

# Swimming pool

Dosing pumps, dosing systems,  
instruments and control panels

-  for **residential** swimming pools
-  for **professional** swimming pools
-  for all the **swimming pool** applications



# Dosing systems, instruments and control panels

## for **residential** swimming pools

### combined systems

Combined systems with peristaltic pumps, electromagnetic pumps and control instruments.

The measure units for domestic applications have been designed so they do not require the presence of technical personnel.

These devices automatically measure and verify the values of the swimming pool.

#### PARAMETERS

- pH and ORP
- pH- and pH+
- pH and Flocculants
- pH and Hydrogen Peroxide (according to preset times)
- pH, ORP and Flocculants
- pH-, ORP and pH+

#### MEASURE RANGE

- **pH** : 0 ÷ 14
- **ORP** : ± 1 000 mV
- Volumetric method

#### PERISTALTIC DOSING PUMPS

- **PWM** (Pulse With Modulation) proportional dosing method
- **Santoprene** tube
- **Transaxle** technology
- Stabilized power supply **240 Vac 50/60 Hz** with reduced power consumption
- **Flow rate** :
  - 1.5 l/h at 1.5 bar
  - 5 l/h at 1.5 bar
- Automatic calibration
- Recirculation pump with automatic flow rate control



#### PoolBasic EVO

System with a single peristaltic pump with proportional dosing method

##### MODELS

###### pH

For the pH control. Reading indicated by LED

###### mV

For the ORP control. Reading indicated by LED

###### Plus / Plus mV (shuko)

For the pH or ORP control

###### PRO

By external signal from 4÷20 mA or pulse signal

###### TIME

With weekly timer to set the precise volumes for each day of the week



#### PoolBasic PRO

System with two peristaltic pumps with proportional dosing method

##### MODELS

###### pH ORP / pH ORP (shuko)

For the pH and Chlorine control by measuring the pH and ORP values

###### pH- / pH+

For the pH- and pH+ control through a simple pH measurement

###### pH / Flocculants

For the pH control. Timed dosage method to control the flocculants

###### pH / H<sub>2</sub>O<sub>2</sub>

For the pH control. Timed dosage method to control the flocculants

###### pH ORP / Flocculants

For the pH or ORP control. Timed dosage method to control the flocculants

###### pH- / ORP / pH+

For the pH-, pH+ and ORP control



#### Kommander

Weekly timer to control the heat pump and the recirculation pump

##### MODELS

###### pH / ORP

Peristaltic dosing pump system with proportional dosing method to control the pH and ORP

###### pH / ORP / Flocculants

Peristaltic dosing pump system with proportional dosing method to control the pH and ORP. Timed dosage method to control the flocculants.



#### Kontrol Invikta

It's an easy-to-use dosing system composed of a control instrument and an electromagnetic dosing pump.

This system is the best solution for pH or ORP measurement in applications where dosing is required with a backpressure up to 5 bar.



## Pool Basic PRO EVO pH Chlorine

pH and Chlorine version - Amperometric pH and Chlorine sensor [CU-PT]

### FEATURES

- Chlorine reading directly displayed in ppm
- Easy to manage and display measurements
- Chlorine and pH sensor with reduced maintenance
- Proportional dosing

Compact and easy to use, the Easy series panels are complete with all the accessories needed for immediate installation

(buffer solutions for pH and ORP calibration, DPD colorimetric system for Chlorine calibration).

### MAIN FEATURES

- Automatic calibration of all measurements
- Compact probe holder, complete with filter
- No water flow alarm signal
- Instruments with IP65 protection level
- Alarm relay (5 A - 250 Vac)
- Power supply 230 Vac (standard) or 115 Vac (on demand)
- Programmable set-point and alarm
- Pump pause function during calibration operations
- Temperature reading and compensation (automatic, with PT100 optional probe)
- Adjustments on set point: On/Off, pause/run, proportional by impulse



## Easy pH-ORP

### FEATURES

**pH** : 0 ÷ 14,0 pH

**ORP** : 0 ÷ 1500 mV

**Relay** : 250 V 10 A (resistive charge) for each measurement

**Electric unit** : with 230 Vac power supply to be connected to external dosing pump



## Easy Basic pH and ORP

### FEATURES

**pH** : 0 ÷ 14,0 pH

**ORP** : 0 ÷ 1500 mV

**Peristaltic dosing pump :**

– Flow rate : 1,5 l/h

– Pressure : 1,5 bar



## Easy Invikta pH and ORP

### FEATURES

**pH** : 0 ÷ 14,0 pH

**ORP** : 0 ÷ 1500 mV

**Electromagnetic dosing pump :**

– Flow rate : 5 l/h

– Pressure : 5 bar

# Dosing systems, instruments and control panels

for **professional** swimming pools

assembled panels

The Kontrol 800 instrument responds to the demand expressed by the market of a complete and functional system.

