list of available cables, see page 34.*
For calibration and maintenance solutions, see page 43.

ORP ELECTRODES
INDUSTRIAL LINE

S7   S7 + PG13.5

- Combined electrodes with glass body, diameter 12 mm
- Gel electrolyte (unless otherwise indicated)
- Range ±2000 mV

ITEM	SENSOR	CONNECTION (THREAD)	FEATURES / APPLICATION	WORKING TEMPERATURE	PRESSURE MAX	PART NO.
EURO2105-RX	Platinum	S7 + PG13.5	Single ceramic diaphragm, plastic body	0 ... 80 °C	8 bar	80192105
EURO2110-RX	Platinum	S7 screw head	Single ceramic diaphragm	0 ... 80 °C	6 bar	80192110
EURO2120-RX	Gold	S7 screw head	Single ceramic diaphragm, for use in case of salt electrolysis	0 ... 80 °C	6 bar	80192120
EURO2115-RX	Platinum	S7 + PG13.5	Single ceramic diaphragm	0 ... 80 °C	6 bar	80192115
EURO2125-RX	Gold	S7 + PG13.5	Single ceramic diaphragm, for use in case of salt electrolysis	0 ... 80 °C	6 bar	80192125
EURO2150-RX	Platinum	S7 screw head	Triple ceramic diaphragm and salt bridge	0 ... 120 °C	6 bar	80192150
EURO2151-RX	Platinum	Cable 5 m + tips	Triple ceramic diaphragm and salt bridge	0 ... 120 °C	6 bar	80192151
EURO2155-RX	Platinum	S7 + PG13.5	Triple ceramic diaphragm and salt bridge	0 ... 120 °C	6 bar	80192155
EURO2160-RX	Gold	S7 screw head	Triple ceramic diaphragm, for use in case of salt electrolysis	0 ... 120 °C	6 bar	80192160
EURO2165-RX	Platinum	S7 + PG13.5	Single ceramic diaphragm, HF resistant glass body	0 ... 80 °C	6 bar	80192165
EURO2175-RX	Platinum	S7 + PG13.5	Single ceramic diaphragm, polypropylene body for use in HF high concentration and high pressure	0 ... 60 °C	8 bar	80192175

Note: *Electrodes with screw head are supplied without cable. For a list of available cables, see page 34.*
For calibration and maintenance solutions, see page 43.

CABLES AND CONNECTORS FOR pH and ORP ELECTRODES

High Quality (HQ) coaxial cables, dia. 5 mm, for industrial electrodes, EURO2010-pH and EURO2110-RX series.

ITEM		LENGTH	CONNECTORS	PART NO.
	CAV0	0.65 m	S7 screw + tips	80099010
	CAV1	1.2 m	S7 screw + tips	80099011
	CAV3	3 m	S7 screw + tips	80099013
	CAV5	5 m	S7 screw + tips	80099014
	CAV10	10 m	S7 screw + tips	80099015
	CAV15	15 m	S7 screw + tips	80099016
	CAV20	20 m	S7 screw + tips	80099017
	CAV30	30 m	S7 screw + tips	80099018
	CAV50	50 m	S7 screw + tips	80099019
	BNC/CV0	0.65 m	S7 screw + BNC	80099000
	BNC/CV1	1 m	S7 screw + BNC	80099001
	BNC/CV2	2 m	S7 screw + BNC	80099002
	BNC/CV3	3 m	S7 screw + BNC	80099003
	BNC/CV5	5 m	S7 screw + BNC	80099004
	BNC/CV10	10 m	S7 screw + BNC	80099005
	BNC/CV15	15 m	S7 screw + BNC	80099006
	BNC/CV20	20 m	S7 screw + BNC	80099007

Notes:
- *To avoid interferences in the signal transmission, use cables with a maximum length of 20 meters; for longer distances, we recommend the insertion of an SG18 pre-amplifier.*
- *Cables with tips: use for connection to EQ, EW, EW^2, S503, S504, S507, S508, MC14, SG18, MCO14 instruments.*
- *Cables with BNC: use for connection to the EW^2 Pool and $NOVA^2$ instruments, to pool controllers (EF260, EF300, EF315, EF117 series) and dosing pumps with inbuilt pH/ORP meter (PSP162, NSP162, EF110).*

ITEM		DESCRIPTION	PART NO.
	CV5	Screw connector S7 for industrial electrodes with cable of dia. 5 mm	51300501
	BNC/M	BNC male connector	51300005

pH & ORP ELECTRODES
SWIMMING POOL LINE

- Combined electrodes with shockproof plastic body, diameter 12 mm
- HQ (High Quality) coaxial cable, section 5 mm
- Gel electrolyte, KCl 3M
- pH electrodes: range 0…14 pH, minimum conductivity of sample 50 µS/cm
- ORP electrodes: range ±2000 mV

pH Electrodes

ITEM	MEMBRANE	CABLE / CONNECTOR		FEATURES / APPLICATION	WORKING TEMPERATURE	PRESSURE MAX	PART NO.
EURO4111-pH	Glass S	1 m	BNC	Single ceramic diaphragm	0 … 80 °C	8 bar	80094111
EURO2224-pH	Glass S	1 m	Puntali	Single ceramic diaphragm	0 … 80 °C	8 bar	80092224
EURO4112-pH	Glass S	2.5 m	BNC	Single ceramic diaphragm	0 … 80 °C	8 bar	80094112
EURO2214-pH	Glass S	2.5 m	Puntali	Single ceramic diaphragm	0 … 80 °C	8 bar	80092214
EURO4114-pH	Glass S	5 m	BNC	Single ceramic diaphragm	0 … 80 °C	8 bar	80094114
EURO2216-pH	Glass S	5 m	Puntali	Single ceramic diaphragm	0 … 80 °C	8 bar	80092216
EURO2206-pH	Glass S	5 m	BNC	Single ceramic diaphragm, green gel, suitable for horizontal installation	0 … 50 °C	2 bar	80092206
EURO4115-pH	Glass S	10 m	BNC	Single ceramic diaphragm	0 … 80 °C	8 bar	80094115

ORP Electrodes

ITEM	SENSOR	CABLE / CONNECTOR		FEATURES / APPLICATION	WORKING TEMPERATURE	PRESSURE MAX	PART NO.
EURO4111-RX	Platinum	1 m	BNC	Single ceramic diaphragm	0 … 80 °C	8 bar	80194111
EURO2224-RX	Platinum	1 m	Puntali	Single ceramic diaphragm	0 … 80 °C	8 bar	80192224
EURO2234-RX	Gold	0.65 m	BNC	Diaframma ceramico singolo, per misure in presenza di elettrolisi salina	0 … 80 °C	8 bar	80192234
EURO4112-RX	Platinum	2.5 m	BNC	Single ceramic diaphragm	0 … 80 °C	8 bar	80194112
EURO2214-RX	Platinum	2.5 m	Puntali	Single ceramic diaphragm	0 … 80 °C	8 bar	80192214
EURO2191-RX	Gold	2.5 m	BNC	Single ceramic diaphragm, per for use with salt electrolysis	0 … 80 °C	8 bar	80192191
EURO4114-RX	Platinum	5 m	BNC	Single ceramic diaphragm	0 … 80 °C	8 bar	80194114
EURO2238-RX	Platinum	5 m	Puntali	Single ceramic diaphragm	0 … 80 °C	8 bar	80192238
EURO2206-RX	Platinum	5 m	BNC	Single ceramic diaphragm, horizontal installation	0 … 50 °C	2 bar	80192206
EURO4115-RX	Platinum	10 m	BNC	Single ceramic diaphragm	0 … 80 °C	8 bar	80194115

![STEIEL — yes, we watercare!]

CCK1   CCK5   CCK J   CCK P

CONDUCTIVITY PROBES
CCK SERIES

- Two-electrode cells, with shielded cable (resin-bonded to the cell)
- Models with threaded body for direct in-line installation
- Models with stem body for industrial applications, also available with connector for use with portable meter
- Models with M8 connector for PSP164 pumps

ITEM	K CELL CONSTANT	RANGE (µS/cm)	BODY	ELEC-TRODES	TEMP. SENSOR	TEMPERATURE / PRESSURE MAX.	CABLE (*)	PART NO.
CCK1G-5S	1 cm	20'000	PVC, ½" GAS	Graphite	-	45°C / 5 bar	5 m	80290001
	1 cm	20'000	PVC, ½" GAS	Graphite	-	45°C / 5 bar	5 m + M8	80290045
CCK1G-10S	1 cm	20'000	PVC, ½" GAS	Graphite	-	45°C / 5 bar	10 m	80290006
CCK1GT-PT100	1 cm	20'000	PTFE, ½" GAS	Graphite	PT100	130°C / 3 bar	5 m	80290003
CCK1GT-PT100-10S	1 cm	20'000	PTFE, ½" GAS	Graphite	PT100	130°C / 3 bar	10 m	80290019
CCK1GT-NTC	1 cm	20'000	PTFE, ½" GAS	Graphite	NTC10K	130°C / 3 bar	5 m	80290002
	1 cm	20'000	PTFE, ½" GAS	Graphite	NTC10K	130°C / 3 bar	5 m + M8	80290052
CCK5	5 cm	2'000	PVC, ½" GAS	AISI316	-	45°C / 5 bar	2.5 m **	80290005
CCK5-5S	5 cm	2'000	PVC, ½" GAS	AISI316	-	45°C / 5 bar	5 m	80290107
	5 cm	2'000	PVC, ½" GAS	AISI316	-	45°C / 5 bar	5 m + M8	80290114
CCK5-10S	5 cm	2'000	PVC, ½" GAS	AISI316	-	45°C / 5 bar	10 m	80290106
CCK5T-PT100	5 cm	2'000	PTFE, ½" GAS	AISI316	PT100	130°C / 3 bar	5 m	80290009
CCK5T-NTC	5 cm	2'000	PTFE, ½" GAS	AISI316	NTC10K	130°C / 3 bar	5 m	80290010
	5 cm	2'000	PTFE, ½" GAS	AISI316	NTC10K	130°C / 3 bar	5 m + M8	80290097
CCK0.1J ***	0.1 cm	200'000	Glass stem, dia. 12 mm	Platinum	-	100°C / 2 bar	5 m	80291000
CCK1J ***	1 cm	20'000	Glass stem, dia. 12 mm	Platinum	-	100°C / 2 bar	5 m	80291001
CCK10J ***	10 cm	2'000	Glass stem, dia. 12 mm	Platinum	-	100°C / 2 bar	5 m	80291010
Models with connector for portable instruments								
CCK0.1P	0.1 cm	200'000	Glass stem, dia. 12 mm	Platinum	PT1000	60°C / 2 bar	1.5 m + con.	80291300
CCK1P	1 cm	20'000	Glass stem, dia. 12 mm	Platinum	PT1000	60°C / 2 bar	1.5 m + con.	80291301
CCK10P	10 cm	2'000	Glass stem, dia. 12 mm	Platinum	PT1000	60°C / 2 bar	1.5 m + con.	80291302

* If your installation needs a cable longer than the standard one, please contact STEIEL for a specific evaluation.
Warning! Extending the cell cable can affect measurement and it is not advisable.

** Unshielded cable.

*** Models not suitable for installation in PP/Moplen immersion probe-holders.

CONDUCTIVITY PROBES
CMK SERIES FOR INDUCTIVE MEASUREMENTS

Adapter

CMK-AS

CMK50   CMK-PP

CTI 23

- Conductivity measurement with inductive method, up to 500 mS/cm
- Built-in temperature sensor, automatic temperature compensation
- Standard cable length 10 m
- Immersion installation or in flow probe-holder
- In-line mounting with special accessories (PP or steel)
- To be used together with special signal transmitter (watertight casing for wall installation, dimensions 110 x 150 x 150 mm, protection IP56)

ITEM	DESCRIPTION	PART NO.
CMK50	Inductive conductivity cell with PEEK body, 1/2" thread for installation in probe-holder and cable 10 m; temperature max 120 °C	80280000
CMK-AS	AISI304 stainless steel fitting, DN50, for in-line installation	80280010
CMK-ADAS	Adapter for mounting the CMK50 cell on CMK-AS	80280020
CMK-PP	PP fitting, 1/2" GF, for in-line installation	80280011
CMK-51PP	PP fitting, 2" GM, for in-line installation	80280046
CMK-ADPP	Adapter for mounting the CMK50 cell on CMK-PP	80280021
CTI-23	Signal transmitter, 230 V~, 4-20 mA output	80281028
	Signal transmitter, 115 V~, 4-20 mA output	80281128

![STEIEL logo — yes, we watercare!]

AMPEROMETRIC SENSORS
CLE11 / CLE12 MODELS - OPEN CELLS

- Measurement of free chlorine, bromine and chlorine dioxide
- Two-electrode cell, copper and platinum (Cu/Pt), with antipassivation system
- Reading up to 1 ppm, or 5 ppm with saturation error
- Cell in down-flow probe-holder, with flow regulator and housings for two sensors dia. 12 mm (CLE12 only), flow and PT100 sensors
- Probe-holder with methacrylate body, connections for hose 6x8 mm and sampling outlet
- Working conditions: temperature max 40 °C, pressure max 3 bar, recommended flow rate 40-50 l/h, pH range 6-7.8
- Supplied with installation kit (Kit B)

ITEM		DESCRIPTION		PART NO.
	CLE11	Open amperometric cell with Cu/Pt electrodes and housings for PT100 probe and flow sensor	Cable 1 m	80610140
			Cable 1 m + M8	80610142
	CLE12	Open amperometric cell with Cu/Pt electrodes and housings for PT100 probe, flow sensor and two probes with dia. 12 mm	Cable 1 m	80610130
			Cable 1 m + M8	80610131
	SH-12CLE	Open amperometric cell for easy+fix system, with Cu/Pt electrodes, housings for PT100 probe, flow sensor and one probe with dia. 12 mm; complete with inlet filter	Cable 1 m	8081332D
			Cable 1 m + M8	8081334D

CLE16 MODEL, OPEN CELL

- Measurement of free chlorine and chlorine dioxide
- Three-electrode cell, stem dia. 12 mm
- Reading up to 1 ppm, or 5 ppm with saturation error
- Working conditions: temperature max 45 °C, pressure max 3 bar, flow rate 60-80 l/h
- pH range: 5-9 (cell working limits); 6-7.8 (recommended for disinfection with chlorine)
- Suitable to measurement in potable water and swimming pool, even in case of electrolysis process

ITEM	DESCRIPTION	PART NO.
CLE16/M8	Three-electrode, open amperometric cell, 1 m cable with M8 connector	80610127

AMPEROMETRIC SENSORS
ACCESSORIES AND SPARE PARTS FOR MODELS **CLE11 / CLE12**

ITEM	DESCRIPTION		PART NO.
CLE12-SENS	Spare Cu/Pt electrode group	Cable 1 m	80610115
		Cable 1 m + M8	80610119
	Spare Cu/Pt electrode group for cell mounted on BG08 generators	Cable 2.5 m	80610116
Kit-sfere/CLE	Kit of Pyrex balls (spare part)		80610110
Kit electrode	Kit of rings and seals for the installation of one sensor dia. 12 mm		80610265
	Maintenance kit for CLE and SD probe-holders		80610268
	Spare methacrylate body for CLE12 cell, with PP fittings and flow regulator		80610132
	Spare methacrylate body for CLE11 cell, with PP fittings and flow regulator		80610143
	Kit flow: Flow control kit for CLE12 / CLE11 and SD probe-holder series		80610114
	Grounding kit for CLE12 / CLE11 and SD probe-holder series		80610111
	Kit B: Installation kit, including 2 PVC valves M/F ½", 2 PP fittings with ½" threaded nut, PE hose 6x8 mm (5 m)		80509915
	PE hose, 6x8 mm, 100 m coil, price per meter		36501008
	PP fitting for hose 6x8 mm, with O-ring		97000164
	PVDF fitting for hose 6x8 mm, with O-ring		97000165
	SD-SF/PNP: PNP flow sensor for SD / SH / CLE probe-holders, for connection to S507 / S508 / EF300 instrument series		54500009
	SD-SF/NPN: NPN flow sensor for SD / SH / CLE probe-holders, for use with MC14 / EF214 / EF315 / EVOLUTION / NOVA² instrument series		54500010
	SD-SF/NPN M8: NPN flow sensor for SD / SH / CLE probe-holders, with M8 connector, for connection to PSP / NOVA / EF160 EVO pumps		80610000

AMPEROMETRIC SENSORS

CAC SERIES - CLOSED PROBES WITH MEMBRANE

- Full range of cells with ion-selective membrane for measurements of oxidants in water
- Four-wire direct cable, standard length 1 m
- Conductivity of the sample (aqueous solution): 50 … 10000 µS/cm
- Thermo-compensated readings thanks to the inbuilt temperature sensor
- Working conditions: temperature max 45 °C / pressure max 1 bar

PROBE	ANALYSIS OF	RANGE (ppm)	RECOMMENDED USE	pH RANGE	CONNECTION	PART NO.
CAC-CLI-XB	Active chlorine	0.01-0.5	Cooling, industrial and potable water, or with high (constant) pH value	5.0 … 9.5	Cable 1 m	80611100
CAC-CLI-B	Active chlorine	0.02-2.0			Cable 1 m	80611101
CAC-CLI-SW	Active chlorine	0.1-10.0	Analysis in seawater		Cable 1 m	80611103
CAC-CLI-M1	Active chlorine	0.2-20.0	Industrial, washing and waste water	5.5 … 8.0	Cable 1 m	80611104
CAC-CLI-M2	Active chlorine	0.5-50.0			Cable 1 m	80611105
CAC-CLI-A1	Active chlorine	1-100			Cable 1 m	80611106
CAC-CLI-A2	Active chlorine	10-200			Cable 1 m	80611107
CAC-CLO-B	Available chlorine	0.02-2.0	Swimming pool water treated with chlorine-organic disinfectants or salt electrolysis	5.0 … 9.5	Cable 1 m	80611201
CAC-CLO-M1	Active chlorine	0.1-10.0			Cable 1 m	80611203
					Cable 1 m + M8	80611283
CAC-CTO-M1	Total chlorine	0.05-5.0	Potable, industrial and waste water	5.5 … 9.5	Cable 1 m	80611302
CAC-CTO-M2	Total chlorine	0.1-10.0			Cable 1 m	80611303
CAC-CDX-B	Chlorine dioxide	0.02-2.0	Chlorine dioxide in cold water	4.0 … 11.0	Cable 1 m	80611401
					Cable 1 m + M8	80611481
CAC-BRO-M	Bromine (BCDMH)	0.1-10.0	Cooling water, pools and spas disinfected with organic-bromine-based products	6.0 … 9.5	Cable 1 m	80611503
CAC-HYP-XB	Hydrogen peroxide	1 -50	All types of water, even dirty or chemically contaminated	2.5 … 8.0	Cable 1 m	
CAC-HYP-B		5-200			Cable 1 m	
CAC-HYP-M		10-500			Cable 1 m	
CAC-OX3-B	Ozone	0.02-2.0	Potable and pool water	n.a.	Cable 1 m	80611701
CAC-PAA-B	Peracetic acid	1-200	Aseptic filling for food use	1.0 … 9.0	Cable 1 m	80611807
CAC-PAA-M		10-2000			Cable 1 m	80611808
CAC-CLT-XB	Chlorite	0.01-0.5	Potable and washing water	5.5 … 9.5	Cable 1 m	80611900
CAC-CLT-B		0.02-2.0			Cable 1 m	80611901

AMPEROMETRIC SENSORS

SPARE PARTS FOR **CAC** SERIES - CLOSED PROBES WITH MEMBRANE

Membrane caps

ITEM	COLOUR	SPARE PART FOR PROBES	PART NO.
CAC-ME-1	Blue	CAC-CLI-XB, CAC-CLI-B, CAC-CLI-SW, CAC-CTO-XB, CAC-BRO-M	80611001
CAC-ME-2	Transparent	CAC-CLI-M1, CAC-CLI-M2, CAC-CLI-A1, CAC-CDX-B, CAC-OX3-B	80611002
CAC-ME-3	White	CAC-CLI-A2, CAC-PAA-B, CAC-PAA-M	80611003
CAC-ME-4	Orange	CAC-CLO-B, CAC-CLO-M1, CAC-CTO-B, CAC-CTO-M1, CAC-CTO-M2, CAC-HYP-XB, CAC-HYP-B, CAC-HYP-M	80611004
CAC-ME-5	Grey	CAC-HYP-XB, CAC-HYP-B, CAC-HYP-M (**before 04/2023**)	80611005
CAC-ME-6	Black	CAC-CLT-XB, CAC-CLT-B	80611006

