

POOLDOSE DOUBLE

INSTRUCTIONS MANUAL **EN**

HANDBUCH **DE**

MANUAL DE INSTRUCCIONES **ES**

MANUEL D'INSTRUCTIONS **FR**

MANUALE D'INSTALLAZIONE **IT**



WARNING!

Before carrying out ANY work inside control panel of the PoolDose device, make sure you disconnect it from the power supply.

Failure to comply with the instructions contained in this manual could cause injury to people and/or damage to the appliance and the system.

1. PACKAGE CONTENT

A: PVC Crystal 4x6 suction hose (4 m)	B: Polyethylene delivery hose (5m)	C: FPM Lip valve (3/8" GAS)	D: PSS3 probe-holder (1/2" GAS)	E: Tapping saddle (φ=50mm)	F: Reducer for injection valve (1/2" M to 3/8" F)
G: Foot filter (PP riser)	H: Mounting bracket kit (φ=6 mm screws)	L: Temperature sensor	M: pH probe	N: ORP probe	O: Probes holder + Chlorine probe
P: Filter Minor (5") + PSS3 probe-holder (1/2" GAS)	Q: Cleaning brush chlorine probe	R: Balls for chlorine probe	S: pH 4 Buffer solution	T: pH 7 Buffer solution	U: 465 mv Calibration solution
V: Water					

Item*	System	Double pump	
		PoolDose pH / ORP	PoolDose pH / ORP / CL
A		2	2
B		2	2
C		2	2
D		2	-
E		4(*1)	4(*1)
F		2	2
G		2	2
H		1	1
L		1 (*2)	1 (*2)
M		1	1
N		1	1
O		-	1
P		-	1
Q		-	1
R		-	1
S		1	1
T		1	1
U		1	1
V		1	1

*NOTE: The values from the table represent the number of items inside the package.

(*1 Five pieces for the WiFi model only)

(*2 One piece for the WiFi model only)

PoolDose | pH · ORP · Chlorine

WARNING!

These products are **DANGEROUS (I★A)** and require special precautions during use, handling and storage.

- **NEVER mix chemical products.**
- NEVER allow children or people who have not read this manual to use or tamper with PoolDose or any of its peripheral components (including chemical products).

pH chemical products:

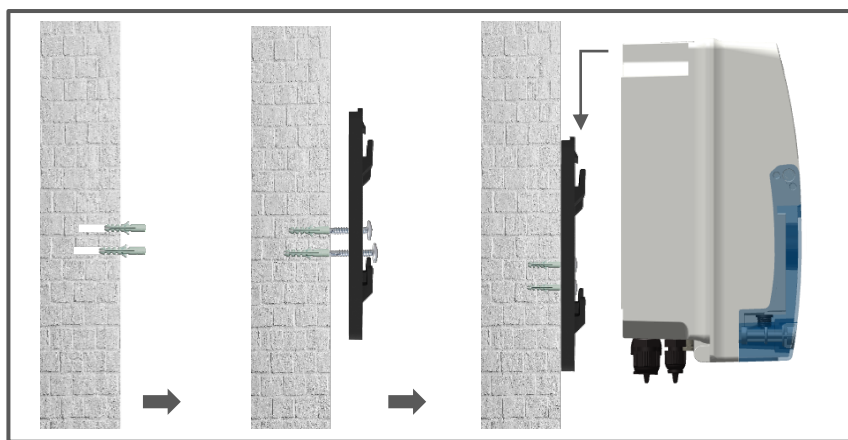
- **ABSOLUTELY** not recommended => pure sulphuric acid
- Recommended for lowering pH => negative pH (with a sulphuric acid base)
- Recommended for raising pH => positive pH (sodium carbonate or bicarbonate)

ORP chemical products:

- **ABSOLUTELY** not recommended => all types of organic chlorine
- Liquid chlorine or 12% bleach can be used neat. If the product has a concentration of 48%, it is necessary to dilute it in water in a 1:3 ratio.