Thanks to the alphanumeric display (4 lines and 20 letters), it is possible to view all the measurements.

The control unit presents the following outputs:

- Four relays (power supply)
- Two relay (dry contact)
- Four 4 ÷ 20 mA outputs
- Four frequency outputs
- RS485 serial port with Modbus RTU communication protocol

Panel with 2 dosing pumps, integrated control, transparent hydraulic probe holder, filter and enclosure box.



## Kontrol 800

Multiparameter instrument for simultaneous measurement of 4 parameters

MEASURE RANGE

**pH** : 0 ÷ 14,0 pH

**ORP** : 0 ÷ 1500 mV

**Free Chlorine** : 0 ÷ 5,00 ppm

**Temperature** : 0÷100 °C



## Kontrol 800 Panel

Panel complete with probe holders and control and measurement instrument

FEATURES

**Panel size**

700 x 420 x 10 mm in PVC

**Transparent hydraulic probe holder**

Transparent with ZIF connection (zero input force)

**Inlet/outlet tubes** 8 x 12 mm

**Pressure** 3 bar

**Temperature** 50°C



## Kontrol TMP/TPR Panel

TEKNA TPR 603 PUMP

MEASURE RANGE

**pH** : 0 ÷ 14,0 pH

ELECTROMAGNETIC DOSING PUMP

**Flow rate** 8 l/h

**Pressure** 2 bar

TEKNA TMP 603 PUMP

MEASURE RANGE

**Free Chlorine** : 0 ÷ 200 ppm

**H<sub>2</sub>O<sub>2</sub>** : 0 ÷ 100,000 ppm

**CH<sub>3</sub>CO<sub>3</sub>H** : 0 ÷ 100,000 ppm

ELECTROMAGNETIC DOSING PUMP

**Flow rate** 8 l/h

**Pressure** 2 bar

The PhotoMeter is a photometer ideal for the automatic measurement of Free or Total Chlorine.

The photometer finds its application in general in all the systems or swimming pools where, for health purposes, there is a need to chlorinate the water and maintain the chlorine levels within the limits set by the legislation.

**GRAPHIC DISPLAY**

Display **LCD STN** 240x128 with backlight for simultaneous reading of the measure and temperature parameters + the trend line, the digital output status, storage status, errors and photometric measurement phase

**INTERNAL DATA LOGGER**

4 Mbit flash memory equivalent to 16000 records

**ANALOGUE OUTPUTS**

1 for each measured parameter

**RS485 SERIAL PORT**

MODBUS RTU protocol (baud rate from 1200 to 38400) for set-up, real time status or data upload



**Pool Photometer**

Multiparameter control unit for specific swimming pool applications

**MEASURE RANGE**

- pH** : 0 ÷ 14,0 pH
- ORP** : 0 ÷ 1500 mV
- Free Chlorine** : 0 ÷ 5,00 ppm (with DPD automatic method)
- Temperature** : 0÷100 °C

**RELAY**

- Free Chlorine (2)
- pH (1)
- ORP (1)
- Alarm (1)



**Photometer systems**

Control unit for measurement of 6 parameters

**MEASURE RANGE**

- pH** : 0 ÷ 14,0 pH
- ORP** : 0 ÷ 1500 mV
- Free/Total Chlorine** : 0 ÷ 5,00 ppm (with DPD automatic method)
- Combined Chlorine** : 0 ÷ 5,00 ppm (by calculating the extent)
- Temperature** : 0÷50 °C

**RELAY**

- Free Chlorine (2)
- pH (1)
- ORP (1)
- Alarm (1)



**PoolChem Systems**

**chlorine dissolving/dosing system**

A unit for dissolving chlorine granules (chlorine isocyanurate, calcium or sodium hypochlorite) into the swimming pool water, as necessary.

Three working modes are available:

- The manual operation mode activates the continuous production to preset dosage (or with the set working / pause dosage times).

- The automatic ON/OFF operation mode starts the production to preset dosage only if triggered by an external consent (for example of a control unit), and follows the set working / pause dosage times.
- The automatic proportional operation mode provides a variable production according to the analogue signal in mA from a control unit (which generally is an MCO03 chlorine controller). The time settings for a maximum production must be defined into the POOL-CHEM unit. It is possible to change the production by adjusting the distribution motor speed.

# Peristaltic, electromagnetic and electromechanical dosing pumps for all the **swimming pool** applications

## dosing pumps

### Peristaltic dosing pumps

The peristaltic technology guarantees low noise level and reduced maintenance.