Electrolytes

ITEM	VOLUME	SPARE PART FOR PROBES	PART NO.
CAC-EL-1	100 ml	CAC-CLI-XB, CAC-CLI-B, CAC-CLI-SW	80611021
CAC-EL-2	100 ml	CAC-CLI-M1, CAC-CLI-M2, CAC-CLI-A1, CAC-CLI-A2	80611022
CAC-EL-3	50 ml	CAC-CLO-B, CAC-CLO-M1, CAC-CTO-XB, CAC-CTO-B, CAC-CTO-M1, CAC-CTO-M2	80611023
CAC-EL-4	50 ml	CAC-BRO-M	80611024
CAC-EL-5	100 ml	CAC-CDX-B	80611025
CAC-EL-6	100 ml	CAC-OX3-B	80611026
CAC-EL-7	50 ml	CAC-HYP-XB, CAC-HYP-B, CAC-HYP-M (**before 04/2023**)	80611027
CAC-EL-8	100 ml	CAC-PAA-B, CAC-PAA-M	80611028
CAC-EL-9	50 ml	CAC-CLT-XB, CAC-CLT-B	80611029
CAC-EL-10	100 ml	CAC-HYP-XB, CAC-HYP-B, CAC-HYP-M (**after 04/2023**)	80611030

Other Spare Parts

ITEM	DESCRIPTION	PART NO.
CAC-OR	Silicone ring seal for CAC membrane-cap, kit 10 pieces	80612099

AMPEROMETRIC SENSORS

CAC-HT-B MODEL - OPEN CELL

- Cell for measurements of chlorine and chlorine dioxide in hot water (max. 70 °C) circuits and under pressure
- Also suitable for analysis in dirty water
- Three-electrode amperometric sensor, without protection membrane
- Constant flow rate is required through the probe holder (recommended: 60 l/h)
- Conductivity of the sample (aqueous solution): 50 ... 10000 µS/cm
- Thermo-compensated readings thanks to the inbuilt temperature sensor

PROBE	ANALYSIS OF	RANGE (ppm)	RECOMMENDED USE	TEMPERATURE / PRESSURE MAX	CONNECTION	PART NO.
CAC-HT-B	Chlorine / ClO$_2$	0.02-2.0	Disinfection of sanitary hot water; analysis in dirty water	70 °C / 8 bar	Cable 1 m	80612101
					Cable 1 m + M8	80612181

ITEM	DESCRIPTION	PART NO.
CAC-EL-HT	Spare electrolyte for CAC-HT-B probe, 100 ml	80612005

TEMPERATURE SENSORS

- Series of temperature probes, of different materials and shapes
- Models with anti-acid Pyrex stem body, probes with threaded body for installation in probe-holder or in-line mounting
- Sensor PT100, PT1000 or NTC10K
- Inbuilt cable

PT101-CP   PT100S

ITEM	DESCRIPTION		PART NO.
PT100S	Probe Pt100, anti-acid Pyrex body, dia. 12 mm, cable 2 m		80390001
PT100S2	Probe Pt100, anti-acid Pyrex body, dia. 12 mm, double sensor, cable 5 m		80390002
PT101-CP1	Probe Pt100, threaded PP body; working temperature: max 90°C for 20 minutes, max 75°C for continuous operation	Cable 0.75 m	80390013
PT101-CP2		Cable 1.5 m	80390014
PT101-CP3		Cable 2.5 m	80390015
PT1000	Probe Pt1000 for SHP series of portable meters, AISI316 sleeve, dia. 4 x L 200 mm, with spiral cable		80390060
NTC-S	Probe NTC-10K, anti-acid Pyrex body, dia. 12 mm, cable 2 m		80390000

CELLS FOR TURBIDITY MEASUREMENT

CTS07 MODELS

Items available while stock lasts!

- Turbidity cells compliant to the ISO7027 international standards
- SS (Side Scattering) and FS (Forward Scattering) models
- Complete system including cell and pre-amplifier, assembled on a panel (325 x 325 mm)
- Water inlet and outlet with ¼" GAS connection on 12 mm hose-holder
- Light source: high efficiency red LED
- Optional auto-cleaning system
- Signal output: 4-20 mA
- Calibration with formazine-based solutions

ITEM	DESCRIPTION	PART NO.
CTS07-SS	Panel with turbidity cell, range up to 100.0 FTU (NTU)	85700040
CTS07-FS	Panel with turbidity cell, range up to 500.0 FTU	85700041
ATS96	Automatic cleaning system for cells 100 FTU and 500 FTU	85700035

SOLUTIONS

- Full range of solutions for calibration and periodic maintenance of sensors.

ITEM	90 ml BOTTLE PART NO.	500 ml BOTTLE PART NO.
Buffer solution pH4	80090095	80090093
Buffer solution pH7	80090096	80090094
Buffer solution pH9	80090097	80090100
ORP solution 220 mV a 25°C	80190091	80190090
Electrode storage solution	-	80090091
Solution 147 µS/cm @ 25°C	-	80290155
Solution 1413 µS/cm @ 25°C	-	80290153
Solution 12880 µS/cm @ 25°C	-	80290151

ITEM		PART NO.
KRE, Kit of solutions for cleaning and storage of pH & ORP electrodes		80099902
Refilling kit for refillable electrodes	Small bottle (empty)	36000100
	Hose 7x10 mm	36502111
Electrolyte (KCl 3 M) for refillable electrodes, 250 ml bottle		80090087
Protective cap for electrode storage		36100112

PROBE-HOLDERS

S92 SERIES, FOR IN-LINE INSTALLATION


S92/T   S92/P   S92/PG13.5

- Probe-holders for the installation of one sensor of dia. 12 mm
- Direct connection to the pipe, also with support clamp

ITEM	MATERIAL	CONNECTION	PRESSURE MAX.	TEMPERATURE MAX.	PART NO.
S92/T	PP	½" GAS M	2 bar	70 °C	80820005
S92/P	PVC / PVC protection	½" GAS M	2 bar	45 °C	80820001
S92/PG13.5	PP	PG13.5 / 1/2" G M	5 bar	70 °C	80820012
	PP	PG13.5 / 3/4" G M	5 bar	70 °C	80610267
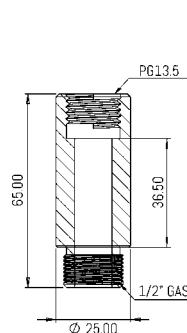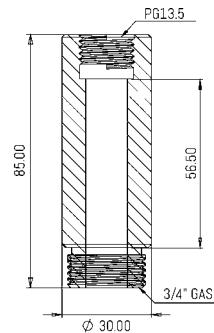
80820012   80610267

Accessories

ITEM	DESCRIPTION	PART NO.
Collar 50	DN50 clamp with ½" F connection, to be used with S92 models	36307706
Collar 63	DN63 clamp with ½" F connection, to be used with S92 models	36307707

PROBE-HOLDERS

S86 SERIES, FOR IMMERSION INSTALLATION

- Probe-holders for immersion installation of one or two sensors
- External diameter 60 mm
- Models for CCK or CMK with ½" threaded connection
- Adjustable flange

ITEM	MATERIAL	LENGTH UNDER FLANGE MAX (mm)	SENSOR(S)	TEMPERATURE MAX.	PART NO.
S86-60	PVC	710	1 x CCK o CMK	40 °C	80800004
S86-1000	PVC	1000	1 x CCK o CMK	40 °C	80800096
S86-1500	PVC	1500	1 x CCK o CMK	40 °C	80800097
S86-60M	PP Moplen	710	1 x CCK o CMK	80 °C	80800010
S86-1000M	PP Moplen	1000	1 x CCK o CMK	80 °C	80800015
S86-61	PVC	710	1 x dia. 12 mm	40 °C	80800002
S86-1001	PVC	1000	1 x dia. 12 mm	40 °C	80800090
S86-1501	PVC	1500	1 x dia. 12 mm	40 °C	80800091
S86-62	PVC	710	2 x dia. 12 mm	40 °C	80800003
S86-1002	PVC	1000	2 x dia. 12 mm	40 °C	80800093
S86-1502	PVC	1500	2 x dia. 12 mm	40 °C	80800094
S86-61M	PP Moplen	710	1 x dia. 12 mm *	80 °C	80800012
S86-1001M	PP Moplen	1000	1 x dia. 12 mm *	80 °C	80800016
S86-62M	PP Moplen	710	2 x dia. 12 mm *	80 °C	80800014
S86-1002M	PP Moplen	1000	2 x dia. 12 mm *	80 °C	80800018
* Not for CCKJ series probes					

Accessories

DESCRIPTION	PART NO.
Self-cleaning kit for pH and ORP electrodes	80099900

PROBE-HOLDERS

SD SERIES - FLOW-THROUGH METHACRYLATE MODELS
SH SERIES - FLOW-THROUGH METHACRYLATE MODELS FOR easy+fix SYSTEMS

- Housings for PT100 probe and proximity sensor for sample water flow control (no SDE)
- **PP fittings for hose 6x8 mm**
- Working temperature max 70°C (also check operation limits of the sensors installed)
- Supplied with installation kit (Kit B) and (only SH models) inlet filter
- If the probe-holder is intended to be used with hot water (max 70 °C), buy proper installation kit (Kit B/HT)
- **SDE, SD-P1 and SD-P2 models available while stock lasts!**

ITEM		SENSOR(S)		PRESSURE MAX.	PART NO.
		MEASUREMENT	PT100 + FLOW		
	SDE	2 x dia. 12 mm	-	2 bar	80610258
	SD-P1	1 x dia. 12 mm	x	2 bar	80610270
	SD-P2	2 x dia. 12 mm	x	2 bar	80610272
	SD-CAC1	1 x CAC	x	5 bar	80610255
	SD-CAC2	1 x CAC + 2 x dia. 12 mm	x	2 bar	80610256
	SD-CAC3	2 x CAC + 2 x dia. 12 mm	x	2 bar	80610257
	SH-1212	2 x dia. 12 mm	x	2 bar	8081331D
	SH-1225	1 x CAC + 1 x dia. 12 mm	x	2 bar	8081330D

DESCRIPTION
Surcharge for probe-holder with PVDF fittings for hot water applications

PROBE-HOLDERS

ACCESSORIES FOR **SD / SH** SERIES, METHACRYLATE MODELS

ITEM	DESCRIPTION	PART NO.
Kit electrode	Kit of threaded rings & seals for the installation of one sensor dia. 12 mm	80610265
	Electrode-holder with PP body, 3/4" thread, for the installation of one glass sensor dia. 12 mm with PG13.5 connection; allows to work up to a pressure of 5 bar	80610267
	Kit CAC: Kit of threaded rings & seals for the installation of one CAC probe	80610264
	Maintenance kit for CLE and SD series probe-holders	80610268
	Kit flow: Flow control kit for CLE11 / CLE12 and SD series probe-holders	80610114
	Grounding kit for CLE11 / CLE12 and SD series probe-holders	80610111
	Kit B: Installation kit, including 2 PVC valves M/F ½", 2 PP fittings with ½" threaded ring, PE hose 6x8 mm (5 m)	80509915
	Kit B/HT: Installation kit, including 2 PP valves M/F ½", 2 PP fittings with ½" threaded ring, PE hose 6x8 mm (5 m); max 70 °C	80509916
	Valve HT: PP valve M/F ½", for hot water (max 70 °C)	36316592
	PE hose, 6x8 mm, 100 m coil, price per meter	36501008
	PP connection with O-ring for hose 6x8 mm	97000164
	PVDF connection with O-ring for hose 6x8 mm	97000165
	PVC valve ½" + fitting for SH sensor-holders	80509920
	Filter + fitting for SH sensor-holders	80509921
	SD-SF/PNP: PNP flow sensor for SD / SH / CLE probe-holders, for use with S507 / S508 / EF300 instrument series	54500009
	SD-SF/NPN: NPN flow sensor for SD / SH / CLE probe-holders, for use with MC14 / EF214 / EF315 / EVOLUTION / NOVA² instrument series	54500010
	SD-SF/NPN M8: NPN flow sensor for SD / SH / CLE probe-holders, with M8 connector, for use with PSP / NOVA / EF160 EVO pumps	80610000
	Flow control SDE: Flow sensor for SDE	97009203
	Pressure reduction kit for sampling outlet	80610080

PROBE-HOLDERS

SF SERIES - FLOW-THROUGH MODELS WITH CUP

- Installation of one, two or three sensors
- Supplied complete with mounting bracket and IN-OUT connections
- **Working pressure max 2 bar**
- Models SF17 and SF19 supplied with installation kit (Kit B)

ITEM		MATERIAL	CONNECTION	SENSOR(S)	TEMPERATURE MAX.	PART NO.
	SF17	Transparent SAN	PP, for hose 6x8 mm	1 x dia. 12 mm	50 °C	80810011
	SF19E2			2 x dia. 12 mm	40 °C	80811122
	SF19/CO			1 x CCK (1/2") or 1 x CMK	40 °C	80811102
	SF78M3	PP	Hose-fitting 1/2"	3 x dia. 12 mm	80 °C	80810002
	SF78M/CCK	PP		1 x CCK	80 °C	80810006
	SF78M/CMK	PP		1 x CMK	80 °C	80810000

FILTER-HOLDERS

PF SERIES - FLOW-THROUGH MODELS WITH CUP

- Models for cold and hot water, complete with filtering cartridge
- Supplied complete with mounting bracket and IN-OUT connections

ITEM		MATERIAL	CONNECTION	PRESSURE MAX.	TEMPERATURE MAX.	PART NO.
	PF17	Transparent SAN	PP, for hose 6x8 mm	8 bar	50 °C	80710026
	PF16-HT	Polyamide		15 bar	80 °C	80710030

PROBE-HOLDERS and FILTER-HOLDERS

ACCESSORIES AND SPARE PARTS FOR **SF / PF** SERIES

ITEM	DESCRIPTION	PART NO.
	Filtering PP cartridge with washable PA mesh, 80 µm, to be used with models SF17 / PF17	80710034
Cup	Transparent SAN cup, PP threaded head with brass inserts and NBR70 seals; spare part for SF17 / PF17	80710031
	Transparent SAN cup only; spare part for SF17 / PF17 / SF19	33000009
Bracket	Mounting bracket for SF17 / PF17	80710032
	Kit for swimming pool panels, including: 2x SF17, 1x filtering cartridge, IL-SF flow sensor; supplied assembled and ready to install, complete with Kit B	80810013
	IL-SF: "In-line" flow sensor, 3/8" M/M connection	97009202
	Filtering cartridge with washable AISI304 mesh, 50 µm, to be used with model PF16-HT	80710025
Cup HT	Polyamide filter-holder cup; spare part for PF16-HT	80710021
Seal	Filter O-ring for PF16-HT	37014325
Bracket	Mounting bracket for PF16-HT	80710022
	PP connection with O-ring for hose 6x8 mm; spare part for SF17 / PF17 / SF19 / PF16-HT	97000164
	PVDF connection with O-ring for hose 6x8 mm; spare part for SF17 / PF17 / SF19 / PF16-HT	97000165
Kit electrode	Kit of threaded rings & seals for the installation of one sensor dia. 12 mm, spare part for SF19E2	80610265
Seal	Spare sealing for electrode installation in SF78M3	37000100
	Kit B: Installation kit, including 2 PVC valves M/F ½", 2 PP fittings with ½" threaded ring, PE hose 6x8 mm (5 m)	80509915
	Kit B/HT: Installation kit, including 2 PP valves M/F ½", 2 PP fittings with ½" threaded ring, PE hose 6x8 mm (5 m); max 70 °C	80509916
	PE hose, 6x8 mm, 100 m coil, price per meter	36501008

DOSING SYSTEMS

ELECTROMAGNETIC DOSING PUMPS WITH DIAPHRAGM

PROXIMA PSP SERIES - PROFESSIONAL LINE, FOOT-MOUNTING

- Advanced, **multifunctional electronics**, with backlit alphanumeric display
- **Mechanical adjustment** of stroke length (injection volume)
- Multilingual interface (Italian, English, French, Spanish, German)
- Two configuration levels, standard and advanced, password-protected
- Dosing schedule at set hours and days (internal clock)
- Counters of injected litres, working hours and strokes of the membrane
- **"Service" menu**
- **"Autoset" function**
- **Self-priming** (only available with optional injection flow control)
- Internal system for **overheating control / safety**
- **Anti-leakage system** towards the magnet
- IP65 housing; dimensions: 110 x 260 x 190 mm (maximum overall dimensions, wiring excluded)
- Multi-voltage power supply: 100-240 V~ (cable with plug)
- Standard digital inputs for external consent and level control
- Optional input for injection flow control
- Optional output, to be chosen among: relay, pulse repetition (SSR), or RS485 serial port with **Modbus** RTU communication protocol

- These pumps are supplied with standard accessory kit (foot filter; injection valve; hoses for suction, delivery and bleed lines), fittings kit, cables with M8 connector for inputs / outputs wiring

Available models

- **PSP161**   Multifunctional pump, with pulse and mA inputs; pulse command (with dosage proportional to the flow rate or automatic ppm / % / ml/q calculation) or analogic input signal, batch mode, duty cycle

- **PSP162**   Pump with inbuilt pH/ORP meter and electrode input on BNC connector

- **PSP163A**   Pump with inbuilt chlorine meter and input for CLE11 / CLE12 cell available on M8 connector

- **PSP163B**   Pump with inbuilt chlorine meter and input for CLE16 cell available on M8 connector

- **PSP164**   Pump with inbuilt conductivity meter and input for two-electrode cell with integrated NTC sensor, available on M8 connector

How to build the part number for **PROXIMA PSP** pumps

98 ☐ ☐ ☐ ☐ A ☐ ☐ ☐

Range
Only for PSP163 and PSP164 models; contact STEIEL for more details.

Flow Rate
For available options, see table on next page.

Dosing Head
For available options, see table on next page.

Inputs
2 = Level + External Consent (pulse)
3 = Level + External Consent (pulse), level probe included
4 = Level + External Consent (pulse) + Flow
5 = Level + External Consent (pulse) + Flow, level probe included

Optional Outputs
0 = No output
1 = Alarm relay
3 = Relay for pulse repetition
8 = RS485 serial port with Modbus RTU protocol

Power Supply
0 = 100-240 V~ cable with Schuko plug
2 = 100-240 V~ cable with US plug (type B)
6 = 100-240 V~ cable with UK plug (type G)

Pump Model
5 = **PSP161**   (multifunctional pump)
6 = **PSP162**   (pH/ORP pump)
7 = **PSP163A**   (chlorine pump, input for CLE11/CLE12)
8 = **PSP163B**   (chlorine pump, input for CLE16)
9 = **PSP164**   (conductivity pump)

Note: Options in bold refer to the standard version of the pump.

Available Flow Rates

REF. CODE	FLOW RATE (l/h / bar)
A	02 16
F (#)	03 10
G	04 16
H (*)	04 25
B	05 10
J	05 16
K	08 07
L	08 10
C	13 04
M	13 07
D	20 02
N	20 04
E	32 02

(#) Model F (03 10) is available only for PSP161 model and only as PKTT/AS version ("full PTFE" diaphragm) and is supplied with PTFE hose (4x6 mm, 10 m), injection valve without spring and foot filter.

(*) Model supplied without standard accessory kit (hoses, foot valve and injection valve).