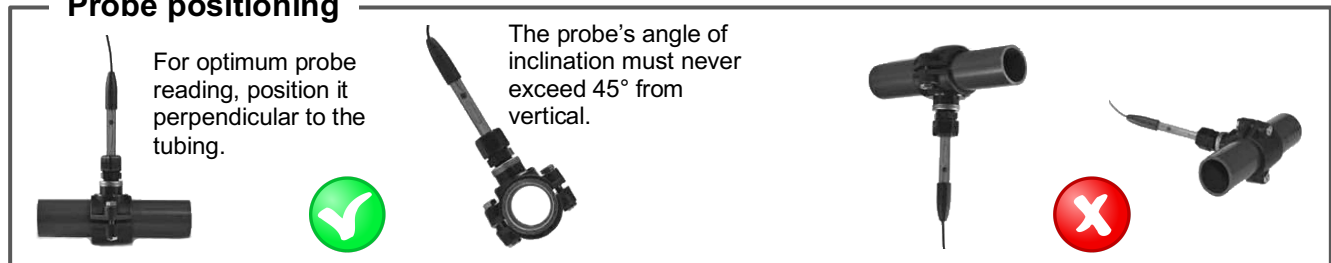
The pH / ORP probes are subject to wear and tear and therefore are not covered by the warranty.

2. INSTALLATION INSTRUCTIONS

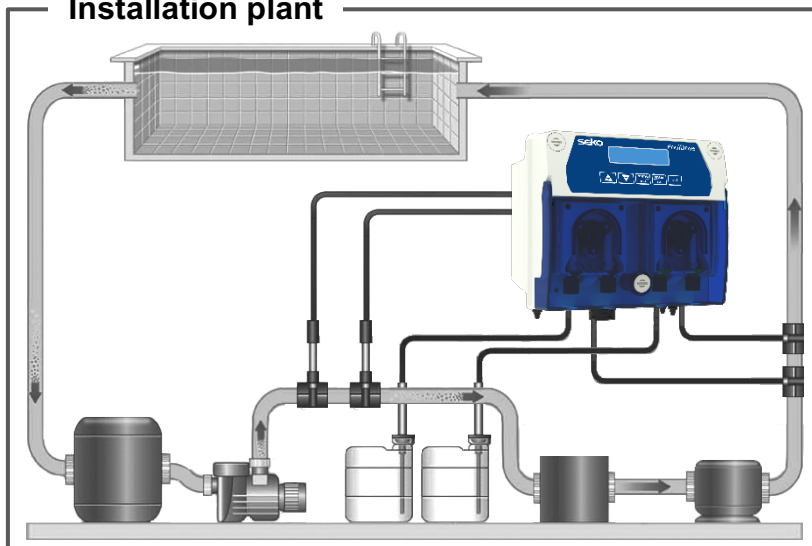


Make sure that the injection pressure is below 1.5 bar

Probe positioning



Installation plant



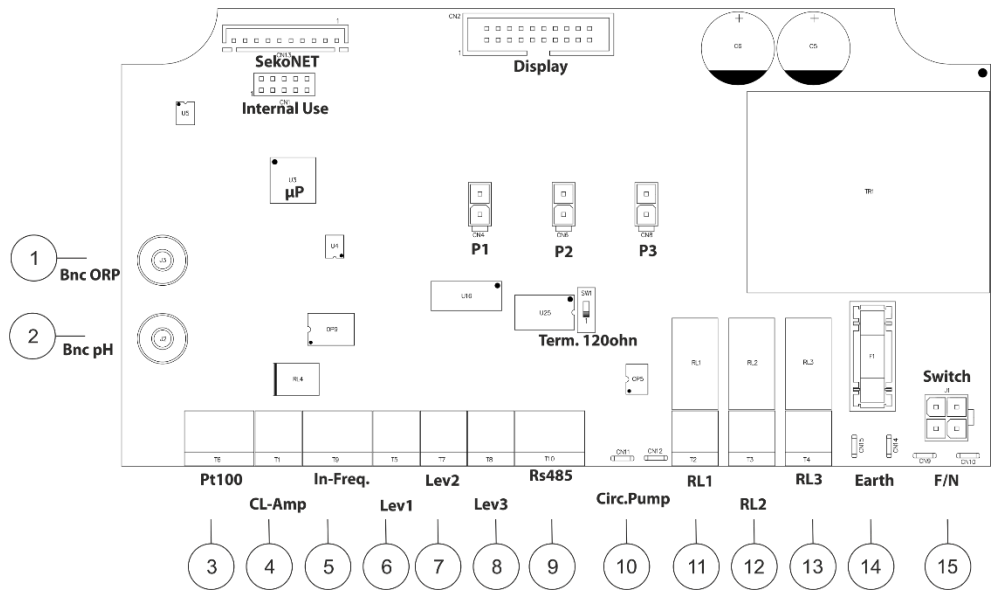
Warning!