The chemical feed is aspirated by exerting a pressure on the membrane hose. This ensures a gentle handling of the metered fluid.

The housing is made of shockproof and chemical resistant PPE with IP65 protection degree and it is equipped with several inputs for dosing configuration.

Typical applications are processes that require only a low discharge pressure, such as chemical dosing in swimming pool applications.



### Peristaltic pump

#### PRODUCT LINE

#### PE-1,5.1,5

constant flow rate  
1,5 l/h at 1,5 bar

#### PE-1,5.05

constant flow rate  
5 l/h at 1,5 bar

#### PR4

constant flow rate  
4 l/h at 1,5 bar



### Dynamik PRO ESSENCE TUBE

Digital peristaltic pump with a low dosage from 2,5 cc/hour to 9700 cc/hour.

#### FEATURES

Speed controlled by software, Transaxle technology, level control, priming by ON OFF switch, power supply 100÷240 Vac, display LCD, external trigger 24÷240 Vac and constant dosage.



### Kronos

Peristaltic dosing pump driven by a stepper motor

**Flow rate :** up to 10 l/h  
(Minimum value of 2 ml/h continuous)

**Pressure :** up to 3 bar

#### Stepper motors

Accurate, reliable and ultra quiet <35 dB with direct coupling

### Electromechanical dosing pumps

Dosing pumps with spring return mechanism. Plunger and mechanical diaphragm metering pumps.

Three sizes of mechanism and wide range of models with different performances allow the user to find the best solution for any application.



### Spring

#### PRODUCT LINE

#### PS1

Maximum flow rate : 304 l/h  
Maximum pressure : 20 bar

#### PS2

Maximum flow rate : 1000 l/h  
Maximum pressure : 20 bar

#### MS1

Maximum flow rate : 460 l/h  
Maximum pressure : 10 bar

#### MS0

Maximum flow rate : 47 l/h  
Maximum pressure : 5 bar

## Electromagnetic dosing pumps

The high frequency of dosing pulses and the full chemical compatibility of the components make them extremely accurate and versatile.

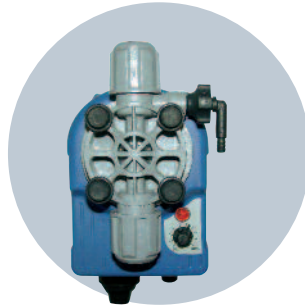
Thanks to the electronic microprocessors, can be easily adapted to every need of dosage.

### ANALOGUE DOSING PUMPS

- Constant flow rate manually adjustable by control knob situated on the front panel, two frequency range (0 ÷ 20% or 0 ÷ 100%)
- Constant flow rate manually adjustable, proportional flow rate according to an external analogue (4 ÷ 20 mA) or digital signal (pulse signal)
- Constant flow rate manually adjustable and timed dosage with T.on/T.off regulation

### DIGITAL DOSING PUMPS

- Constant flow rate manually adjustable, proportional flow rate according to an external analog (4 ÷ 20 mA) or digital signal (pulse signal)
- Built in pH/ORP control meter
- Hydrogen Peroxide, Chlorine or pH measurement
- Constant flow rate manually adjustable or automatically by switch



### Invikta

#### FEATURES

- **Flow rate :** 2 or 5 l/h
- **Pressure :** 7 or 5 bar
- **Full chemical compatibility**
- **Reduced maintenance**



### Kompakt

#### FEATURES

- **Flow rate :** 5 or 3 l/h
- **Pressure :** 8 or 10 bar
- **Full chemical compatibility**
- **Reduced maintenance**

#### AVAILABLE VERSIONS

Analogue or digital interface, constant flow rate controlled with timer or adjustable by knob or proportional flow rate according to an external analog or digital signal.



### Tekna EVO

#### FEATURES

- **Flow rate :** 0,4 to 54 l/h
- **Pressure :** up to 20 bar
- **Full chemical compatibility**
- **Reduced maintenance**
- **Stable dosing performance**

#### AVAILABLE VERSIONS

Analogue or digital interface, constant flow rate controlled with timer or adjustable by knob or proportional flow rate according to an external analog or digital signal.



### Pool Cleaning

Specially designed for the intensive cleaning and disinfection of floors and surfaces.

### disinfection station

- Avoids waste of water, contributing thus to environmental protection and to cost optimization. Allows an effective mixing thanks to the assisted calibration.
- Reduced maintenance thanks to the additional plastic eductor (Venturi).
- Can be connected directly to a tap.
- Works without electricity or compressed air.
- Customizable by screen printing.