Optional inputs / outputs

DESCRIPTION
Pump with FLOW input
Pump with level probe included
Pump with alarm relay, supplied with connection cable
Pump with relay for pulse repetition
Cable for pulse repetition, L=50 cm (cod. 80099252)
Cable for pulse repetition, L=2 m (cod. 80099250)
Pump with RS485 / Modbus, supplied with connection cable

PKT standard head

MKV head

HV head
(high viscosity)

DOSING SYSTEMS

Dosing Head

REF. CODE	TYPE	HEAD MATERIAL	VALVE BALLS	SEALS	NOTES
2	**PKT**	**PVDF**	**Ceramic**	**PTFE**	**Standard head**
3	PKT/AS	PVDF	Ceramic	PTFE	PKT head with 2-way self-bleeding valve, only for models 0216, 0510, 0516
4	MKV	Methacrylate	Ceramic	FPM	Only for models 0216, 0510, 0516
5	PKT500-1	PVDF	Ceramic	PTFE	Valves with spring for dosing viscous liquids up to 500 cP, for pumps with flow rate ≤ 5 l/h
6	PKT500-2	PVDF	Ceramic	PTFE	Valves with spring for dosing viscous liquids up to 500 cP, for pumps with flow rate ≥ 8 l/h
7	PKT-HV	PVDF	Ceramic	PTFE	Head for dosing highly viscous liquids up to 3000 cP, for pumps with flow rate ≥ 5 l/h (no 3202)
8	PTT	PVDF	PTFE	PTFE	
9	PTT500-1	PVDF	PTFE	PTFE	Valves with spring for dosing viscous liquids up to 500 cP, for pumps with flow rate ≤ 5 l/h
A	PTT500-2	PVDF	PTFE	PTFE	Valves with spring for dosing viscous liquids up to 500 cP, for pumps with flow rate ≥ 8 l/h
B	PKTT/AS	PVDF	Ceramic	PTFE	PKT head with "full PTFE" diaphragm and 2-way self-bleeding
C	MKV/AS	Methacrylate	Ceramic	FPM	MKV head with 3-way self-bleeding (only for model 0216)
D	MKVT/AS	Methacrylate	Ceramic	FPM	MKV head with "full PTFE" diaphragm and 3-way self-bleeding (only for model 0216)
L	PKT	PVDF	Ceramic	PTFE	Pumps supplied with PTFE hoses
M	PKT/AS	PVDF	Ceramic	PTFE	
N	PTT	PVDF	PTFE	PTFE	

Hydraulic Characteristics

REF. CODE	FLOW RATE (INJECTION VOLUME) @ PRESSURE				HOSE IDxOD (mm) (*)	MAX SUCTION HEIGHT
	0.5 bar	4 bar	8 bar	16 bar		
A (02 16)	7 l/h (0.65 ml)	3 l/h (0.28 ml)	2.5 l/h (0.23 ml)	1.8 l/h (0.17 ml)	4x6	5 m
G (04 16)	10.5 l/h (0.98 ml)	5.5 l/h (0.42 ml)	3.8 l/h (0.35 ml)	3 l/h (0.28 ml)	4x6	5 m
J (05 16)	12 l/h (1.14 ml)	6.4 l/h (0.59 ml)	5.5 l/h (0.51 ml)	4.5 l/h (0.42 ml)	4x6 (5x8)	5 m

REF. CODE	FLOW RATE (INJECTION VOLUME) @ PRESSURE				HOSE IDxOD (mm) (*)	MAX SUCTION HEIGHT
	0.5 bar	6 bar	12 bar	25 bar		
H (04 25)	12 l/h (1.16 ml)	5.3 l/h (0.49 ml)	4.5 l/h (0.41 ml)	3.3 l/h (0.31 ml)	4x6	5 m

REF. CODE	FLOW RATE (INJECTION VOLUME) @ PRESSURE				HOSE IDxOD (mm) (*)	MAX SUCTION HEIGHT
	0.5 bar	4 bar	6 bar	10 bar		
F (03 10)	9 l/h (0.85 ml)	4.2 l/h (0.39 ml)	3.5 l/h (0.32 ml)	3 l/h (0.28 ml)	4x6	n.a.
B (05 10)	12 l/h (1.1 ml)	5.8 l/h (0.53 ml)	5 l/h (0.46 ml)	4.5 l/h (0.41 ml)	4x6 (5x8)	5 m
L (08 10)	20 l/h (1.89 ml)	10.5 l/h (0.97 ml)	9 l/h (0.83 ml)	7.8 l/h (0.72 ml)	5x8	4 m

REF. CODE	FLOW RATE (INJECTION VOLUME) @ PRESSURE				HOSE IDxOD (mm) (*)	MAX SUCTION HEIGHT
	0.5 bar	2 bar	4 bar	7 bar		
K (08 07)	19 l/h (1.75 ml)	11 l/h (1 ml)	8.3 l/h (0.64 ml)	7 l/h (0.64 ml)	5x8	4 m
M (13 07)	27 l/h (2.55 ml)	15.5 l/h (1.44 ml)	12 l/h (1.13 ml)	9.5 l/h (0.87 ml)	5x8	3 m

REF. CODE	FLOW RATE (INJECTION VOLUME) @ PRESSURE				HOSE IDxOD (mm) (*)	MAX SUCTION HEIGHT
	0.5 bar	1 bar	2 bar	4 bar		
C (13 04)	21 l/h (1.98 ml)	18 l/h (1.67 ml)	15 l/h (1.41 ml)	12 l/h (1.13 ml)	5x8	3 m
D (20 02)	30 l/h (2.75 ml)	26 l/h (2.42 ml)	19.4 l/h (1.8 ml)	-	9x12	2 m
N (20 04)	26 l/h (2.4 ml)	22.5 l/h (2.1 ml)	16.5 l/h (1.53 ml)	15 l/h (1.37 ml)	9x12	2 m
E (32 02)	36 l/h (3.35 ml)	32 l/h (2.93 ml)	28 l/h (2.61 ml)	-	9x12	2 m

(*) Warning! In case of HV head for dosing highly viscous liquids, you need a hose 16x24 mm.
For models B (0510) and J (0516), if dosing medium viscous liquids (valves with spring), it is necessary to use a hose with diameter greater than the standard one; recommended size indicated in brackets.

Notes:
- *The hydraulic specifications refer to pumps with standard head (only model F 0310 features a PKTT/AS head), mechanical stroke 100%, frequency 180 strokes/minute, ambient temperature 25°C, dosage of no viscous liquid (water) with a 5 m delivery hose.*
- *For pumps with AS dosing head (self-bleeding), consider a flow rate yield reduced by 25-30%.*
- *The max suction height values refer to pumps with standard dosing head, with head and suction line totally full of liquid.*

ELECTROMAGNETIC DOSING PUMPS WITH DIAPHRAGM

NOVA NSP SERIES - PROFESSIONAL LINE, WALL INSTALLATION

- **Intuitive configuration** protected by three-level password
- Bilingual interface (English/Italian), with backlit alphanumeric display
- Multifunctional connector for external consent / pulse / mA inputs, and input for level sensor
- Counters of injected litres, working hours and strokes of the diaphragm
- **"Service" menu**
- **"Autoset" function** for a quick configuration
- **"Reset" function** to restore factory values
- "Flow Control" optional input for **injection flow control** and **self-priming function**
- Optional output: alarm (NO/NC) or pulse repetition relay
- **RS485** optional serial port **with galvanic insulation** and **Modbus** RTU communication protocol, also for connection with **SteieLynx gateway**
- **"Timer" option** for dosage scheduling at set days and times, with management of 14 daily events or 2 daily events on 7 days, automatic updating of winter / summer time
- Internal system for **overheating control / safety**
- **Anti-leakage system** towards the magnet
- Casing made of PP-FG with V-0 UL flame classification
- IP65-rated housing; dimensions: 226 x 115 x 175 mm (wiring excluded)
- Power supply, standard: 230 V~ (cable with plug); on request: 115 V~

- These pumps are supplied with standard accessory kit (foot filter; injection valve; hoses for suction, delivery and bleed lines), fittings kit, wall-mounting bracket, cables with M8 connector for inputs / outputs wiring

SteieLyxn ext.

Available models

- **NSP161**   Multifunctional pump with pulse / external consent / mA inputs; pulse command or from analog input, batch mode, duty cycle

- **NSP162**   Pump with inbuilt pH/ORP meter and electrode input on BNC connector

- **NSP163A**   Pump with inbuilt chlorine meter and input for CLE11 / CLE12 cell available on M8 connector

- **NSP163B**   Pump with inbuilt chlorine meter and input for CLE16 cell available on M8 connector

DOSING SYSTEMS

How to build the part number for **NOVA NSP** pumps

91 ☒ ☒ ☒ ☒ ☒ ☒ ☒ ☒ ☒ A ☒ ☒

Language of Instruction Manual
0 = Multilingual manual
6 = No manual
Note: Customized manual available on request

Second Language of Software (English always provided)
1 = Italian
2 = Spanish
3 = French

Timer and Digital Communication Options
00 = No options
01 = Timer (RTC with automatic winter / summer time switch)
10 = RS485 serial port with Modbus RTU protocol
11 = RS485 serial port with Modbus RTU protocol + Timer

Optional Outputs
0 = No output
1 = Alarm relay
2 = Relay for pulse repetition

Inputs
2 = Level + External Consent   (standard for NSP161 and NSP162 pumps)
4 = Level + External Consent + Flow   (standard for NSP163 pumps - Sample Water)

Power Supply
0S = 230 V~, 50/60 Hz, cable with Schuko plug
0E = 230 V~, 50/60 Hz, cable with UK plug (type G)
1B = 115 V~, 50/60 Hz, cable with US plug (type B)

Kit for Hydraulic Installation
1 = Standard kit
2 = Kit with PTFE hoses
3 = Standard kit + level probe
4 = Kit with PTFE hoses + level probe

Dosing Head
For available options, see table on next page.

Flow Rate
For available options, see table on next page.

Range
00 = Not applicable (standard value for NSP161 and NSP162 models)
01 = 0-1 ppm / 0-5 ppm (standard value for NSP163 models)

Pump Model
A = **NSP161**   (multifunctional pump)
B = **NSP162**   (pH/ORP pump)
C = **NSP163A**   (chlorine pump, input for CLE11/CLE12)
D = **NSP163B**   (chlorine pump, input for CLE16)

Note: Options in bold refer to the standard version of the pump.

Available Flow Rates

REF. CODE (FLOW RATE)	FLOW RATE (l/h / bar)
B0220	02 20
B0310 (#)	03 10
C0512	05 12
D0808	08 08
E1504	15 04
F1903	19 03

(#) Model B0310 is available only for NSP161 model and only as PKTT/AS version ("full PTFE" diaphragm) and is supplied with PTFE hose (4x6 mm, 10 m), injection valve without spring and foot filter.

Optional inputs / outputs

DESCRIPTION
Pump with FLOW input
Pump with alarm relay output, complete with connection cable
Pump with relay output for pulse repetition
Cable for pulse repetition, L=50 cm (cod. 80099252)
Cable for pulse repetition, L=2 m (cod. 80099250)
Pump with Timer
Pump with RS485 port / Modbus, complete with connection cable

Hydraulic Characteristics

REF. CODE (FLOW RATE)	FLOW RATE (INJECTION VOLUME) @ PRESSURE						HOSE IDxOD (mm)
	0.5 bar	4 bar	8 bar	12 bar	16 bar	20 bar	
B0220	11.7 l/h (1.08 ml)	4.3 l/h (0.41 ml)	3.2 l/h (0.3 ml)	2.8 l/h (0.26 ml)	2.3 l/h (0.2 ml)	2.0 l/h (0.20 ml)	4x6
C0512	15.8 l/h (1.47 ml)	7.9 l/h (0.73 ml)	6.4 l/h (0.59 ml)	5.6 l/h (0.52 ml)	-	-	4x6
D0808	19.8 l/h (1.83 ml)	11.3 l/h (1.04 ml)	8.0 l/h 0.74 ml)	-	-	-	5x8

REF. CODE (FLOW RATE)	FLOW RATE (INJECTION VOLUME) @ PRESSURE				HOSE IDxOD (mm) (*)
	0.5 bar	2 bar	3 bar	4 bar	
E1504	26.7 l/h (2.47 ml)	18.6 l/h (1.72 ml)	17.2 l/h (1.55 ml)	15.3 l/h (1.42 ml)	5x8
F1903	26.5 l/h (2.46 ml)	20.8 l/h (1.93 ml)	18.6 l/h (1.72 ml)	-	9x12

Notes:
- *The hydraulic specifications refer to pumps with standard head, frequency 180 strokes/minute, ambient temperature 25°C, dosage of no viscous liquid (water) with a 5 m delivery hose.*
- *For pumps with AS dosing head (self-bleeding), consider a flow rate yield reduced by 25-30%.*

Dosing Head

REF. CODE	TYPE	HEAD MATERIAL	VALVE BALLS	SEALS	NOTES
2	**PKT**	**PVDF**	**Ceramic**	**PTFE**	**Standard head**
3	PKT/AS	PVDF	Ceramic	PTFE	PKT head with 2-way self-bleeding valve, only for models B0220, C0512
4	MKV	Methacrylate	Ceramic	FPM	Only for models B0220, C0512
5	PKT500-1	PVDF	Ceramic	PTFE	Valves with spring for dosing viscous liquids up to 500 cP, for pumps with flow rate ≤ 5 l/h
6	PKT500-2	PVDF	Ceramic	PTFE	Valves with spring for dosing viscous liquids up to 500 cP, for pumps with flow rate ≥ 8 l/h
8	PTT	PVDF	PTFE	PTFE	
9	PTT500-1	PVDF	PTFE	PTFE	Valves with spring for dosing viscous liquids up to 500 cP, for pumps with flow rate ≤ 5 l/h
A	PTT500-2	PVDF	PTFE	PTFE	Valves with spring for dosing viscous liquids up to 500 cP, for pumps with flow rate ≥ 8 l/h
B	PKTT/AS	PVDF	Ceramic	PTFE	PKT head with "full PTFE" diaphragm and 2-way self-bleeding
C	MKV/AS	Methacrylate	Ceramic	FPM	MKV head with 3-way self-bleeding (only for model B0220)
D	MKVT/AS	Methacrylate	Ceramic	FPM	MKV head with "full PTFE" diaphragm and 3-way self-bleeding (only for model B0220)

DOSING SYSTEMS

ELECTROMAGNETIC DOSING PUMPS WITH DIAPHRAGM

NOVA NSE SERIES - BASIC LINE, WALL INSTALLATION

- Three-digit, red LED display
- Internal system for **overheating control / safety**
- **Anti-leakage system** towards the magnet
- Casing made of PP-FG with V-0 UL flame classification
- IP65-rated housing; dimensions: 226 x 115 x 175 mm (wiring excluded)
- Power supply, standard: 230 V~ (cable with plug); on request: 115 V~

- These pumps are supplied with standard accessory kit (foot filter; injection valve; hoses for suction, delivery and bleed lines), fittings kit, wall-mounting bracket, cables with M8 connector for inputs / outputs wiring

Available models

- **NSE150**   ON/OFF pump, basic model

- **NSE155**   ON/OFF pump, basic model with level input

- **NSE157**   Model with pulse command and level input

Hydraulic Characteristics

REF. CODE (FLOW RATE)	FLOW RATE (INJECTION VOLUME) @ PRESSURE						HOSE IDxOD (mm)
	0.5 bar	4 bar	8 bar	12 bar	16 bar	20 bar	
B0220	11.7 l/h (1.08 ml)	4.3 l/h (0.41 ml)	3.2 l/h (0.3 ml)	2.8 l/h (0.26 ml)	2.3 l/h (0.2 ml)	2.0 l/h (0.20 ml)	4x6
C0512	15.8 l/h (1.47 ml)	7.9 l/h (0.73 ml)	6.4 l/h (0.59 ml)	5.6 l/h (0.52 ml)	-	-	4x6
D0808	19.8 l/h (1.83 ml)	11.3 l/h (1.04 ml)	8.0 l/h 0.74 ml)	-	-	-	5x8

REF. CODE (FLOW RATE)	FLOW RATE (INJECTION VOLUME) @ PRESSURE				HOSE IDxOD (mm) (*)
	0.5 bar	2 bar	3 bar	4 bar	
E1504	26.7 l/h (2.47 ml)	18.6 l/h (1.72 ml)	17.2 l/h (1.55 ml)	15.3 l/h (1.42 ml)	5x8
F1903	26.5 l/h (2.46 ml)	20.8 l/h (1.93 ml)	18.6 l/h (1.72 ml)	-	9x12

Notes:
- *The hydraulic specifications refer to pumps with standard head, frequency 180 strokes/minute, ambient temperature 25℃, dosage of no viscous liquid (water) with a 5 m delivery hose.*
- *For pumps with AS dosing head (self-bleeding), consider a flow rate yield reduced by 25-30%.*

![STEIEL logo - yes, we watercare!]

How to build the part number for **NOVA NSE** pumps

91 ☒ 00 ☒ ☒ ☒ ☒ ☒ 0 00 A 0 ☒

Language of Instruction Manual
0 = Multilingual manual
6 = No manual
Note: Customized manual available on request

Inputs
0 = No input	(NSE150)
1 = Level	(NSE155)
2 = Level + External consent	(NSE157)

Power Supply
0S = 230 V~, 50/60 Hz, cable with Schuko plug
0E = 230 V~, 50/60 Hz, cable with UK plug (type G)
1B = 115 V~, 50/60 Hz, cable with US plug (type B)

Kit for Hydraulic Installation
1 = Standard kit
2 = Kit with PTFE hoses
3 = Standard kit + SLP5 level probe
4 = Kit with PTFE hoses + SLP5 level probe

Dosing Head
For available options, see table on next page.

Flow Rate
For available options, see table here below.

Pump Model
1 =	**NSE150**	(basic pump, no input)
2 =	**NSE155**	(basic pump with level input)
3 =	**NSE157**	(pump with pulse command and level input)

Note: Options in bold refer to the standard version of the pump.