Use with salt chlorinator:

For the pH systems, to prevent the risk of system malfunctioning or damage, observe the following instructions:

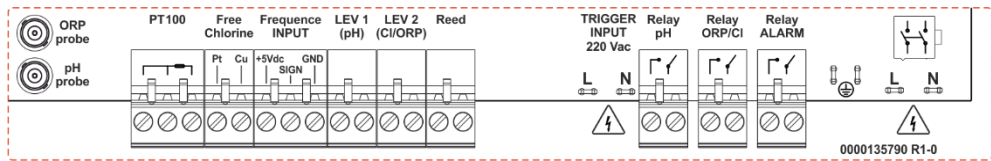
1. Position the pH measuring probe prior to the chlorinator cell.
2. To eliminate eddy currents, connect the pool water to an electrical ground point
3. Position the product injection point after the chlorinator cell.

3. ELECTRICAL CONNECTIONS



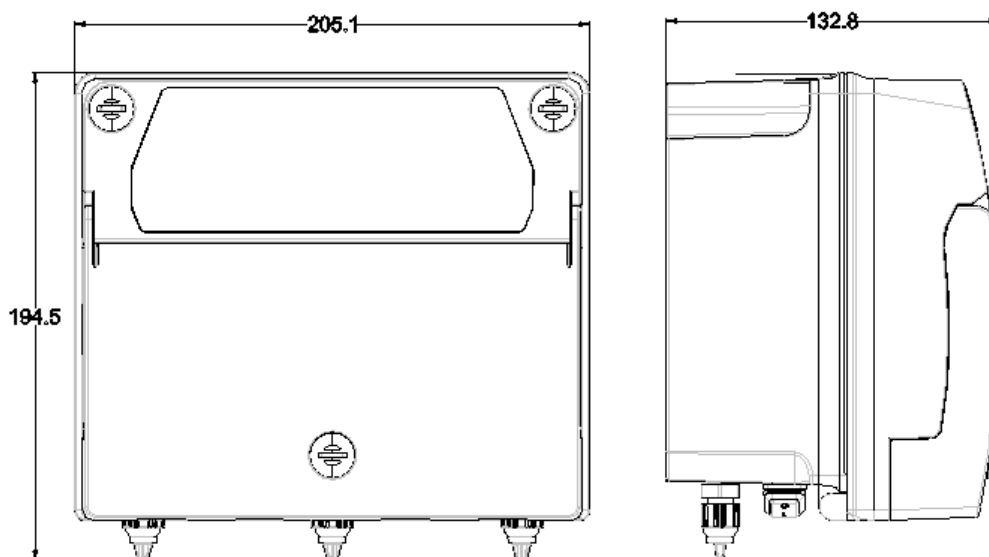
Double pump system			
Clamp	Description	PoolDose pH · ORP	PoolDose pH · ORP · CL
1	Input Probe	ORP	ORP
2	Input Probe	pH	pH
3	Input Probe	TEMP (PT100)	TEMP (PT100)
4	Input Probe	Not used	Free Chlorine
5	Input Freq. signal	Flow Rate (Freq. Input)	Flow Rate (Freq. Input)
6	Level (product tank)	pH Level probe	pH Level probe
7	Level (product tank)	Chlorine (ORP) level probe	Chlorine level probe
8	Level (External Reed flow sensor)	Flow (REED sensor)	Flow (REED sensor)
9	Serial Port	Not present	Not present
10	Trigger Input 220Vac (High Voltage)	Circulation Pump (220Vac input)	Circulation Pump (220Vac input)
11	Output Relay R1	RL1 AUX1 pH	RL1 AUX1 pH
12	Output Relay R2	RL2 AUX2 OPR/Chlorine	RL2 AUX2 OPR/Chlorine
13	Output Relay R3	RL3 Alarm	RL3 Alarm
14	Earth connector	Earth	Earth
15	Power Supply	220-240 Vac 50-60 Hz (F/N)	220-240 Vac 50-60 Hz (F/N)
P1	Peristaltic pump connection	pH	pH
P2	Peristaltic pump connection	Chlorine (ORP)	Chlorine
P3	Peristaltic pump connection	Not used	Not used
SekoNet	WiFi Module	WiFi card (dedicate code)	WiFi card (dedicate code)