# A Worldwide Group at your service

**seko** has been a significant manufacturer of metering pumps and dosing systems for over 40 years. This long activity allowed seko to acquire a vast experience in diversified applications and to confirm its international success in many industrial fields through the supply of reliable solutions for the dosing, injection and transfer of liquids

Today **seko** is an International Group, developing, manufacturing and delivering its products in more than 50 countries, through its 16 subsidiaries and an extended network of distributors, agents and authorized dealers



## **BRAZIL**

■ **Seko do Brasil Comercio de Sistemas de Dosagem Limitada**  
03170-050 São Paulo (SP)  
Phone: +55 11 2606 9878  
Fax: +55 11 2606 9878  
sekobrasil@sekobrasil.com.br  
www.sekobrasil.com.br

## **CHINA**

■ **Seko China Ltd**  
072750 Hebei  
Phone: +86 312 552 0904  
Fax: +86 312 552 0901  
china@seko.com  
www.sekochina.com

## **DENMARK**

■ **Seko Denmark**  
DK-4930 Maribo  
Phone: +45 5475 7545  
Fax: +45 5474 7545  
info@seko.com

## **FRANCE**

■ **Seko Lefranc-Bosi S.A.**  
77435 - Marne La Vallée Cedex 2  
Phone: +33 1 6005 9060  
Fax: +33 1 6480 4104  
lefrancbosi@lefrancbosi.com  
service.commercial@seko.fr  
www.lefrancbosi.com

## **GERMANY**

■ **Seko Deutschland GmbH**  
55252 Mainz - Kastel  
Phone: +49 6134 2858 10  
Fax: +49 6134 2858 29  
info@seko-messtechnik.de  
www.seko-germany.com

## **ITALY**

■ **Seko Spa**  
Via Salaria Km. 92,200  
02010 S.Rufina - Rieti  
Phone: +39 0746 605801  
Fax: +39 0746 607072  
sales@seko.com

## **ITALY**

■ **Seko Spa [Process & Sytems]**  
Via Di Vittorio, 25  
20068 Peschiera Borromeo - Milano  
Phone: +39 02 97372411  
Fax: +39 02 55301744  
info.psd@seko.com  
info@seko.com

## **ROMANIA**

■ **Seko Sieta S.r.l.**  
400393 Cluj-Napoca  
Phone: +40 264 415 251  
Fax: +40 264 415 622  
info.dpro@seko.com

## **RUSSIA**

■ **OOO Seko**  
129347 - Moscow  
Phone: +74 99 182 52 36  
Fax: +74 99 182 52 36  
sekorussia@seko.com  
www.sekorussia.ru

## **SINGAPORE**

■ **Seko Dosing Systems Asia Pacific Pte Ltd**  
608838 Singapore  
Phone: +65 6515 6996  
Fax: +65 6515 5079  
asiapacific@seko.com

## **SOUTH AFRICA**

■ **Seko Southern Africa (PTY) Ltd**  
Kyasand - Johannesburg - Gauteng  
Phone: +27 11 704 6589  
Fax: +27 11 704 6588  
sales@sekosa.co.za

## **SPAIN**

■ **Seko Ibérica Sistemas de Dosificación S.A.**  
08960 Sant Just Desvern - Barcelona  
Phone: +34 93 4802 570  
Fax: +34 93 4802 571  
sekoiberica@sekoiberica.com

## **SWEDEN**

■ **Seko Sweden**  
26123 Landskrona  
Phone: +46 418 448 482  
Fax: +46 418 448 483  
info@seko.com

## **TURKEY**

■ **Seko Endüstriyel Pompalar ve Proses Sistemleri San. ve Tic. Ltd. Şti.**  
Kartal Istanbul  
Phone: +90 216 353 2542  
Fax: +90 216 353 1450  
info@seko.com.tr  
www.seko.com.tr

## **UNITED ARAB EMIRATES**

■ **Seko Middle East FZE**  
P.O. Box 42090  
Hamriyah Free Zone Phase II, Sharjah  
Phone: +971 6 5138700  
Fax: +971 6 5269188  
info@seko.ae  
sales@seko.ae

## **UNITED KINGDOM**

■ **Seko UK Chemical Controls Ltd**  
Harlow, Essex - CM19 5JH  
Phone: +44 1279 423550  
Fax: +44 1279 423993  
seko.uk@seko.com  
www.sekouk.com

## **USA**

■ **Seko Dosing Systems Corporation**  
Tullytown - PA 19007  
Phone: +1 215 945 01 25  
Fax: +1 215 945 09 37  
sales@sekousa.com  
www.sekousa.com

For more information  
[www.seko.com](http://www.seko.com)