Available Flow Rates

REF. CODE (FLOW RATE)	FLOW RATE (l/h / bar)
B0220	02 20
C0512	05 12
D0808	08 08
E1504	15 04
F1903	19 03

Dosing Head

REF. CODE	TYPE	HEAD MATERIAL	VALVE BALLS	SEALS	NOTES
2	**PKT**	**PVDF**	**Ceramic**	**PTFE**	**Standard head**
3	PKT/AS	PVDF	Ceramic	PTFE	PKT head with 2-way self-bleeding valve, only for models B0220, C0512
4	MKV	Methacrylate	Ceramic	FPM	Only for models B0220, C0512
5	PKT500-1	PVDF	Ceramic	PTFE	Valves with spring for dosing viscous liquids up to 500 cP, for pumps with flow rate ≤ 5 l/h
6	PKT500-2	PVDF	Ceramic	PTFE	Valves with spring for dosing viscous liquids up to 500 cP, for pumps with flow rate ≥ 8 l/h
8	PTT	PVDF	PTFE	PTFE	
9	PTT500-1	PVDF	PTFE	PTFE	Valves with spring for dosing viscous liquids up to 500 cP, for pumps with flow rate ≤ 5 l/h
A	PTT500-2	PVDF	PTFE	PTFE	Valves with spring for dosing viscous liquids up to 500 cP, for pumps with flow rate ≥ 8 l/h
B	PKTT/AS	PVDF	Ceramic	PTFE	PKT head with "full PTFE" diaphragm and 2-way self-bleeding
C	MKV/AS	Methacrylate	Ceramic	FPM	MKV head with 3-way self-bleeding (only for model B0220)
D	MKVT/AS	Methacrylate	Ceramic	FPM	MKV head with "full PTFE" diaphragm and 3-way self-bleeding (only for model B0220)

PROXIMA & NOVA SERIES - SPARE PARTS
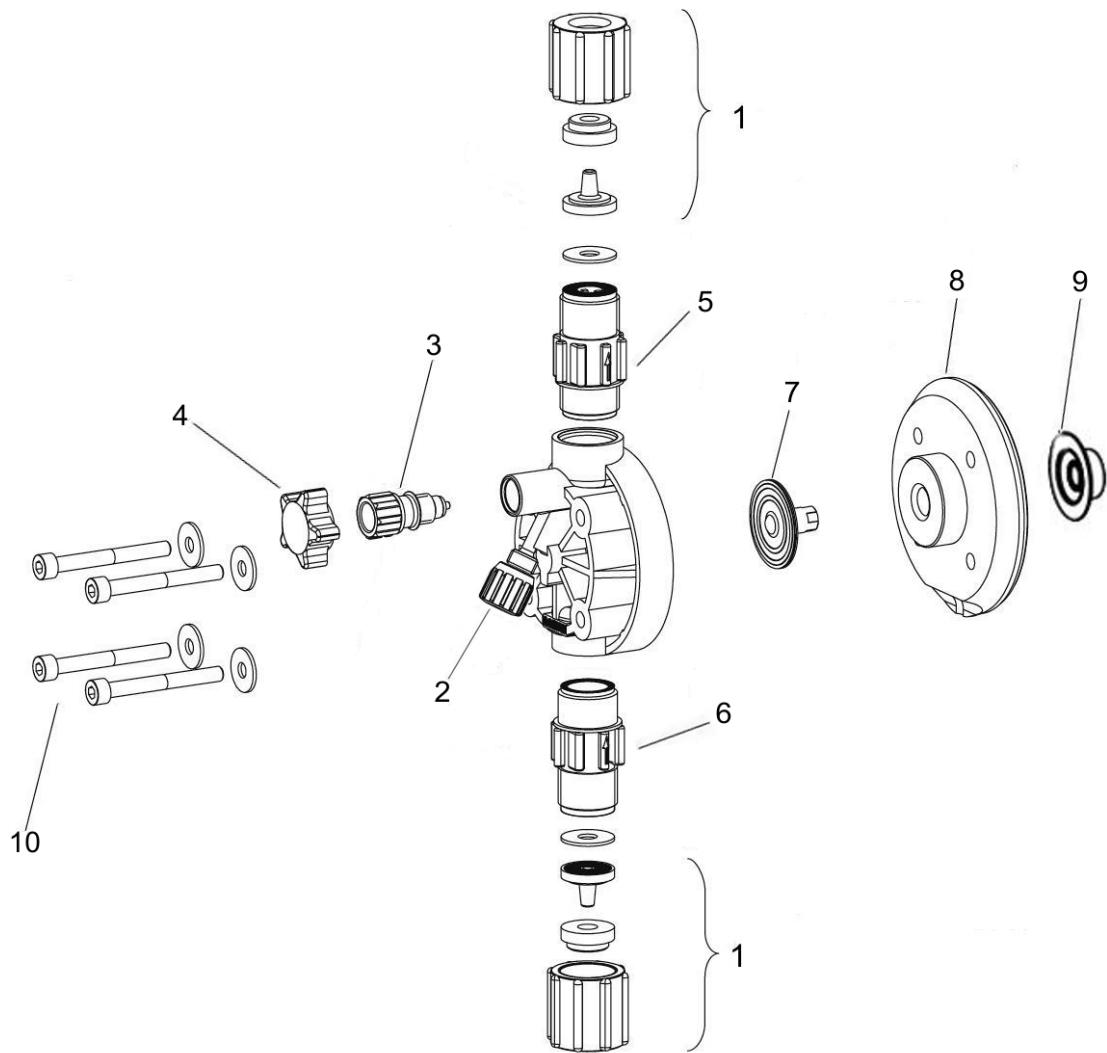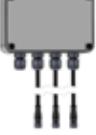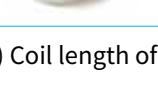
ITEM	DESCRIPTION	MODEL	PART NO.
	Complete dosing head, with ring nuts and screws	0216, 0220	9700310A/PKT
		0416, 0425	9700310H/PKT
		0510, 0512	9700310B/PKT
		0807, 0810, 0808	9700310L/PKT
		1304, 1307, 1504	9700310C/PKT
		2002, 2004, 1903	9700310D/PKT
		3202	9700310E/PKT
	PKT/AS dosing head, with ring nuts and screws	0216, 0220	9700311A/PKT
		0310	9700311F/PKT
		0510, 0512	9700311B/PKT
	Surcharge for PKT head, for dosing liquids with viscosity up to 500 mPa•s	Flow rates ≤ 5 l/h	-
		Flow rates ≥ 8 l/h	-
	Surcharge for PKT head for highly viscous liquids, up to 3000 mPa•s	Flow rates ≥ 5 l/h (no 3202)	-

REF. DRAWING	DESCRIPTION	MODEL	PART NO.
Ref. 1 (2 pc.) + 5 + 6 + 3 + 7 + 9	Kit for the complete maintenance of standard PKT dosing head	0216, 0220	97003000/PKT
		0416, 0425	97003006/PKT
		0510, 0512	97003001/PKT
		0807, 0810, 0808	97003005/PKT
		1304, 1307, 1504	97003002/PKT
		2002, 2004, 1903	97003003/PKT
		3202	97003004/PKT
	Kit for the complete maintenance of PKT-HV head for dosing highly viscous liquids	0510	9700300B/PKT
		0807, 0810	9700300L/PKT
		1304, 1307	9700300C/PKT
		2002, 2004	9700300D/PKT
	Kit for the complete maintenance of PKT/AS head with self-bleeding valve	0216, 0220	97003000/PKT-AS
		0510, 0512	97003001/PKT-AS
	Kit for the complete maintenance of PKTT/AS head with "full PTFE" diaphragm	0310	97003007/PKTT-AS
Ref. 1	Kit fittings for hose…	4x6 mm	97003090
		5x8 mm	97003093
		9x12 mm	97003096
Ref. 2	Hose-tightening ring for bleeding	-	97003183
Ref. 3	Bleeding valve	-	97003180
Ref. 4	Bleeding knob	-	97003184
Ref. 7	Multi-layer diaphragm: high quality EPDM, tissue-reinforced, steel core and PTFE coating on the side in contact with the liquid	0216, 0220	97003010
		0416, 0425	97003016
		0510, 0512	97003011
		0807, 0810, 0808	97003015
		1304, 1307, 1504	97003012
		2002, 2004, 1903	97003013
		3202	97003014
	"Full PTFE" diaphragm	0310	97003017
		0610	97003018
Ref. 7 + 8	"Full PTFE" diaphragm + plate	0310	97003197
		0610	97003198
Ref. 9	Safety membrane	-	70110063
Ref. 10	Kit of galvanized screws for dosing head, L=45 mm	0216, 0220, 0416, 0425	97003225
	Kit of galvanized screws for dosing head, L=50 mm	0510, 0512, 0807, 0810, 0808	97003226
	Kit of galvanized screws for dosing head, L=55 mm	1304, 1307, 1504, 2002, 2004, 1903	97003227
	Kit of galvanized screws for dosing head, L=40 mm	3202	97003228

PROXIMA & NOVA SERIES - ACCESSORIES AND SPARE PARTS

ITEM	DESCRIPTION	MODEL	PART NO.
	Flat gaskets for fittings of PROXIMA / NOVA pumps, kit 10 pc.	FPM	9700315V
		EPDM	9700315E
		PTFE	9700315T
	PKT foot valve with filter, fitting for hose...	4x6 mm	97003020/PKT
		5x8 mm	97003021/PKT
		9x12 mm	97003022/PKT
	PKT injection valve with spring loaded at 0.5 bar, fitting for hose...	4x6 mm	97003030/PKT
		5x8 mm	97003031/PKT
		9x12 mm	97003032/PKT
	PKT injection valve with Hastelloy C4 spring loaded at 1 bar, fitting for hose...	4x6 mm	97003040/PKT
		5x8 mm	97003041/PKT
		9x12 mm	97003042/PKT
	PKT injection valve with Hastelloy C4 spring loaded at 2 bar, fitting for hose...	4x6 mm	97003043/PKT
		5x8 mm	97003044/PKT
		9x12 mm	97003045/PKT
	PKT injection valve with FEP coated Hastelloy C4 spring loaded at 1 bar, fitting for hose...	4x6 mm	97003046/PKT
		5x8 mm	97003047/PKT
		9x12 mm	97003048/PKT
	PKT injection valve without spring, fitting for hose...	4x6 mm	97003240/PKT
	Steel injection valve for high temperature (max 200 °C), max 30 bar, with FPM seals, fitting for hose	4x6 mm	97003250
	Standard kit: PVC Crystal hose (2 m), PE hose (5 m), PKT foot valve, PKT injection valve	4x6 mm	97003200/PKT
		5x8 mm	97003201/PKT
		9x12 mm	97003202/PKT
	Kit PTFE: PTFE hose (10 m), PKT foot valve, PKT injection valve	4x6 mm	97003206/PKT
		5x8 mm	97003207/PKT
		9x12 mm	97003208/PKT
	Kit LEGION: PTFE hose (10 m), PKT injection valve without spring	4x6 mm	97003203/PKT
Kit 16x24	Injection valve for highly viscous liquids and reinforced PVC hose 16x24 mm (7 m)	PVC-HV	97003209
		PKT-HV	97003209/PKT
	Injection valve 16-3/8" DN10 for highly viscous liquids, fitting for hose 16x24 mm	PVC-HV	97003049
		PKT-HV	97003049/PKT
	Reinforced PVC hose 16x24 mm, max 15 bar @ 20 °C, 50 m coil (price per meter)	Testate HV	36504108
	Level probe with 2 m PUR cable and M8 plastic connector for NOVA / PROXIMA pumps	SLP-C	97009032

ITEM	DESCRIPTION	MODEL	PART NO.
	PUR cable with M8 F plastic connector, L = 2 m	CAV2M8D/P	80099262
	PVC cable with M8 F plastic connector, L = 5 m	CAV5M8D/P	80099194
	PVC cable with double M8 F plastic connector, for pulse repetition, L = 2 m	CAV2M8-M8/P	80099252
	PVC cable with double M8 F plastic connector, for pulse repetition, L = 50 cm	CAV0M8-M8/P	80099250
	M8 female plastic connector	CON16/FP	51300545
	Anti-siphon, short dosing extension, PKT with Hastelloy C spring pre-loaded @1 bar, ½" connection; pressure max 16 bar @25°C. Fitting for hose...	4x6 mm	
		5x8 mm	
		9x12 mm	
	Surcharge for version with FEP coated spring	-	-
	PVC-U adapter for connection to hard PVC pipes. Fitting for hose...	4x6 mm	97003214
		5x8 mm	97003215
		9x12 mm	97003216
	Junction box for pulse signal, for distances up to 50 m, to be used with homogeneous STEIEL pumps	-	80620005
	Signal splitter	2 channels	80620001
		4 channels	80620002
	Signal splitter with 230 V power supply	2 channels	80620011
		4 channels	80620012
	Graduated plastic cylinder (500 ml) for pump calibration	-	35999120
	PVC Crystal hose, 100 m coil, price per meter	4x6 mm	36502103
		5x8 mm	36502106
	PVC Crystal hose, 50 m coil, price per meter	9x12 mm	36502115
	PE hose, 100 m coil, price per meter	4x6 mm	36501003
		5x8 mm	36501006
	PE hose, 50 m coil, price per meter	9x12 mm	36501015
	PTFE hose, 100 m coil, price per meter (*)	4x6 mm	36506003
	PTFE hose, 50 m coil, price per meter (*)	5x8 mm	36506006
		9x12 mm	36506015

(*) Coil length of PTFE hoses may differ from the standard one. Ask for confirm upon order.

MOUNTING BRACKETS FOR PUMPS

- Exclusive bracket with **rotating support**, designed and patented by STEIEL
- Wall- mounting of PROXIMA PSP pumps
- **Rotation up to 360°** for easy operations on the pump dosing head
- Slots for suction and drain **tubes housing**
- Supplied complete with screws and dowels for wall mounting, screws and nuts for fixing pump on bracket
- Also available with kit for the foot mounting on tank of wall installation STEIEL pumps

PATENTED
INTELLECTUAL PROPERTY
n. 102.019.000.012.612

ITEM	DESCRIPTION	MODEL	PART NO.
	Bracket with rotating support for wall installation of PROXIMA PSP pumps	SMP18	97000504
	Bracket with screws for foot mounting of NOVA series pumps	SMP19	97000505
	Fixed bracket for wall installation of PROXIMA PSP pumps with HV head	SMP17	97000502
	Bracket with screws for wall installation of NOVA series pumps	SMP-NOVA	97000506

DOSING SYSTEMS
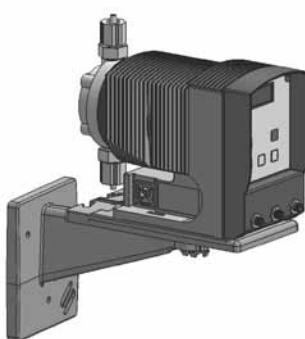
Normal mounting
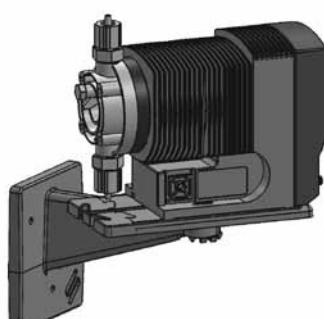
Rotation 45°
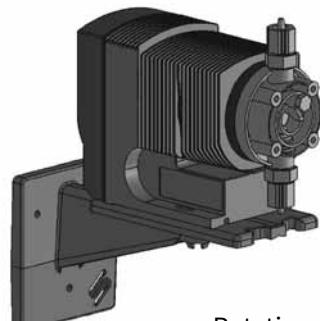
Tank installation of a wall-mounting pump (NOVA series)

Slots for suction and drain tubes housing

Rotation 180°
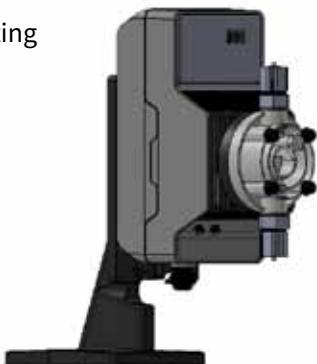
MULTIFUNCTIONAL VALVES

- **Protect the dosing line from over-pressures** in case of interruptions along the line
- **Prevent the siphon effect** from the suction tank
- **Help the pump priming** in case of start in the presence of back pressure
- **Useful to vent the dosing line** during maintenance
- Working temperature: -10 ... +45 °C
- Counterpressure max 1.5 bar
- Supplied with double kit of seals, FPM and EPDM
- Hydraulic connections for direct installation on the delivery valve of PROXIMA and NOVA pumps
- Assembly with special adapter in case of dosing head with self-bleeding option

DESCRIPTION	PART NO.
MF valve, purge fitting for hose 4x6, opening pressure 16 bar; to be used with PROXIMA PSP (models 0216, 0416, 0510, 0516, 0807, 0810, 1304, 2002) and NOVA pumps	97003910
MF valve, purge fitting for hose 4x6, opening pressure 10 bar; to be used with PROXIMA PSP (models 0216, 0416, 0510, 0516, 0807, 0810, 1304, 2002) and NOVA pumps	97003911
MF valve, purge fitting for hose 4x6, opening pressure 6 bar; to be used with PROXIMA PSP (models 0216, 0416, 0510, 0516, 0807, 0810, 1304, 2002) and NOVA pumps	97003912
MF valve, purge fitting for hose 9x12, opening pressure 10 bar; to be used with PROXIMA PSP pumps (models 0425, 1307, 2004, 3202)	97003921
MF valve, purge fitting for hose 9x12, opening pressure 6 bar; to be used with PROXIMA PSP pumps (models 0425, 1307, 2004, 3202)	97003922
Expansion chamber, white PVC, for installation of a multifunctional valve on a PKT/AS dosing head of PSP pumps with 2-way self-bleeding option	70100341

Assembly of the multifunctional valve directly on the pump delivery valve, on a standard dosing head.

Assembly of the multifunctional valve on PKT/AS dosing head, with special accessory.

"FLOW CONTROL" SENSOR

- **New flow sensor, designed and patented by STEIEL**
- **Accurate and reliable monitoring** of the injection liquid flow
- Supplied assembled, tested and complete with cable with M8 connector
- Direct mounting on delivery valve or with proper accessory in case of dosing head with self-bleeding option
- Connection to the FLOW (injection flow) input of the pump (contact closed for normal operation; contact open upon fault / alarm)
- **Working conditions: temperature 1...55 °C, pressure 0.5...25 bar, density of the dosed liquid max 1.25 g/cm³**
- Three models available, depending on the requested flow rate; easily identifiable thanks to the colour of the internal float

Warning! To choose the correct sensor, it is necessary to know the flow rate at the sensor inlet. Please refer to the table on the following page.

It is recommended to run pumps with standard PKT head with a minimum stroke of 50%. In the case of PKT/AS self-bleeding head, the minimum recommended stroke is 60%.

Note: The methacrylate body is not compatible with peracetic acid.

DESCRIPTION	SIZE	EFFECTIVE FLOW RATE	DOSING HEAD	PART NO.
Flow Control sensor for PROXIMA and NOVA pumps, with 50 cm cable and M8 connector	A	0.8 ... 2 l/h	PKT	948A126211
			PKT/AS (*)	948A133211
	B	2 ... 7 l/h	PKT	948B126211
	C	7 ... 20 l/h	PKT	948C126211
	D	1 ... 6 l/h	PKT (**)	948D226211
Spare weight for "Flow Control", size A (magenta)				94800003
Spare weight for "Flow Control", size B (green)				94800001
Spare weight for "Flow Control", size C (grey)				94800002

(*) Recommended PKTT/AS version.
(**) Model suitable for pumps which dose dense liquids, such as the concentrated corrosion inhibitor.

Direct assembly on the delivery valve of standard dosing head.

Assembly on PKT/AS head, with aluminium support.

Guide to the choice of the "Flow Control" sensor according to the pump and its working conditions (back pressure and stroke adjustment).
Dosing of liquids with max density 1.25 g / cm^3 and standard head.

The colours identify the size of the sensor, as shown in the legend

Size	Flow rate (l/h)
A (purple)	0.8 … 2
B (green)	2 … 7
C (grey)	7 … 20

Legend for cells below: **A** = purple, **B** = green, **C** = grey, blank = white (no selection).

P (bar)	0.5				2				4				6				8			
Stroke %	30	50	70	100	30	50	70	100	30	50	70	100	30	50	70	100	30	50	70	100
PSP 0216	A	B	B	B	A	A	B	B	A	A	A	B	A	A	A	B	A	A	A	B
PSP 0416	B	B	B	C	A	B	B	B	A	A	B	B	A	A	B	B	A	A	B	B
PSP 0425	B	B	C	C	B	B	B	C	A	B	B	B	A	A	B	B	A	A	B	B
PSP 0510	B	B	C	C	B	B	B	B	A	B	B	B	A	A	B	B	A	A	B	B
PSP 0516	B	B	C	C	B	B	B	C	A	B	B	B	A	B	B	B	A	B	B	B
PSP 0807	B	C	C	C	B	B	C	C	B	B	C	C	B	B	C	C	B	B	B	B
PSP 0810	B	C	C	C	B	B	C	C	B	B	C	C	B	B	B	C	B	B	B	C
PSP 1304	B	C	C		B	B	C	C	B	B	C	C								
PSP 1307	C	C			B	C	C	C	B	B	C	C	B	B	C	C	B	B	B	C
PSP 2002	C	C			B	C	C	C												
PSP 2004	C	C			B	C	C	C	B	C	C	C								
PSP 3202	C	C			B	C	C													

P (bar)	10				12				14				16				18			
Stroke %	30	50	70	100	30	50	70	100	30	50	70	100	30	50	70	100	30	50	70	100
PSP 0216	A	A	A	A	A	A	A	A	A	A	A	A		A	A	A				
PSP 0416	A	A	B	B	A	A	B	B	A	A	B	B	A	A	A	B				
PSP 0425	A	B	B	B	A	B	B	B	A	B	B	B	A	A	B	B	A	A	B	B
PSP 0510	A	B	B	B																
PSP 0516	A	B	B	B	A	B	B	B	A	B	B	B	A	B	B	B				
PSP 0807																				
PSP 0810	B	B	B	C																
PSP 1304																				
PSP 1307																				
PSP 2002																				
PSP 2004																				
PSP 3202																				

EF150 / EF155 / EF160 SERIES - ACCESSORIES AND SPARE PARTS

ITEM	DESCRIPTION	MODEL	PART NO.
	Spare dosing head, SGV	0212	97002100/SGV
		0506 / 1002	97002101/SGV
	Spare dosing head, SGE	0212	97002100/SGE
		0506 / 1002	97002101/SGE
	Spare dosing head, PGV	0212	97002100/PGV
		0506 / 1002	97002101/PGV
	Spare dosing head, PGE	0212	97002100/PGE
		0506 / 1002	97002101/PGE
	Dosing head, PGV, with self-bleeding valve	0506 / 1002	97002106/PGV
	Dosing head, PGE, with self-bleeding valve	0506 / 1002	97002106/PGE
	Kit of suction and delivery valves	SGV	97002000/SGV
		SGE	97002000/SGE
	Kit of suction and delivery valves	PGV	97002000/PGV
		PGE	97002000/PGE
	Kit fittings (10 pc.)	PVDF	97002003
	Kit valves, suction / delivery / purge, and O-ring for dosing head	SGV	97002001/SGV
		SGE	97002001/SGE
	Kit valves, suction / delivery / purge, and O-ring for dosing head	PGV	97002001/PGV
		PGE	97002001/PGE
	Maintenance kit: flange, diaphragm and FPM O-ring for dosing head	0212	97002020
		0506 / 1002	97002021
	Maintenance kit: flange, diaphragm and EPDM O-ring for dosing head	0212	97002040
		0506 / 1002	97002041
	Kit purge PP, with FPM seals	-	97002026
	Kit purge PP, with EPDM seals	-	97002046
	Kit purge PVDF with FPM seals	-	97002025
	Kit purge PVDF, with EPDM seals	-	97002045
	Standard accessory kit: PP foot filter, PP injection valve, PVC Crystal hose (4x6 mm, 2+2 m), PE hose (4x6 mm, 2 m)	SGV, 4x6 mm	97002010/SGV
		SGE, 4x6 mm	97002010/SGE
	Standard accessory kit: PVDF foot filter, PVDF injection valve, PVC Crystal hose (4x6 mm, 2 m), PE hose (4x6 mm, 5 m)	PKT, 4x6 mm	97003200/PKT

ITEM	DESCRIPTION	MODEL	PART NO.
	Foot valve with filter	PP/FPM	97002013/SGV
		PP/EPDM	97002013/SGE
		PVDF/PTFE	97003020/PKT
	Injection valve	PP/FPM	97002012/SGV
		PP/EPDM	97002012/SGE
		PVDF/PTFE	97003030/PKT
	Spare magnet	0212	97002130
		0506	97002131
		1002	97002132
	Bracket with screws for wall installation of pumps with EF150 / EF155 / EF160 housing	-	97002140
	Bracket with screws for foot mounting of EF150, EF155, EF160 pumps	SMP19	97000505
	Level probe with 2 m PUR cable and connector for pumps EF110, EF125, EF145, EF150, EF155, and "Compact" units	SLP-B	97009031
	Level probe with 2 m PUR cable and M8 plastic connector for EF160 EVO pumps	SLP-C	97009032

EF150 Series

EF155 Series

EF160 EVO Series

DOSING ACCESSORIES
SUCTION LANCES
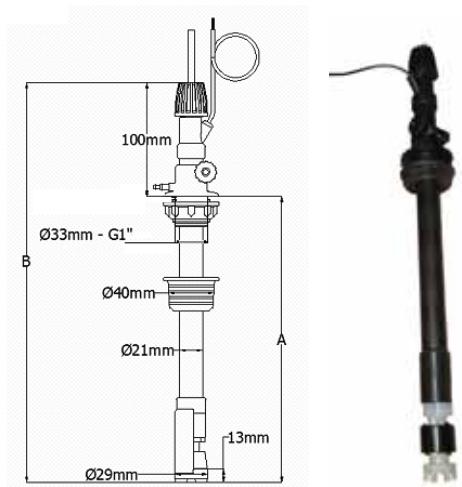
- **Adjustable length** suction lances
- Suitable to dosing stations with tanks up to 1000 litres
- **Flow rate max 100 L/h**
- Mounting with 1" threaded ring or sleeve
- **Built-in check ball valve**
- PP-PVC-NBR body, FPM (standard) or EPDM seals
- **Level probe with totally protected cable** and soldering connector
- Ring colour: black (standard), blue, red, yellow
- Connection for hose 4x6 (standard), 5x8, 9x12 mm
- Working temperature max 50 °C

Standard version lances

ITEM	LENGTH (mm)		TANK
	TOTAL (B)	ADJUSTABLE (A)	
Suction lance with FPM seals, Pyrex ball valve, connection for hose 4x6 mm and black threaded ring	490	115...390	25 / 50 L
	700	115...600	100 L
	940	115...840	150 / 300 L
	1420	115...1320	500 / 1000 L

Optional characteristics

DESCRIPTION
Lance with blue, red or yellow ring
Lance with connection for hose 5x8 / 9x12 mm
Lance with Pyrex ball and EPDM seals
Lance with ceramic ball and FPM seals
Lance with ceramic ball and EPDM seals
Lance with PTFE ball and FPM seals
Lance with PTFE ball and EPDM seals

How to build the part number for suction lances

949 ☒ ☒ ☒ ☒ ☒

Total Length (Tank)
1 = 490 mm (25 / 50 L)
2 = 700 mm (100 L)
3 = 940 mm (150 / 300 L)
4 = 1420 mm (500 / 1000 L)

Materials (Ball / Seals)
0 = Pyrex / FPM
1 = Pyrex / EPDM
4 = ceramica / FPM
5 = ceramica / EPDM
6 = PTFE / FPM
7 = PTFE / EPDM

Connection for Hose
1 = 4x6 mm
2 = 5x8 mm
3 = 9x12 mm

Threaded Ring Colour
0 = Blue
2 = Black
4 = Red
5 = Yellow

Connector of Level Probe
1 = 4-pin, 90°   EF110 / EF150 / EF155 pumps and "Compact" systems
2 = no connector   Wiring on terminal block
5 = plastic M8   NOVA / PROXIMA / EF160 EVO pumps and EF315 unit

Note: Options in bold refer to the standard version of the suction lances.

Spare parts for suction lances

ITEM	DESCRIPTION	PART NO.
	Spare black threaded ring	94902005
	Spare blue threaded ring	94900005
	Spare red threaded ring	94904005
	Spare yellow threaded ring	94905005
	Kit hose-holder + locking ring, for hose 4x6 mm	94902108
	Kit hose-holder + locking ring, for hose 5x8 mm	94906218
	Kit hose-holder + locking ring, for hose 9x12 mm	94906318

DOSING ACCESSORIES
PROFESSIONAL ELECTROMECHANICAL STIRRERS

- Series of **electromechanical** stirrers
- **Standard motors: three-phase 230/400 V~ (Δ/Y)** 50 Hz, IEC, with IP55 aluminium casing and C2 painting
- On request, different voltages, special motors (e.g. ATEX, tropicalized, etc.) and different painting are available
- Worm gear box
- Various rod lengths available, for tanks from 100 to 1000 L

- Removable impeller with 3 or 4 blades inclined at 45°, or marine propeller

Professional electromechanical fast stirrers - PMF Series
- Speed: 1400 rpm @ 50 Hz
- Standard materials: shaft and propeller in AISI316L

ITEM	SHAFT LENGTH (mm)	TANK (L)	MARINE PROPELLER Ø	MOTOR POWER (kW)	PART NO.
PMF-06TA	600	100	90	0.18	892HAS00206
PMF-08TA	800	150	110	0.18	892HAS00308
PMF-09TA	900	300	110	0.25	892HAS00409
PMF-13TA	1150	500	130	0.37	892HAS00711
PMF-14TA	1150	1000	140	0.55	892HAS00811

Options with surcharge

DESCRIPTION
Wet parts in PP (shaft and marine propeller)
Models with single-phase motor, 230 V~ 50 Hz, IEC, IP55 casing
Models with three-phase motor, 230/460 V~ 60 Hz, IEC NEMA electric, IP55 casing
Models with single-phase motor, 110 V~ 60 Hz, IEC NEMA electric, IP55 casing

Professional electromechanical slow stirrers - PMS Series

- Speed: 140 / 200 rpm @ 50 Hz
- Standard materials: shaft and impeller in AISI316L

ITEM	SHAFT LENGTH (mm)	TANK (L)	IMPELLER		MOTOR POWER (kW)	PART NO.
			TYPE	(Ø mm)		
PMS-06TA	600	100	Marine propeller	140	0.12	892MAS00006
PMS-08TA	800	150	Marine propeller	140	0.12	892MAS00108
PMS-09TA	900	300	3 blades	200	0.18	892KAS00409
PMS-13TA	1150	500	3 blades	200	0.25	892KAS00611
PMS-14TA	1150	1000	4 blades	200	0.37	892JAS00711

Options with surcharge

DESCRIPTION
Wet parts in PP (shaft and marine propeller)
PP coating of wet parts (shaft and 3 or 4-bladed impeller)
Models with single-phase motor, 230 V~ 50 Hz, IEC, IP55 casing
Models with three-phase motor, 230/460 V~ 60 Hz, IEC NEMA electric, IP55 casing
Models with single-phase motor, 110 V~ 60 Hz, IEC NEMA electric, IP55 casing

MANUAL STIRRERS - AM Series

- Shaft and impeller **in PVC**

ITEM		SHAFT LENGTH (mm)	TANK (L)	PART NO.
	AM-0	400	50	89000059
	AM-1	485	100-150	89000060
	AM-2	735	300	89000063
	AM-3	950	500-1000	89000064

Note: Supplied with mounting plate, nylon screws and nuts.

TANKS AND ACCESSORIES

- Series of blue semi-transparent polyethylene (LLDPE) tanks
- Black models are available for photosensitive products
- Provision for **drain outlet** (1/2" for models up to 150 L; 1" for tanks from 300 to 1000 L)
- **Visual indication of liquid level**
- Filling hole with screw cap
- Series of safety containers (LLDPE)
- Assembled, complete dosing stations

TANKS

ITEM		VOLUME	B (Ø)	H	CAP (Ø)	PART NO.
	S50	50 L	41 cm	46.5 cm	14 cm	36000003
	S50 black	50 L	41 cm	46.5 cm	14 cm	
	S100	100 L	47 cm	65 cm	14 cm	36000004
	S100 black	100 L	47 cm	65 cm	14 cm	
	S150	150 L	49 cm	86.5 cm	14 cm	36000005
	S300	300 L	67 cm	96.5 cm	21.5 cm	36000006
	S500	500 L	76 cm	119.5 cm	21.5 cm	36000007
	S1000	1000 L	108.5 cm	122.5 cm	31.5 cm	36000008

SAFETY CONTAINERS

ITEM		TANK	A (Ø)	B (Ø)	H	PART NO.
	CAM50	S50	47 cm	43 cm	45 cm	36000009
	CAM100	S100	55 cm	50.5 cm	61 cm	36000010
	CAM150	S150	59.5 cm	54.5 cm	87.5 cm	36000011
	CAM300	S300	78 cm	71.5 cm	96 cm	36000013
	CAM500	S500	84.5 cm	81 cm	110.5 cm	36000015
	CAM1000	S1000	116.5 cm	123.5 cm	125.5 cm	36000016

ACCESSORIES

ITEM	DESCRIPTION		PART NO.
	Drain kit, 1/2" PVC-U/EPDM, for 50 / 100 / 150 L tank		89000085
	Drain kit, 1" PVC-U/EPDM, for 300 / 500 / 1000 L tank		89000086
	Vent kit for tanks		89000087
	PVC support with screws and fittings for	S50 tank	89000074
		S100 / S150 tanks	89000075
		S300 / S500 tanks	89000076
		S1000 tank	89000077
	PVC-U Calm tube, supplied with foot filter and fitting for pump hose 4x6, 5x8 or 9x12 mm		

DOSING STATIONS

How to build a tailor-made dosing station

Dosing Pump(s)
Quantity (0, 1, 2, 3)
Type (PSP, NOVA, ST)
Flow rate
Dosing head/seals
Accessories (Flow Control, Multifunctional valve)

Stirrer
Electromechanical, slow
Electromechanical, fast
Manual

Accessories
Suction lance
Calm tube
Level sensor

Tank
Volume (50 ... 1000 L)
Safety container

DOSING SKID

STEIEL dosing skids made of heat-sealed polypropylene sheet, with frontal protection, are available in different sizes, even with compartment for chemicals tanks housing. Depending on pumps (type and quantity) and accessories required, the assembly is done in a skid of suitable size.
All models are equipped with an external panel with support terminal block and On/Off selector.

Accessories
Graduated cylinder
Pulsation dampner
Manometers

Piping Material
PVC-U (standard)
PVC-C
PP
PVDF

Dosing Pump(s)
Quantity (1 or 2)
Type (PSP, NOVA, ST)
Flow rate
Dosing head/seals
Accessories (Flow Control, Multifunctional valve)

Fittings
Bonded unions (standard)
Threaded

Additional lines
Over dosage line
Washing line

DOSING ACCESSORIES
PULSE-EMITTING WATER METERS

- **Full range of volumetric water meter with reed standard pulse emitting device, MID001 approved according to the European Directive 2004/22/CE (modules B+D)**
- Certification MI001 for use with sanitary water (no for HR models)
- Accuracy class 2, direct reading with 5 counter rollers, dry dial, magnetic transmission, different pulse rate options (litres/pulse), reed emitting device with 2 meter standard cable
- **Product code to be completed with the desired pulse rate**

Turbine models for cold water - CRU (single-jet) / CRM (multi-jet) Series
- Temperature **max 30 °C**
- Pressure max 16 bar

ITEM		CONNECTIONS		LENGTH	PART NO.
CRU-012	1/2"	DN15		110 mm	9400000x
CRM-012					9400010x
CRU-034	3/4"	DN20		130 mm	9400001x
CRM-034					9400011x
CRM-100	1"	DN25		260 mm	9400012x
CRM-114	1.1/4"	DN32		260 mm	9400013x
CRM-112	1.1/2"	DN40		300 mm	9400014x
CRM-200	2"	DN50		300 mm	9400015x

Turbine models for hot water - Serie CRM-HT (multi-jet)
- Temperature **max 90 °C**
- Pressure max 16 bar

ITEM		CONNECTIONS	LENGTH	PART NO.
CRM-012HT	1/2"	DN15	110 mm	9400110x
CRM-034HT	3/4"	DN20	130 mm	9400111x
CRM-100HT	1"	DN25	260 mm	9400112x
CRM-114HT	1.1/4"	DN32	260 mm	9400113x
CRM-112HT	1.1/2"	DN40	300 mm	9400114x
CRM-200HT	2"	DN50	300 mm	9400115x

Turbine models with housing treated for use with aggressive liquids and special waters (demi, industrial wastewater, etc.) - CRM-HR (multi-jet) Series

- Temperature **max 90 °C**
- Pressure max 16 bar

ITEM		CONNECTIONS		LENGTH	PART NO.
	CRM-012HR	1/2"	DN15	110 mm	9400310x
	CRM-034HR	3/4"	DN20	130 mm	9400311x
	CRM-100HR	1"	DN25	260 mm	9400312x
	CRM-114HR	1.1/4"	DN32	260 mm	9400313x
	CRM-112HR	1.1/2"	DN40	300 mm	9400314x
	CRM-200HR	2"	DN50	300 mm	9400315x

For each model of turbine water meter, you can choose different pulse emitting rate, by completing the product part number as follows:

X	K REED (L/PULSE)	PULSE FREQUENCY	CONNECTIONS CRU / CRM
0	K0.25	4 pulses / 1 L	DN15 ... DN32
1	K1	1 pulse / 1 L	All models
2	K2.5	4 pulses / 10 L	All models
3	K10	1 pulse / 10 L	All models
4	K25	4 pulses / 100 L	All models
5	K100	1 pulse / 100 L	All models
6	K250	4 pulses / 1000 L	All models
7	K1000	1 pulse / 1000 L	All models

Accessories

ITEM	DESCRIPTION	PART NO.
CAV-REED 2	Reed cable for CRU / CRM series, L = 2 m	94002000
CAV-REED 3	Reed cable for CRU / CRM series, L = 3 m	94002001

DOSING ACCESSORIES
PULSE-EMITTING WATER METERS

- **Full range of volumetric water meter with reed standard pulse emitting device, MID001 approved according to the European Directive 2004/22/CE (modules B+D)**
- Certification MI001 for use with sanitary water
- Accuracy class 2, direct reading with 5 counter rollers, dry dial, magnetic transmission, different pulse rate options (litres/pulse), reed emitting device with 2 meter standard cable
- **Product code to be completed with the desired pulse rate**

Flanged Woltmann models for cold water - CW Series
- Temperature **max 50 °C**
- Pressure max 16 bar

ITEM		CONNECTIONS		LENGTH	PART NO.
	CW-05C	2"	DN50	200 mm	9401005x
	CW-06C	2.1/2"	DN65	200 mm	9401006x
	CW-08C	3"	DN80	225 mm	9401008x
	CW-10C	4"	DN100	250 mm	9401010x
	CW-12C	5"	DN125	250 mm	9401012x
	CW-15C	6"	DN150	300 mm	9401015x
	CW-20C	8"	DN200	350 mm	9401020x
	CW-25C	10"	DN250	450 mm	9401025x

Flanged Woltmann models for hot water - CW-HT Series
- Temperature **max 90 °C**
- Pressure max 16 bar

ITEM		CONNECTIONS		LENGTH	PART NO.
	CW-05HT	2"	DN50	200 mm	9401105x
	CW-06HT	2.1/2"	DN65	200 mm	9401106x
	CW-08HT	3"	DN80	225 mm	9401108x
	CW-10HT	4"	DN100	250 mm	9401110x
	CW-12HT	5"	DN125	250 mm	9401112x
	CW-15HT	6"	DN150	300 mm	9401115x

For each model of Woltmann water meter, you can choose different pulse emitting rate, by completing the product part number as follows:

X	K REED (L/PULSE)	PULSE FREQUENCY	CONNECTIONS CW
4	K25 - K250	4 pulses / 100 L - 1000 L	DN50 ... DN200
5	K100 - K1000	1 pulse / 100 L - 1000 L	DN50 ... DN200
7	K1000 - K10000	1 pulse / 1000 L - 10000 L	DN250

DIAPHRAGM MOTOR DOSING PUMPS
ST and ST DUPLEX SERIES

- Electronic-free, motor pumps, with **mechanical adjustment of stroke length**
- **Rigid, multi-layer membrane;** parts in contact with the liquid are in PTFE to ensure the maximum chemical compatibility
- Simple use, basic maintenance
- Safe operation, without external moving parts
- **Flow rates from 4 up to 2000 l/h** at the maximum counterpressure
- **Pressure up to 14 bar**, depending on model
- Manual micrometric adjustment of stroke (injection volume)
- Techno-polymer pump housing (models with 80 and 110 mm diaphragm) or aluminium (pumps with 140 and 170 mm diaphragm)
- Mechanical parts in oil bath
- **Available standard heads: PP, PVDF and AISI316L** (other materials upon request)
- Standard motor: asynchronous, three-phase, 230-380V 50Hz / 280-480V 60Hz (optional single-phase)

STANDARD VERSIONS, MATERIALS OF WET PARTS

VERSION	DOSING HEAD	VALVE BALL	CAGE	VALVE SEAT	CASING	DIAPHRAGM	SEALS	INTENDED USE
B	PP*	Pyrex	PP	PVC	PP*	PTFE	FPM	Process and wastewater treatment (sulphuric acid, aluminium chloride, hypochlorite), fertigation, pulp & paper industry, acid or neutral products
F	PVDF	PTFE	PVDF	PVDF	PVDF	PTFE	PTFE	Process and wastewater treatment (fluoride, chromium), strong acids and alkalis
A	AISI316L	AISI316L	PP	AISI316L	AISI316L	PTFE	FPM	Process and wastewater treatment (peroxides, poly-electrolytes, nitric acid), food and beverage industry, alkaline or neutral chemicals

* Glass-reinforced polypropylene

SPECIAL VERSIONS, MATERIALS OF WET PARTS

VERSION	DOSING HEAD	VALVE BALL	CAGE	VALVE SEAT	CASING	DIAPHRAGM	SEALS	INTENDED USE
B33	PP*	AISI316L	PP	AISI316L	PP*	PTFE	FPM	Poly-electrolyte, sodium hydroxide, ferrous sulphate, ferric sulphate up to 10%, lime milk, etc.
B1	PP*	Ceramic	PP	PVC	PP*	PTFE	FPM	
B2	PP*	PTFE	PP	PVC	PP*	PTFE	FPM	Hydrochloric acid
B56	PP*	Hastelloy	PP	Incoloy	PP*	PTFE	FPM	Sulphuric acid, conc. 96-98%
F5	PVDF	Hastelloy	PVDF	PVDF	PVDF	PTFE	PTFE	Diluted sulphuric acid
A331	AISI316L	AISI316L	PP	AISI316L	AISI316L	PTFE	PTFE	Peroxides, acetic acid, food industry

Glass-reinforced polypropylene

ST Series with diaphragm Ø 80 mm, hydraulic connections 1/4" GF

MODEL	FLOW RATE (l/h)		P MAX. (bar)	STROKES/MIN.		STROKE (mm)	MOTOR (kW)	VALVES (Ø mm)
	50Hz	60Hz		50Hz	60Hz			
ST4.14	4	4.8	14*	34	41	2	0.18	5
ST9.14	9	10.8	14*	71	85	2	0.18	5
ST15.14	14.5	17.4	14*	106	127	2	0.18	5
ST19.10	19	22.8	10**	126	152	2	0.18	5
ST22.10	22	-	10**	150	-	2	0.18	5
ST7.14	7	8.4	14*	34	41	3	0.18	5
ST18.14	18	21.6	14*	71	85	3	0.18	5
ST26.14	26	31.2	14*	106	127	3	0.18	5
ST34.10	34	40.8	10**	126	152	3	0.18	5
ST39.10	39	-	10**	150	-	3	0.18	5
ST11.14	11	13.2	14*	34	41	4	0.18	5
ST27.14	27	32.4	14*	71	85	4	0.18	5
ST41.14	41	49.2	14*	106	127	4	0.18	5
ST49.10	49	58.8	10**	126	152	4	0.18	5
ST54.10	54	-	10**	150	-	4	0.18	5

With 0.37 kW motor, the pump can operate up to 16 bar.
**With 0.37 kW motor, the pump can operate up to 12 bar.*

ST Series with diaphragm Ø 110 mm, hydraulic connections 3/8" GF

MODEL	FLOW RATE (l/h)		P MAX. (bar)	STROKES/MIN.		STROKE (mm)	MOTOR (kW)	VALVES (Ø mm)
	50Hz	60Hz		50Hz	60Hz			
ST14.08	14	16	8*	34	41	2	0.18	8.5
ST30.08	30	36	8*	71	85	2	0.18	8.5
ST40.08	40	48	8*	106	127	2	0.18	8.5
ST51.08	51	61	8**	126	152	2	0.18	8.5
ST65.08	65	-	8**	150	-	2	0.18	8.5
ST35.08	35	42	8*	34	41	4	0.18	8.5
ST75.08	75	90	8*	71	85	4	0.18	8.5
ST105.08	105	126	8*	106	127	4	0.18	8.5
ST133.08	133	159	8**	126	152	4	0.18	8.5
ST150.08	150	-	8**	150	-	4	0.18	8.5
ST50.08	50	60	8*	34	41	6	0.18	8.5
ST110.08	110	132	8*	71	85	6	0.18	8.5
ST170.08	170	204	8*	106	127	6	0.18	8.5
ST207.08	207	248	8**	126	152	6	0.18	8.5
ST250.08	250	-	8**	150	-	6	0.18	8.5

* *With 0.37 kW motor, the pump can operate up to 10 bar.*
** *With 0.37 kW motor and aluminium casing, the pump can operate up to 10 bar.*

ST Series with diaphragm Ø 140 mm, hydraulic connections 3/4" GF

MODEL	FLOW RATE (l/h)		P MAX. (bar)	STROKES/MIN.		STROKE (mm)	MOTOR (kW)	VALVES (Ø mm)
	50Hz	60Hz		50Hz	60Hz			
ST80.08	80	96	8	34	41	6	0.37	17
ST162.08	162	194.4	8	71	85	6	0.37	17
ST252.08	252	302.4	8	106	127	6	0.37	17
ST305.08	305	366	8	126	152	6	0.37	17
ST355.08	355	-	8	150	-	6	0.37	17

ST Series with diaphragm Ø 170 mm, hydraulic connections 1" GF

MODEL	FLOW RATE (l/h)		P MAX. (bar)	STROKES/MIN.		STROKE (mm)	MOTOR (kW)	VALVES (Ø mm)
	50Hz	60Hz		50Hz	60Hz			
ST140.05	140	168	5	34	41	6	0.37	17
ST300.05	300	360	5	71	85	6	0.37	17
ST430.05	430	516	5	106	127	6	0.37	17
ST505.05	505	606	5	126	152	6	0.37	17
ST670.05	670	-	5	150	-	6	0.37	17
ST200.05	200	240	5	34	41	9	0.37	17
ST450.05	450	540	5	71	85	9	0.37	17
ST700.04	700	840	4	106	127	9	0.37	17
ST800.04	800	960	4	126	152	9	0.37	17
ST1000.03	1000	-	3	150	-	9	0.37	17
ST700.05	700	840	5	106	127	9	0.55	17
ST800.05	800	960	5	126	152	9	0.55	17
ST1000.04	1000	-	4	150	-	9	0.55	17

Note: *Models with 0.55 kW motor are equipped with reinforced diaphragm chamber.*

ST Duplex Series with two diaphragms Ø 170 mm, hydraulic connections 1" GF

MODEL	FLOW RATE (l/h)		P MAX. (bar)	STROKES/MIN.		STROKE (mm)	MOTOR (kW)	VALVES (Ø mm)
	50Hz	60Hz		50Hz	60Hz			
ST400.05	400	480	5*	34	41	9	0.55	17
ST900.05	900	1080	5*	71	85	9	0.55	17
ST1400.04	1400	1680	4*	106	127	9	0.55	17
ST1600.04	1600	1920	4*	126	152	9	0.55	17
ST2000.03	200	-	3*	150	-	9	0.55	17

***** *With 0.75 kW motor, the maximum pressure increases by 1 bar.*

Options with surcharge

DESCRIPTION
Version B33 of pumps with diaphragm dia. 80 and 110 mm
Version B33 of pumps with diaphragm dia. 140 and 170 mm
Version B2 of pumps with diaphragm dia. 80 and 110 mm
Version B2 of pumps with diaphragm dia. 140 and 170 mm
Version B56 of pumps with diaphragm dia. 80 and 110 mm
Version B56 of pumps with diaphragm dia. 140 and 170 mm
Version F5 of pumps with diaphragm dia. 80 and 110 mm
Version F5 of pumps with diaphragm dia. 140 and 170 mm
Version A331 of pumps with diaphragm dia. 80 and 110 mm
Version A331 of pumps with diaphragm dia. 140 and 170 mm
Single-phase, asynchronous motor, 0.37 kW, 230 V, 50 Hz
3-phase, asynchronous motor, 0.37 kW, for pumps ST4 … ST41 (P max 16 bar)
3-phase, asynchronous motor, 0.37 kW, for pumps ST14 … ST250 (P max 10 bar)
Pump with tropicalized motor
Pump with EPDM seals
Pump with PTFE seals
Ceramic ball valves, pumps with diaphragm dia. 110 mm
Ceramic ball valves, pumps with diaphragm dia. 140 and 170 mm
Pump without motor -

Notes: Versions are available with ATEX II motor; price on request.
Versions are available with delivery valve with spring, for dosing of viscous liquids; price on request.

List of spare parts

DESCRIPTION
Kit of suction / delivery valves, dia. 5 mm, for pumps with diaphragm dia. 80 mm
Kit of suction / delivery valves, dia. 8.5 mm, for pumps with diaphragm dia. 110 mm
Kit of suction / delivery valves, dia. 17 mm, for pumps with diaphragm dia. 140 mm
Kit of suction / delivery valves, dia. 17 mm, for pumps with diaphragm dia. 170 mm
Diaphragm dia. 80 mm
Diaphragm dia. 110 mm
Diaphragm dia. 140 mm
Diaphragm dia. 170 mm

DESCRIPTION	PART NO.
Kit fittings 9x12 with adapters for ST series pumps with diaphragm dia. 80 mm	891A8101

PERISTALTIC DOSING PUMPS
EF100 SERIES - PUMPS WITH OPEN CASING

- Fix flow rate
- PP / talc reinforced housing, polycarbonate front panel, PBT roller-holder with Delrin (self-lubricant) rollers, PP fittings
- Internal tube: Santoprene
- Panel installation
- Power supply: see table

ITEM	DESCRIPTION
EF100/A	EF100 pump @ 230 V~. Specify the flow rate (0.6 / 1. 2 / 1.8 / 2.4 l/h @ 1 bar)
EF100/C	EF100 pump @ 24 V-. Flow rate 2.4 l/h @ 1 bar

EF105 / EF106 SERIES - PUMPS WITH CLOSED CASING

- **EF105** Series**: fix flow rate**
  EF106 Series**: adjustable flow rate**, adjustment via front trimmer
- PP casing reinforced with glass fibre, polycarbonate front panel, PBT roller-holder with Delrin (self-lubricant) rollers, PP fittings
- Internal tube: Santoprene or silicone
- Wall installation with supplied mounting bracket
- Power supply: see table
- Available colours: grey (standard) and blue
- Supplied with standard accessory kit (part no. 96000100)

ITEM	DESCRIPTION
EF105/A	EF105 pump @ 230 V~. Specify the flow rate (1.5 / 3 l/h @ 1 bar); Santoprene internal tube
	EF105 pump @ 230 V~. Specify the flow rate (1.5 / 3 l/h @ 1 bar); silicone internal tube
	EF105 pump @ 230 V~. Specify the flow rate (4 / 6 l/h @ 1 bar); specify material of the internal tube (Santoprene or silicone)
EF105/C	EF105 pump @ 24 V-. Specify the flow rate (1 l/h @ 3 bar; 4 / 6 / 12 l/h @ 1 bar); specify material of the internal tube (Santoprene or silicone)
EF105/C-200-S	EF105 pump @ 24 V-. Flow rate 20 l/h @ 1 bar, Santoprene internal tube
EF106/A	EF106 pump @ 230 V~. Specify the flow rate max (1 l/h a 3 bar; 4 / 6 l/h a 1 bar); specify material of the internal tube (Santoprene or silicone)
EF106/M	EF106 pump with 20-230 V~ multi-voltage power supply. Specify the flow rate max (1 l/h @ 3 bar; 4 / 6 l/h @ 1 bar); specify material of the internal tube (Santoprene or silicone)

DOSING SYSTEMS

PERISTALTIC PUMPS - ACCESSORIES AND SPARE PARTS

ITEM	DESCRIPTION	PART NO.
	Kit of accessories for peristaltic pumps: PVC Crystal hose (4x6 mm, 2 m), PE hose (4x6 mm, 2 m), injection valve and foot filter	96000100
	Injection valve for peristaltic pumps	97002012/SLV
	Foot filter for peristaltic pumps	97002013/SLV
	Spare housing with O-ring, for EF100 / EF110 / EF125 pumps	96000140
	Spare front housing with O-ring, for EF105 / EF106 pumps - grey colour	96000142
	Spare front housing with O-ring, for EF105 / EF106 pumps - - blue colour	96000141
	Protective front panel for EF100 / EF110 / EF125 pumps	96000130
	Protective front panel for EF105 / EF106 pumps	96000131
	Santoprene internal tube for EF100 pumps	96000201
	Santoprene internal tube for EF105 / EF106 1 l/h @ 3 bar	96000230
	Santoprene internal tube for EF105 / EF106 @ 1 bar	96000232
	Silicone internal tube for EF105 / EF106 1 l/h @ 3 bar	96000240
	Silicone internal tube for EF105 / EF106 @ 1 bar	96000242
	Roller-holder for EF100 pumps	96000401
	Roller-holder for EF105 / EF106, for models with Santoprene tube	96000411
	Roller-holder for EF105 / EF106, for models with silicone tube	96000410
	Spare motor for EF100 pumps (specify the model)	
	Spare motor for EF110 pump, 1.8 l/h 230V	96000303
	Spare motor for EF125 pump, 2.4 l/h 230V	96000304
	Spare motor for EF105 pump, 1.5 l/h 230V	96000331
	Spare motor for EF105 pump, 3 l/h 230V	96000332
	Spare motor for EF105 pump, 4 l/h 230V	96000333
	Spare motor for EF105 pump, 6 l/h 230V	96000334
	Spare motor for EF106 pump series (specify the model)	

ANALYSIS AND CONTROL UNITS FOR SWIMMING POOLS

COLORIMETRIC ANALYSIS
MCO14 EVO - DIGITAL COLORIMETRIC UNIT

- Basic measurements always provided: **pH, ORP, free chlorine** (colorimetric analysis)
- Additional measurements: **temperature, total chlorine** (colorimetric analysis) **and combined chlorine** (calculated)
- Housing for reagent bottles (and level probes)
- **Two configuration levels** (standard and advanced), with password
- Multilingual menu
- **Four adjustment relays** (ON-OFF or proportional) and one alarm relay
- **Two analog outputs**, configurable as 0-20 or 4-20 mA
- **OFF input, configurable as NO or NC** for disabling outputs
- Two (or three) level inputs to monitor reagents to be dosed
- **Data log downloadable** through serial line (internal data logger)
- **Serial port**, choice between:
  - RS232, with galvanic separation, for communication with PC and RW14
  - RS485 with Modbus RTU protocol, even for connection with SteieLynx unit
- IP56 housing, dimensions: 520 x 900 x 250 mm
- Power supply: 230 V~ (standard), 115 V~
- **Version with K4 and K5 pulse outputs for PFM regulation available upon order**

SteieLynx ext.

ITEM	DESCRIPTION	PART NO.
MCO14 EVO/3	Measurements of free chlorine, pH and ORP; std model w/ RS232.RCO-R1 and RCO-R2 reagents required (not included)	826301049901
	Model with RS485 serial port and Modbus RTU protocol	826601049901
MCO14 EVO/5	Measurements of free & total (combined) chlorine, pH, ORP and temperature; standard model with RS232 serial port. RCO-R1, RCO-R2 and RCO-R3 reagents required (not included)	826301049904
	Model with RS485 serial port and Modbus RTU protocol	826601049904

SWIMMING POOL LINE

ITEM	DESCRIPTION	PART NO.
	RCO-R1 - Reagent 1 for free chlorine analysis with DPD1 method (1 L)	80090103
	RCO-R2 - Reagent 2 for free chlorine analysis with DPD1 method (1 L)	80090104
	RCO-R3 - Reagent 3 for total chlorine analysis with DPD3 method (0.5 L)	80090105
	EV-MCO14 - Solenoid valve for hydraulic group, 24 V~	80509910
	Spare peristaltic pump; flow rate 0.25 l/h, Santoprene internal tube, 24 V-	80509912
	TB-MCO14 - Santoprene tube for peristaltic pump	96000200
	Roller-holder for colorimeter peristaltic pump	96000400
	MX-MCO14 - Mixer for hydraulic group	80509901
	FT-MCO14 - Impurity filter for colorimetric units	70109069
	Spare valve, ¼" M/F	36306590
	Complete optic group for MCO14 units	80509913
	Cap for bottle of reagent 1, with level sensor	96000116
	Cap for bottle of reagent 2, with level sensor	96000121
	Cap for bottle of reagent 3, with level sensor	96000122
	Kit A - Installation kit: 1 valve M/F ½", 1 fitting with ½" ring nut, PE hose 6x8 mm (5 m)	80509907
	Spare electronic board for RS232 communication	82590200
	Spare electronic board for RS485 communication	82590201

For pH, ORP and temperature sensors, please refer to the specific section "Sensors & Accessories".

SWIMMING POOL LINE

DIGITAL UNITS FOR pH / CHLORINE CONTROL

EVOLUTION EW² Pool LINE
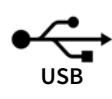
NEW

- **Two measurement inputs for pH electrode / ORP electrode / amperometric sensor** (CAC or CLE **selectable via software**)
- Input for Pt100 or Pt1000 sensor, with **automatic detection** of sensor type; for temperature measurement and compensation
- **Easy-to-use interface** featuring intuitive configuration menu with four multifunction soft-keys and **specific software for swimming pool application**
- Three-level configuration, protected by **three different passwords**
- Large **display with RGB backlight**, changing colour according to instrument status
- Adjustment outputs: 230V (115V), contact or pulse, to drive pumps or other dosing device, configurable by the user for On-Off / PWM / PFM operation mode
- Two analog outputs (0/4-20 mA), fully configurable
- Two inputs for level sensor, configurable at one or two stages
- Input for monitoring sample water flow
- Pause digital input (Ext. Cons) to disable all outputs
- **Two outputs for the timed control of flocculating and anti-algae dosing pumps**
- **"EcoMode" function** for dosage reducing and consequent saving of chemical products, controlled by external contact or timer
- **Inbuilt RTC** for time scheduling and date/time labelling of data
- Easily accessible **USB port**, protected by a watertight cover; can be used for parameter configuration, data downloading and system upgrading
- Communication options: RS485 serial port with Modbus RTU protocol or **integrated SteieLynx gateway**
- New **exclusive STEIEL casing** with quick installation system, thanks to the wall fixing bracket, and safe attachment of the front cover for maximum ease of operations; IP65 protection, suitable for harsh environments
- Power supply: **100-240 V~**, cavo with Schuko plug (other options on request)
- These instruments can be supplied with the sensor-holder fixed on the housing with **easy+fix** (see next pages) or on a panel, complete with dosing pumps

Multifunction soft-keys

Backlight RGB

USB

Modbus

SteieLynx int.+ext.

ITEM	DESCRIPTION	PART NO.
EW² Pool pH/ORP	Dual channel instrument for swimming pool, with inputs for pH and ORP electrodes; cable with Schuko plug	83W3F110
EW² Pool pH/CAC-CLE	Dual channel instrument for swimming pool, with inputs for pH electrode and amperometric sensor; cable with Schuko plug	83W3F120
EW² Pool pH/ORP easy+fix	EW² Pool easy+fix system with pH and ORP plastic electrodes + temperature sensor; cable with Schuko plug	83F5F110326
EW² Pool pH/CAC easy+fix	EW² Pool easy+fix system with EURO2010-PH electrode, CAC-CLO-M1 amperometric probe with membrane + temperature sensor; cable with Schuko plug	83F5F12031A
EW² Pool pH/CLE easy+fix	EW² Pool easy+fix system with EURO2010-PH electrode, Cu/Pt open amperometric cell + temperature sensor; with Schuko plug	83F5F120319
Kit RTU (*)	Kit for RS485 communication with Modbus RTU protocol	83WM000U
Kit SteieLynx int. (*)	Integrated SteieLynx WiFi/LAN module	83WM000Y
	Integrated SteieLynx module, with modem USB 3G/4G and antenna	83WM000G
easy+fix	Fixing plate to attach the sensor-holder on EVOLUTION/NOVA² casing	80610280

(*) The RS485 port with Modbus RTU protocol and integrated SteieLynx module are alternative, that is, one excludes the other.

easy+fix INSTALLATION SYSTEM

STEIEL exclusive and patented system for compact and space-saving assembly of the sensor-holder, directly fixed on the instrument housing.
The innovative s**ymmetrical installation plate allows the maximum flexibility for mounting the sensor-holder on the left or right side, depending on your needs**.

How to build the part number for EW² Pool with easy+fix system

83F5 ☒ **1** ☒ ☒ ☒ ☒ ☒

Measurement sensor 2 (chlorine)
5 = EURO2110 RX/Pt glass
6 = EURO4111 RX/Pt plastic
9 = CLE (Cu/Pt) cell
A = CAC-CLO-M1 probe
etc.

Measurement sensor 1 (pH)
1 = EURO2010 pH glass
2 = EURO4111 pH plastic
etc.

PT100 temperature sensor
2 = Not provided
3 = Provided (standard)

Communication type
0 = No communication
U = RS485 Modbus RTU
Y = Integrated SteieLynx WiFi/LAN module
G = Integrated SteieLynx module, with 3G/4G USB modem and antenna

Measurement 2
1 = Input for ORP electrode
2 = Input for amperometric sensor

Power supply
F = cable with Schuko plug (standard)
G = cable with UK plug (type G)
B = cable with US plug (type B)

SWIMMING POOL LINE

DIGITAL UNITS FOR pH / CHLORINE CONTROL

NEXT315 CONTROL UNITS

NEW

- The evolution of the EF315 instrumental line, in the new **exclusive STEIEL casing** with rapid installation system, thanks to the wall fixing bracket, and safe attachment of the front cover for maximum ease of operations; IP65 protection, suitable for harsh environments
- **Two inputs for simultaneous measurements** (temperature always provided)
- Measurements of pH, ORP, chlorine (open or closed amperometric cell)
- Inputs for pH and ORP electrodes on BNC connector
- Multilingual menu
- Large **display with backlight** changing colour according to instrument status
- Two outputs for pumps driving (230 V or pulse signal)
- Two analog outputs (0/4-20 mA)
- **Input for sample water flow** monitoring
- **Pause input**, configurable as NO or NC, to disable outputs
- Two level inputs to monitor products to be dosed
- Alarm relay
- RS485/Ascii **serial port**, can be used for connection to the SteieLynx gateway (external unit)
- Power supply: **100-240 V~**

- This instrument can be provided assembled on a panel, complete with measurement sensors and dosing pumps

Backlight RGB

SteieLynx ext.

ITEM	DESCRIPTION	PART NO.
NEXT315 pH/ORP	NEXT315 unit with pH/ORP + Pt100 inputs, RS485 port, cable with Schuko plug, **PFM-type control outputs**.	83X1F31R
	Instrument with (100-240V) **voltage-type control outputs**.	83X1F11R
NEXT315 pH/CLE	NEXT315 unit with pH/CLE + Pt100 inputs, RS485 port, cable with Schuko plug, **PFM-type control outputs**.	83X1F33R
	Instrument with (100-240V) **voltage-type control outputs**.	83X1F13R
NEXT315 pH/CAC	NEXT315 unit with pH/CAC + Pt100 inputs, RS485 port, cable with Schuko plug, **PFM-type control outputs**.	83X1F32R
	Instrument with (100-240V) **voltage-type control outputs**.	83X1F12R
PNL NEXT315 pH/ORP	pH/ORP panel with plastic electrodes, cup-type sensor-holders with IL-SF flow sensor and 80µm mesh filter (instrument with voltage-type control outputs)	83P4F11R02607
	Version with two NSE157/PKT 0512 dosing pumps	83P4F31R026073C13C1
PNL NEXT315 pH/CLE	pH/CLE panel with plastic pH electrode, CLE12 open amperometric cell, PT100 and 80µm mesh filter (instrument with voltage-type control outputs)	83P4F13R32908
	Version with two NSE157/PKT 0512 dosing pumps	83P4F33R329083C13C1
PNL NEXT315 pH/CAC-CLO-M1	pH/CAC panel with glass pH electrode, CAC-CLO-M1 probe, PT100, SD-CAC2 sensor-holder and 80µm mesh filter (instrument with voltage-type control outputs)	83P4F12R31A02
	Version with two NSE157/PKT 0512 dosing pumps	83P4F32R31A023C13C1

DATA RECORDING / MANAGING

SteieLynx - GATEWAY & WEB APP

NEW

- **Supervising unit** to monitor and manage STEIEL instruments through the **dedicated Web App**
- Internet connection via LAN port, WiFi module or 3G/4G network (SIM card in USB modem)
- RS485 port for communication with STEIEL instruments and dosing pumps equipped with RS485 interface
- Also available as **module to be integrated in the instrument** for the new EVOLUTION EW / EW² and NOVA² instrumental lines
- IP56 housing for wall installation; dimensions: 150 x 110 x 70 mm
- Power supply: 100-240 V~ 50/60 Hz, cable with Schuko plug (other options on request)

ITEM	DESCRIPTION	PART NO.
SteieLynx EXT	Supervising unit Wi-Fi/LAN, with one RS485 port and cable with Schuko plug	81831000
	Supervising unit , complete with 4G USB modem and antenna, with one RS485 port and cable with Schuko plug	81831G00
SteieLynx INT	Module to be integrated in EVOLUTION EW /EW² and NOVA² units	8183Y000
CAV/RW-M8-1	Serial cable with M8 connector for EF315/RS485 control units, 1.5 m	80099041
CAV/RW-M8-10	Serial cable with M8 connector for EF315/RS485 control units, 10 m	80099045
CAV/RW-MP-1	Serial cable with connector for multi-parametric units EF214 / MC14 / MCO14 / EVOLUTION with RS485 port, 1.5 m	80099111
CAV/RW-MP-10	Serial cable with connector for multi-parametric units EF214 / MC14 / MCO14 / EVOLUTION with RS485 port, 10 m	80099115
CAV/Lynx-WP-1	Serial cable with connector for NOVA NSP pumps and NOVA² units, 2 m	80099202
CAV/Lynx-WP-1	Serial cable with connector for NOVA NSP pumps and NOVA² units, 10 m	80099205
Kit modem	Modem USB 3G/4G + antenna with cable + connectors	81839001

SWIMMING POOL LINE

STEIEL
yes, we watercare!

COMPACT UNITS FOR pH / CHLORINE MONITORING AND ADJUSTMENT

NOVA² Pool LINE

NEW

Tasti multifunzione

Backlight RGB

USB

Modbus
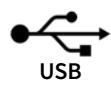
SteieLynx int.+ext.

- **Two measurement inputs for pH and ORP electrodes or pH electrode and amperometric sensor** (CAC or CLE, to be specified upon order)
- Input for Pt100 or Pt1000 sensor, with **automatic detection** of sensor type; for temperature measurement and compensation
- **Easy-to-use interface** featuring intuitive configuration menu with four multifunction soft-keys and **specific software for swimming pool application**
- Three-level configuration, protected by **three different passwords**
- **Large display with RGB backlight**, changing colour according to instrument status
- **Inbuilt RTC** for time scheduling and date/time labelling of data
- **Two integrated** electromagnetic **dosing heads**, PVDF, several flow rates available
- Two analog outputs (0/4-20 mA), fully configurable
- Two level inputs
- Pause digital input (Ext. Cons) to disable all outputs
- Easily accessible **USB port**, protected by a watertight cover; can be used for parameter configuration, data downloading and system upgrading
- Communication options: RS485 serial port with Modbus RTU protocol or connectivity **with integrated SteieLynx gateway**
- New **exclusive STEIEL casing** with quick installation system, thanks to the fixing on a wall bracket, and safe attachment of the front cover for maximum ease of operations; IP65 protection, suitable for harsh environments
- Power supply: **230 V~** (standard) or 115 V~ (on request), 50/60 Hz
- Cable with Schuko plug (other options on request)

- This units can be supplied with sensor-holder fixed on the housing with easy+fix

easy+fix INSTALLATION SYSTEM

NEW

PATENTED
INTELLECTUAL PROPERTY

STEIEL exclusive and patented system for compact and space-saving assembly of the sensor-holder, directly fixed on the instrument housing.
The innovative s**ymmetrical installation plate allows the maximum flexibility for mounting the sensor-holder on the left or right side, depending on your needs**.

pH/ORP Version

ITEM	DESCRIPTION	COMMUNICATION	PART NO.
NOVA² Pool pH/ORP	Compact instrument for swimming pools, with pH/ORP + Pt100 inputs; 230V, cable with Schuko plug; dosing heads 5 l/h @ 3 bar	No communication	83N1F10BB
		Modbus RTU	83N1F1UBB
		SteieLynx WiFi/LAN	83N1F1YBB
		SteieLynx 3G/4G	83N1F1GBB
NOVA² Pool pH/ORP easy+fix	NOVA² Pool easy+fix system with pH and ORP plastic electrodes and temperature sensor; 230V, cable with Schuko plug; dosing heads 5 l/h @ 3 bar	No communication	83F3F10BB322
		Modbus RTU	83F3F1UBB322
		SteieLynx WiFi/LAN	83F3F1YBB322
		SteieLynx 3G/4G	83F3F1GBB322

pH/Chlorine Version

ITEM	DESCRIPTION	COMMUNICATION	PART NO.
NOVA² Pool pH/CAC easy+fix	NOVA² Pool easy+fix system with EURO2010 pH electrode, CAC-CLO-M1 amperometric probe with membrane and PT100 sensor; 230V, cable with Schuko plug; dosing heads 5 l/h @ 3 bar	No communication	83F3F20BB31A
		Modbus RTU	83F3F2UBB31A
		SteieLynx WiFi/LAN	83F3F2YBB31A
		SteieLynx 3G/4G	83F3F2GBB31A
NOVA² Pool pH/CLE easy+fix	NOVA² Pool easy+fix system with EURO2010 pH electrode, Cu/Pt open amperometric cell and PT100 sensor; 230V, cable with Schuko plug; dosing heads 5 l/h @ 3 bar	No communication	83F3F30BB319
		Modbus RTU	83F3F3UBB319
		SteieLynx WiFi/LAN	83F3F3YBB319
		SteieLynx 3G/4G	83F3F3MBB319

Note: *Communication options (RS485 Modbus or integrated SteieLynx module) are assembled at the factory and, therefore, must be requested upon order.*

Surcharges for different dosing heads / flow rates

ITEM	DESCRIPTION
BB 0503	Standard dosing heads, 5 l/h @ 3 bar (hose 4x6 mm)
CC 0703	Dosing heads 7 l/h @ 3 bar (hose 4x6 mm)
EE 1503	Dosing heads 15 l/h @ 3 bar (hose 5x8 mm)
FF 2502	Dosing heads 25 l/h @ 2 bar (hose 9x12 mm)

Accessories

ITEM	DESCRIPTION	PART NO.
Kit Weipu	Female Weipu connector for chlorine sensor, with specific Allen key	80611050
easy+fix	Fixing plate to attach the sensor-holder on EVOLUTION/NOVA² casing	80610280
SteieLynx ext.	SteieLynx WiFi/LAN gateway, external unit	81831000
	SteieLynx gateway, externa unit, with 3G/4G modem and antenna	81831G00

SWIMMING POOL LINE

STEIEL
yes, we watercare!

COMPACT UNITS FOR pH / CHLORINE MONITORING AND ADJUSTMENT
EF260 / EF270 SERIES

- **Measurement inputs for pH and ORP electrodes on BNC connectors**
- **Indirect measurement of chlorine**
- Acid dosage for **pH adjustment** with on board pump:
  - EF265, EF266, EF270: with peristaltic head, 1.5 l/h
  - EF267: with electromagnetic head, 10 l/h
- **Chlorine adjustment**:
  - EF265 and EF270: with on board peristaltic head, 6 l/h
  - EF266 and EF267: through 230V output to command a salt chlorinator or other chlorine feeding device
- Digital input: one OFF input and two level inputs for tanks of products to be dosed
- Optional RS232 serial for tele-control, available on request
- IP65 casing; dimensions:
  - EF270: 350 x 380 x 175 mm
  - EF260 (series): 290 x 280 x 175 mm
- Power supply: 230 V~ (standard), 50 Hz
- Supplied with standard accessories for the provided dosing heads, measurement sensors and calibration solutions

ITEM	DESCRIPTION	PART NO.
EF270	Analysis and control unit for pH/Chlorine, complete with on board peristaltic pumps (1.5 l/h for acid, 6 l/h for chlorine) and methacrylate probe-holder. Supplied with standard accessories for two dosing heads, pH and ORP/Pt electrodes, calibration solutions.	84001015761
EF265	Analysis and control unit for pH/Chlorine, complete with on board peristaltic pumps (1.5 l/h for acid, 6 l/h for chlorine). Supplied with standard accessories for two dosing heads, pH and ORP/Pt electrodes with 2.5 m cable, two electrode-holders with DN50 clamp for in-line installation, calibration solutions.	84008015761
EF266	Analysis and control unit for pH/Chlorine, complete with one on board peristaltic pump (1.5 l/h for acid dosage) and methacrylate probe-holder. Supplied with standard accessories for one dosing head, pH and ORP/Au electrodes, calibration solutions.	84009010559
EF267	Analysis and control unit for pH/Chlorine, complete with one on board electromagnetic head (PVDF, 10 l/h for acid dosage) and methacrylate probe-holder. Supplied with standard accessories for one dosing head, pH and ORP/Au electrodes, calibration solutions.	84010010510
	Optional RS232 serial port for tele-control with RW14	

READY TO USE CONTROL SYSTEMS
STANDARD ASSEMBLIES ON PANEL

INDICATIVE PICTURE	DESCRIPTION	PART NO.
	PNL NOVA Pool pH/ORP High density expanded PVC panel (500x600 mm), two pumps NSP162 C0512, pH and ORP plastic electrodes, two SF17 probe-holders, a filtering cartridge, IL-SF flow sensor and calibration solutions.	9N0SR01C100C10010
	PNL NOVA Pool pH/Cl (CLE11) High density expanded PVC panel (500x600 mm), one NSP162 C0512 pump, one NSP163A C0512 pump, pH electrode with plastic body, CLE11 cell with flow sensor, SF17 probe-holder with filtering cartridge, calibration solutions.	9N0SC01C100C10010
	PNL NOVA Pool pH/Cl (CLE16) High density expanded PVC panel (500x600 mm), one NSP162 C0512 pump, one NSP163B C0512 pump, pH electrode with plastic body, CLE16 probe, methacrylate probe-holder with flow sensor, PF17 filter and calibration solutions.	9N0SC21C100C10010
	PNL EW^2 Pool pH/Cl (CAC) with dosing pumps. High density expanded PVC panel (900x700 mm), EW^2 Pool unit with glass pH electrode, CAC-CLO-M1 probe, PT100 sensor, SD-CAC2 probe-holder with flow sensor, PF17 filter, two NSE157 C0512 dosing pumps and calibration solutions.	83P3F12031A023C13C1
	PNL EW^2 Pool pH/Cl (CLE) with dosing pumps. High density expanded PVC panel (900x700 mm), EW^2 Pool unit with glass pH electrode, CLE12 cell in probe-holder with flow sensor, PT100 probe, PF17 filter, two NSE157 C0512 dosing pumps and calibration solutions.	83P3F120319023C13C1
	PNL EW^2 Pool pH/ORP with dosing pumps. High density expanded PVC panel (900x700 mm), EW^2 Pool unit with pH and ORP glass electrodes, PT100 sensor, SD-P2 probe-holder with flow sensor, PF17 filter, two NSE157 C0512 dosing pumps and calibration solutions.	83P3F110315023C13C1

SWIMMING POOL LINE

EF110 - PERISTALTIC PUMP WITH pH/ORP METER

- Designed for wall installation
- User selectable pH or ORP range
- Electrode input on BNC connector; input for level sensor
- Red LED display
- IP54-rated casing, dimensions: 100 x 160 x 135 mm
- Power supply: 230 V~
- Available pH and ORP kits, with measurement sensor and calibration solutions

ITEM	DESCRIPTION	PART NO.
EF110	Digital peristaltic pump with pH/ORP meter, 1.8 l/h @ 1 bar, Santoprene internal tube; supplied with standard pump accessories	95930203
Kit-pH	pH electrode (2.5 m cable and BNC), electrode-holder with DN50 clamp, pH4 and pH7 buffer solution (90 ml each)	80099903
Kit-RX/Pt	ORP/Pt electrode (2.5 m cable and BNC), electrode-holder with DN50 clamp, calibration solution 220 mV (90 ml)	80099904
Kit-RX/Au	ORP/Au electrode (2.5 m cable and BNC), electrode-holder with DN50 clamp, calibration solution 220 mV (90 ml)	80099905

EF117 - CONTROL UNIT FOR SALT CHLORINATOR

- Digital unit with built-in redox meter
- Double-pitch Schuko socket for powering a dosing unit (e.g. salt chlorinator)
- Electrode input on BNC connector, red LED display
- Prewired power cable with Schuko plug
- IP54-rated casing, dimensions: 100 x 160 x 135 mm
- Power supply: 230 V~, cable with Schuko plug

ITEM	DESCRIPTION	PART NO.
EF117	Control unit for salt chlorinator, with ORP meter (electrode not included)	95940220

EF-J KIT - GROUNDING KIT

- Eliminates interferences or electric noise coming from plastic pipes (no conductive)
- Two sizes available, DN50 and DN63
- Complete with gaskets, screws and cable lugs for electric wirings

ITEM	DESCRIPTION	PART NO.
EFJ_KIT50_MT	Grounding kit with DN50 clamp	85007820
EFJ_KIT63_MT	Grounding kit with DN63 clamp	85007821

BACKWASH KIT

- To be used for applications in which a chlorine reducing product is dosed in the backwash water of swimming pool filters
- The kit includes an SFC capacitive flow sensor and a NOVA NSE157 pump
- The SFC sensor detects the flow of a conductive water-based liquid through a nonmetallic wall (e.g. plastic pipe)
- The SFC sensor should be mounted with the supplied bracket or directly on pipe, with cable ties (see picture); to be connected to the CONTROL input of the NOVA NSE157 pump

ITEM	DESCRIPTION	PART NO.
Backwash kit	The kit includes a NOVA NSE157 C0512 pump, an SFC sensor and an M8 connector for sensor wiring to the pump	S40163015C2
SFC	Capacitive flow sensor, equipped with two LED indicators; to be used with PSP and NOVA pumps	97003262

POOL TIMER MINI - TIMED DOSAGE

- Timed dosing system
- Timer for weekly scheduling the daily dosing times
- Built-in peristaltic pump, with Santoprene internal tube
- IP54 housing, dimensions: 200 x 150 x 80 mm
- Power supply: 230 V~ or 115 V~

ITEM	DESCRIPTION	PART NO.
Pool Timer Mini	Compact system for timed dosage, complete with configurable timer and peristaltic pump (2.4 l/h @ 1 bar); supplied with standard accessory kit for peristaltic pump. Power supply 230 V~.	95050024
	Compact system for timed dosage, complete with configurable timer and peristaltic pump (2.4 l/h @ 1 bar); supplied with standard accessory kit for peristaltic pump. Power supply 115 V~.	95050026

SWIMMING POOL LINE

INSTALLATION EXAMPLE FOR pH / CHLORINE CONTROL
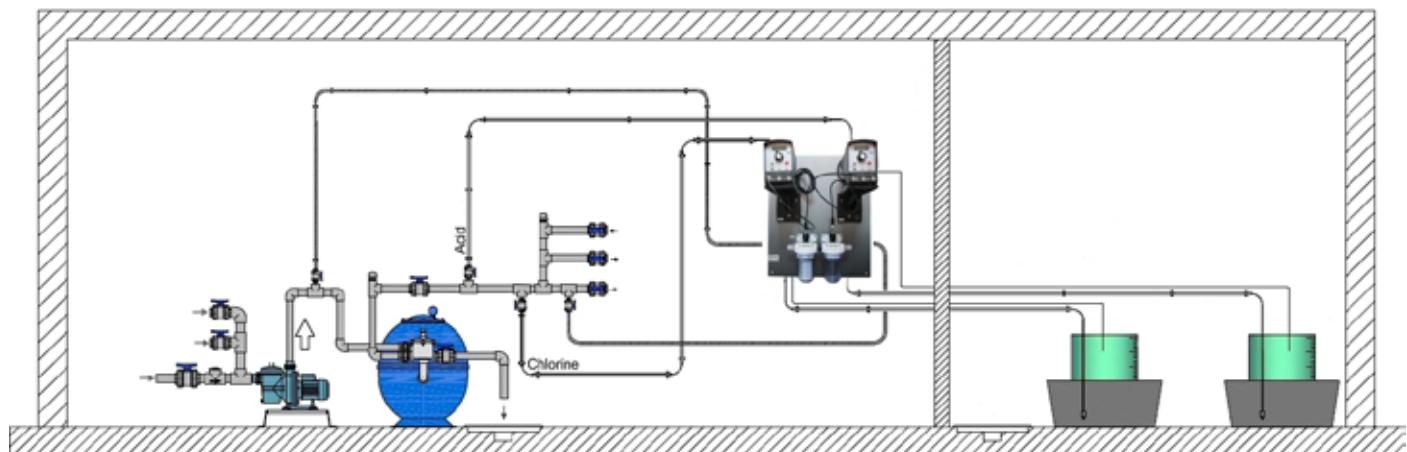
SIZING GUIDE FOR DOSING PUMPS

The chlorine dosing pump has to be sized according to the expected chlorine demand of the swimming pool, which is affected by several factors, as the pool volume, the filtration flow rate, the private or public use, the indoor or outdoor location, the chlorine concentration in the dosed disinfectant.

In other words, to keep a disinfectant level of about 1 ppm, an outdoor swimming pool requires more chlorine than an indoor one, and a public pool will demand more chlorine than a private one.

To simplify, suppose the following average demand of chlorine:

Use	Private	Public
Indoor pool	1.5 ppm	2 ppm
Outdoor pool	2.5 - 3.5 ppm	3 - 4 ppm

The needed dosing flow rate for the chlorine pump is calculated as follows:

Dosing flow rate (l/h) = [filtration flow rate (m3/h) x chlorine-demand (ppm)] / [chlorine conc. (%) / 1000]

It is recommended to choose a pump with a flow rate bigger (double) than the calculated theoretical value.
For the pH correction, the acid dosing pump is sized proportionally to the estimated chlorine consumption.

Here below you can find an useful guide for selecting the pump right size for an outdoor swimming pool with a complete recirculation of about 3 hours, depending on the pool volume and chlorine concentration in the dosed product.

Pool volume	Circul. flow rate	Sodium hypochlorite Conc. 14%		Calcium hypochlorite 65% (1:10)		Di-chloro 55% (diluted 1:10)		Electrolytic chlorine 2%		Sulphuric acid 30-36%	
m³	m³/h	Pump size (l/h)		Pump size (l/h)		Pump size (l/h)		Pump size (l/h)		Pump size (l/h)	
		Private	Public	Private	Public	Private	Public	Private	Public	Private	Public
40	12	2	2	2	2	2	2	4	5	2	2
80	25	2	2	2	4	2	4	8	10	2	2
100	35	2	2	4	5	4	5	13	13	2	2
150	50	2	4	4	8	4	8	20	20	4	4
200	65	4	4	8	8	8	8	20	32	4	4
300	100	4	5	8	13	8	13	32	40	5	8
400	120	4	8	10	20	10	20	40	50	5	8
500	150	5	8	13	20	13	20	50	60	8	8
1000	300	10	20	20	40	20	40	100	120	13	20
1500	500	20	32	32	70	32	70	150	200	20	32

easiflo FIRST SERIES - CHLORINE FEEDERS FROM CALCIUM HYPOCHLORITE

- **On-demand production** of ready-to-use chlorinated solution
- Reagent: **HTH® briquettes of calcium hypochlorite**
- No cyanuric acid in the pool
- Models for **pools up to 150, 600, 1200, 2500 m³**
- They can be controlled by a STEIEL electronic unit equipped with a measurement / monitoring system of the chlorine level in water
- Dosage of the chemical product **with no waste**
- Easy to install
- Minimum maintenance required

Model	*easiflo®* FIRST 10	*easiflo®* FIRST 20	*easiflo®* FIRST 50	*easiflo®* FIRST 100
Loading capacity of **HTH® 7 g briquettes** (kg)	10	20	50	100
Daily max production (kg/die)	18	42	85	203
Max volume of the pool (m³)	150	600	1200	2500

easiflo IP SERIES - CHLORINE FEEDERS FROM CALCIUM HYPOCHLORITE

- *easiflo* **Line for multi-point dosage**; three models, with different loading capacity of the hopper: 20, 50, 100 kg of **HTH® calcium hypochlorite briquettes**
- **Production** of ready-to-use chlorinated solution
- **Effective chlorination** of water **in pipes or tanks**, through external dosing pump(s)
- No cyanuric acid in the water
- Supplied **complete with electronic unit**, for the control of all the electrical functions of the system
- Dosage of the chemical product **with no waste**
- Easy to install
- Minimum maintenance required

Model	*easiflo®* IP 20	*easiflo®* IP 50	*easiflo®* IP 100
Loading capacity of **HTH® 7 g briquettes** (kg)	20	50	100
Production of chlorinated solution conc. 2% (L/h) @ 20 °C / 2 bar	190	250	310

SWIMMING POOL LINE

SISTEMI DI DISINFEZIONE CON RAGGI UV

EF-U200 SERIES - DISINFECTION OF SWIMMING POOL WATER

- Control panel with graphic LCD and LED indicator; featuring counter of lamp working hours, remote ON/OFF, alarm relay and switching on / off timer
- Starter with stabilization function of the power voltage
- Working pressure: max 9 bar
- Power supply: 230 V~ (standard) 50/60 Hz
- **Lamps:**
  - **Low pressure, mercury vapour**
  - Average working life: 9000 hours
- **AISI316L steel vessel**

ITEM	FLOW RATE MAX (m³/h)	LAMPS	HYDRAULIC CONNECT.	UV-C DOSE (J/m²)	PART NO.
EF-U 201	4	1 x 40 W	1.1/2" M		85104221
EF-U 202	7	1 x 40 W	2" M		85104222
EF-U 203	14	1 x 80 W	2" M	> 250	85104223
EF-U 204	18	1 x 80 W	2" M		85104224
EF-U 205	34	2 x 80 W	2.1/2" M		85104225

DESCRIPTION	PART NO.
Low pressure lamp, 40 Watt (minimum order quantity: 4 pcs.)	85100105
Low pressure lamp, 80 Watt (minimum order quantity: 4 pcs.)	85100106
Quartz for 40 / 80 Watt lamp (minimum order quantity: 4 pcs.)	85100205
Contact-cover kit, cable 3 m	85100608
Sheath lock	85100606
EF-U control unit for systems with 1 x 30/40 W lamp	85100001
EF-U control unit for systems with 1 x 80 W lamp	85100002
EF-U control unit for systems with 2 x 80 W lamps	85100004

UV-S800 SERIES - ABATEMENT OF COMBINED CHLORINE IN SWIMMING POOL

- "ECO" control panel with graphic LCD and LED indicator; featuring counter of lamp working hours, remote ON/OFF, alarm relay and switching on / off timer, monitoring of irradiation / temperature of water, check of panel temperature and shutdown function upon overheating of the vessel / electronic unit, 4-20 mA output and optional lamp power adjustment function
- Upon request, a control panel with colour touch screen is available, also in "EVO" version, which features data log function, USB port, serial communication (Modbus, TCP/IP, RTU), digital outputs, UV dose calculation and lamp power adjustment functions
- Working pressure: max 10 bar
- Power supply: 230 V~ (standard) 50/60 Hz
- **Medium pressure, mercury vapour lamps**
- **AISI316L steel vessels** with cleaning system (no UV-S800 XS): manual rack (standard) or automatic (optional)

ITEM	FLOW RATE MAX (m³/h)	LAMPS	HYDRAULIC CONNECT.	UV-C DOSE (J/m²)	MODELLO "ECO" PART NO.
UV-S 800 XS	5-20	1 x 250 W	2.1/2" M		85123620
UV-S 800 (*)	30	1 x 1000 W	3" M		85123651
UV-S 801	55	1 x 1000 W	DN100	600	85123652
UV-S 802	125	1 x 2000 W	DN150		85123653
UV-S 803	235	1 x 3500 W	DN200		85123654

DESCRIPTION	PART NO.
Medium pressure lamp, 250 Watt, for UV-S800 XS	85100111
Medium pressure lamp, 1000 Watt, for UV-S800 / UV-S801	85100116
Medium pressure lamp, 2000 Watt, for UV-S802	85100117
Medium pressure lamp, 3500 Watt, for UV-S803	85100118
Quartz for model UV-S 800 XS	85100210
Quartz for models UV-S 800 (*) and UV-S 801	85100220
Quartz for model UV-S 802	85100221
Quartz for model UV-S 803	85100222

(*) For this model, the lamp consumption is reduced to 600 W by the starter.

UV SYSTEMS

EF-U100 SERIES - POTABLE WATER

- Basic control panel with graphic LCD and LED indicator; featuring counter of lamp working hours, remote ON/OFF, alarm relay and switching on / off timer
- "H" version control panel with additional functions to monitor the irradiation / temperature of water, check the panel temperature and shutdown upon overheating of the vessel / electronic unit, and optional 4-20 mA output
- Working pressure: max 10 bar
- Power supply: 230 V~ (standard) 50/60 Hz
- **Lamps:**
  - **Low pressure, mercury vapour**
  - Average working life: 9000 hours
- **Steel vessels**: polished AISI304 or AISI316L (with manual rack cleaning system available for some models upon request)

ITEM	FLOW RATE MAX (m³/h)	LAMPS	HYDRAULIC CONNECT.	UV-C DOSE (J/m²)	AISI304 VESSEL PART NO.	AISI316L VESSEL PART NO.
EF-U 105	1.2	1 x 30 W	3/4" M	300	85102211	85102221
EF-U 105 H					85103211	85103221
EF-U 106	2.7	1 x 40 W	1" M		85102212	85102222
EF-U 106 H					85103212	85103222
EF-U 107	3.6	1 x 40 W	1.1/2" M		85102213	85102223
EF-U 107 H					85103213	85103223
EF-U 108	4.5	2 x 40 W	1" M		85102214	85102224
EF-U 109	5.1	1 x 80 W	1.1/2" M		85102215	85102225
EF-U 109 H					85103215	85103225
EF-U 110 +	6.0	2 x 40 W	1.1/2" M	400	85102216	85102226
EF-U 110 + H					85103216	85103226
EF-U 111 +	9.6	2 x 80 W	1.1/2" M		85102217	85102227
EF-U 111 + H					85103217	85103227

DESCRIPTION	PART NO.
Low pressure lamp, 30 Watt (minimum order quantity: 4 pcs.)	85100104
Low pressure lamp, 40 Watt (minimum order quantity: 4 pcs.)	85100105
Low pressure lamp, 80 Watt (minimum order quantity: 4 pcs.)	85100106
Quartz for 30 Watt lamp (minimum order quantity: 4 pcs)	85100204
Quartz for 40 / 80 Watt lamp (minimum order quantity: 4 pcs.)	85100205
Contact-cover kit, cable 3 m	85100608

UV SYSTEMS

UV-S300 SERIES - POTABLE WATER AND FOOD INDUSTRY

- Basic control panel with graphic LCD and LED indicator; featuring counter of lamp working hours, remote ON/OFF, alarm relay and switching on / off timer
- "H" version control panel with additional functions to monitor the irradiation / temperature of water, check the panel temperature and shutdown upon overheating of the vessel / electronic unit, and optional 4-20 mA output
- Working pressure: max 10 bar
- Power supply: 230 V~ (standard) 50/60 Hz
- **Lamps:**
  - **Low pressure, mercury vapour**
  - Average working life: 9000 hours
- **Steel vessels**: polished AISI304 or AISI316L (with manual rack cleaning system available for some models upon request)

ITEM	FLOW RATE MAX (m³/h)	LAMPS	HYDRAULIC CONNECT.	UV-C DOSE (J/m²)	AISI304 VESSEL PART NO.	AISI316L VESSEL PART NO.
UV-S 305	30	4 x 80 W	DN80		85108215	85108225
UV-S 305 H					85109215	85109225
UV-S 306	40	5 x 80 W	DN80	400	85108216	85108226
UV-S 306 H					85109216	85109226
UV-S 307	20	3 x 80 W	2" M		85108217	85108227
UV-S 307 H					85109217	85109227

DESCRIPTION	PART NO.
Low pressure lamp, 80 Watt (minimum order quantity: 4 pcs.)	85100106
Quartz for 80 Watt lamp (minimum order quantity: 4 pcs.)	85100205
Contact-cover kit, cable 3 m	85100608

UV-S700 SERIES - BACTERICIDE ACTION WITH AMALGAM LAMPS FOR POTABLE WATER, PHARMACEUTICAL INDUSTRY, IRRIGATION WATERS, AND FOOD INDUSTRY

- Models UV-S 701 / 702 / 703 are available with two options of control panel:
  - **Basic control panel** with graphic LCD and LED indicator; featuring counter of lamp working hours, remote ON/OFF, alarm relay and switching on / off timer
  - **"H" version control panel** with additional functions to monitor the irradiation / temperature of water, check the panel temperature and shutdown upon overheating of the vessel / electronic unit, optional 4-20 mA output and optional lamp power adjustment function
- Models UV-S704 and UV-S 705 are provided with **a control panel with colour touch-screen** with multilingual interface, data log function, USB port, serial communication (Modbus, TCP/IP, RTU), digital outputs, UV dose calculation and lamp power adjustment functions
- Working pressure: max 10 bar
- Power supply: 230 V~ (standard) 50/60 Hz
- **Amalgam lamps**, which guarantee a 100% yield of the emission even with hot water (30 - 60 °C); average life of 14000 hours
- **Steel vessels**, which can be mounted both horizontally and vertically; optional rack cleaning system

ITEM	FLOW RATE MAX (m³/h)	LAMPS	HYDRAULIC CONNECT.	UV-C DOSE (J/m²)	AISI304 VESSEL PART NO.	AISI316L VESSEL PART NO.
UV-S 701	24	1 x 200 W	2" M	> 400	85114211	85114221
UV-S 701 H					85115211	85115221
UV-S 702	50	2 x 200 W	DN80		85114212	85114222
UV-S 702 H					85115212	85115222
UV-S 703	60	2 x 200 W	DN80		85114213	85114223
UV-S 703 H					85115213	85115223
UV-S 704 T+	96	3 x 200 W	DN100		-	85125224
UV-S 705 T+	125	4 x 200 W	DN150		-	85125225

DESCRIPTION	PART NO.
Amalgam lamp, 200 Watt (working life max 14000 hours)	85100110
Quartz for 200 Watt lamp	85100213

UV-S510 SERIES - BACTERICIDE ACTION WITH AMALGAM LAMPS FOR POTABLE WATER, PHARMACEUTICAL INDUSTRY, IRRIGATION WATERS, AND FOOD INDUSTRY

- **Control panel with colour** with multilingual interface, data log function, USB port, serial communication (Modbus, TCP/IP, RTU), digital outputs, UV dose calculation and lamp power adjustment functions
- Working pressure: 10 bar
- Power supply: 230 V~ (standard) 50/60 Hz
- **Amalgam lamps**, which guarantee a 100% yield of the emission even with hot water (30 - 60 °C); average life of 14000 hours
- **Steel vessels**, which can be mounted both horizontally and vertically; optional rack cleaning system

ITEM	FLOW RATE MAX (m³/h)	LAMPS	HYDRAULIC CONNECT.	UV-C DOSE (J/m²)	PART NO.
UV-S 511 T+	160	3 x 400 W	DN150		85126221
UV-S 512 T+	260	4 x 400 W	DN200		85126222
UV-S 513 T+	320	5 x 400 W	DN200		85126223
UV-S 514 T+	445	6 x 400 W	DN230	400	85126224
UV-S 515 T+	630	8 x 400 W	DN250		85126225
UV-S 516 T+	860	10 x 400 W	DN300		85126226
UV-S 517 T+	1010	12 x 400 W	DN400		85126227

DESCRIPTION	PART NO.
Amalgam lamp, 400 Watt (working life max 16000 hours)	85100109
Quartz for 400 Watt lamp	85100207

UV SYSTEMS

EF-U900 / UV-S900 PE SERIES - DISINFECTION OF SWIMMING POOLS, SALT WATER, NAVAL INDUSTRY, AQUARIUMS AND FISH FARMING, IRRIGATION WATER

- EF-U900 PE series and UV-S904 / 905 / 906 / 907 models sare available with two options of control panel:
  - **Basic control panel** with graphic LCD and LED indicator; featuring counter of lamp working hours, remote ON/OFF, alarm relay and switching on / off timer
  - **"H" version control panel** with additional functions to monitor the irradiation / temperature of water, check the panel temperature and shutdown upon overheating of the vessel / electronic unit, optional 4-20 mA output and optional lamp power adjustment function
- Models UV-S908 / 909 / 910 are provided with **a control panel with colour touch-screen** with multilingual interface, data log function, USB port, serial communication (Modbus, TCP/IP, RTU), digital outputs, UV dose calculation and lamp power adjustment functions

- Working conditions: pressure max 6 bar, temperature max 35 °C
- Power supply: 230 V~ (standard) 50/60 Hz
- **Low pressure, mercury vapour lamps**; average life: 9000 hours
- **HDPE vessels**

ITEM	FLOW RATE MAX (m³/h)	LAMPS	HYDRAULIC CONNECT.	UV-C DOSE (J/m²)	STANDARD MODEL PART NO.	"H" MODEL PART NO.
EF-U 900 PE	3	1 x 40 W	1.1/2" F		85106231	85107231
EF-U 901 PE	5	1 x 80 W	1.1/2" F		85106232	85107232
EF-U 902 PE	8	2 x 40 W	2.1/2" F		85106233	85107233
EF-U 903 PE	15	2 x 80 W	2.1/2" F		85106234	85107234
UV-S 904 PE	22	3 x 80 W	DN65		85118231	85119231
UV-S 905 PE	35	4 x 80 W	DN80	> 400	85118232	85119232
UV-S 906 PE	45	5 x 80 W	DN100		85118233	85119233
UV-S 907 PE	60	6 x 80 W	DN100		85118234	85119234
						T+ MODEL
UV-S 908 PE T+	110	2 x 400 W	DN150		-	85127235
UV-S 909 PE T+	150	3 x 400 W	DN200		-	85127236
UV-S 910 PE T+	250	4 x 400 W	DN250		-	85127237

DESCRIPTION	PART NO.
Low pressure lamp, 40 Watt (minimum order quantity: 4 pcs.)	85100105
Low pressure lamp, 80 Watt (minimum order quantity: 4 pcs.)	85100106
Quartz for 40 / 80 Watt lamp (minimum order quantity: 4 pcs.)	85100205
Contact-cover kit, cable 3 m	85100608
Sheath lock	85100606
EF-U control unit for systems with 1 x 30/40 W lamp	85100001
EF-U control unit for systems with 1 x 80 W lamp	85100002
EF-U control unit for systems with 2 x 80 W lamps	85100004

UV SYSTEMS

DISINFECTION SYSTEMS WITH UV RADIATIONS - CHOICE GUIDE

STEIEL offers a full range of systems for water sterilization and debacterization with UV-C radiations.
Models are available for treating installations with a flow rate from 1 to 1000 m3/h, with stainless steel (AISI304 or AISI316L) or HDPE vessel, with mercury vapour (low or medium pressure) or amalgam lamps.
Each system is equipped with a microprocessor-based control unit.

The below tables provide to the customer an useful guide for choosing the model which better fits its needs, depending on the type and flow rate of the water to be treated.

Treatable flow rate (m³/h)	EF-U200 SERIES	UV-S800 SERIES	EF-U100 SERIES	UV-S300 SERIES	UV-S700 SERIES	UV-S510 SERIES	EF-U900 SERIES	UV-S900 SERIES
1000						■		■
800						■		■
600						■		■
400						■		■
200		■				■		■
100		■			■	■		
60		■			■			
50		■			■			
40		■		■				
30	■	■		■				■
20	■	■		■				■
10	■	■	■				■	
5	■	■	■				■	
3	■		■				■	

Intended use	EF-U200 SERIES	UV-S800 SERIES	EF-U100 SERIES	UV-S300 SERIES	UV-S700 SERIES	UV-S510 SERIES	EF-U900 SERIES	UV-S900 SERIES
Potable water			■					
Food industry				■		■		
Pharmaceutical industry					■	■		
Salt water							■	■
Aquariums / Fish farming							■	■
Irrigation water					■			
Naval industry							■	■
Swimming pools (disinfection)	■						■	
Swimming pools (abatement of combined chlorine)		■						

UV SYSTEMS

Notes

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MADE IN **ITALY** MADE IN

QUALITY SYSTEM CERTIFICATION
DNV
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