Label connections

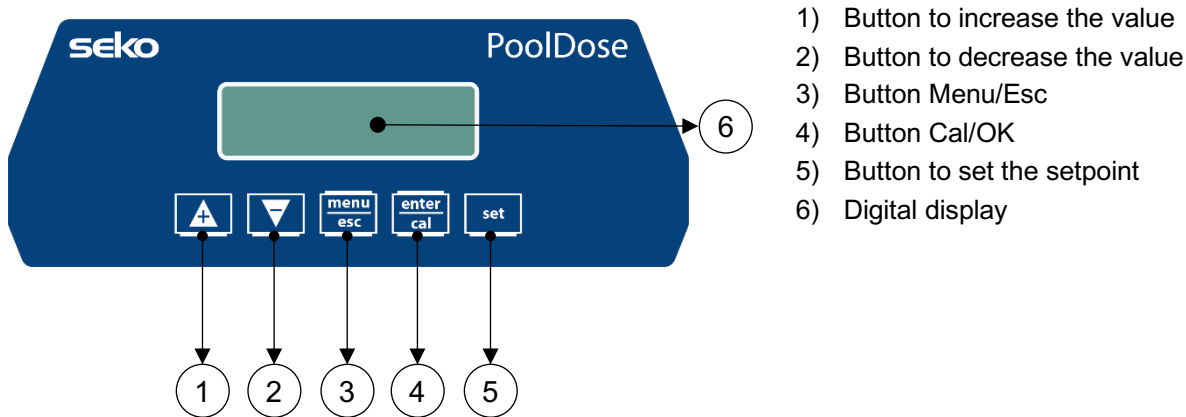


4. TECHNICAL SPECIFICATIONS

Specifications	PoolDose Double PH/ORP	PoolDose Double PH/ORP/Chlorine
Dimensions (H-W-D)	H:194,5x W:205,1x D:132,8 mm	H:194,5x W:205,1x D:132,8 mm
Weight	3,5 Kg	3,5 Kg
Pump state	Pause – Supply	Pause – Supply
Probe calibration	Automatic	Automatic
Power supply	220-240 VAC 50-60 Hz	220-240 VAC 50-60 Hz
Consumption (W)	28 Watt	28 Watt
Device precision	± 0.1 pH; ±10mV; ±1°C	± 0.1 pH; ±10mV; 0.1 ppm; ±1°C
Accuracy	±0,02pH, ±3mV; ±0,5°C	±0,02pH, ±3mV; 0,05 ppm; ±0,5°C
Range	0-14pH; -99 -1000mV; 0...+55°C	0-14pH; -99 -1000mV; 0-5 ppm; 0...+55°C
Flow rate pump (l/h)	1.5 l/h	1.5 l/h
Max. back-pressure	1.5bar	1.5bar
Relay contact (number 3)	250 Vac 10A (resistive load)	250 Vac 10A (resistive load)
Fuse	500 mA (fast)	500 mA (fast)



5. SETTING PROGRAM



Program Setup – Press **menu/esc** for 5 seconds

At the entry of each menu item, the parameter can be directly modified using the arrow keys (**▲** and **▼**).

Confirmation of the current setting and switching to the next item is done by pressing the **enter/cal** button.

The menu has a circular structure: once you arrive at last item, the confirmation of the parameter set by pressing **enter/cal**, determines the return to the first menu item.

1 LANGUAGE – It is possible to select between 5 available languages: **EN**, FR, IT, DE, ES

2 PH

- SETPOINT – **7.4pH** (5-9pH)
- SETPOINT TYPE: – **Acid** (Acid/Alka)

* Timed dosing only

- TIME ON = 30seconds (range from 1 to 360 seconds)
- TIME OFF = 60seconds (range from 1 to 360 seconds)
- **Temperature:** 25°C; set °C/°F and the manual value
- **OFA Alarm:** Off, 1-60' (minutes)

3 ORP

- SETPOINT – **700 mV** (400-850mV)
- SETPOINT TYPE: **Low** (Low/High)

* Timed dosing only

- TIME ON = 30seconds (range from 1 to 360 seconds)
- TIME OFF = 60seconds (range from 1 to 360 seconds)
- **OFA Alarm:** Off, 1-60' (minutes)

- **Note:** The ORP dosing, in the presence of Chlorine has no effect on the dosing pump, but can handle the Aux2 Relay with ON/OFF activation with respect to the setpoint.

4 CHLORINE

- SETPOINT – **1.2 ppm**(0.3-3.0 ppm)
- SETPOINT TYPE: **Low** (Low/High)

* Timed dosing only

- TIME ON = 30seconds (range from 1 to 360 seconds)
- TIME OFF = 60seconds (range from 1 to 360 seconds)
- **OFA ALARM:** Off, 1-60' (minutes)

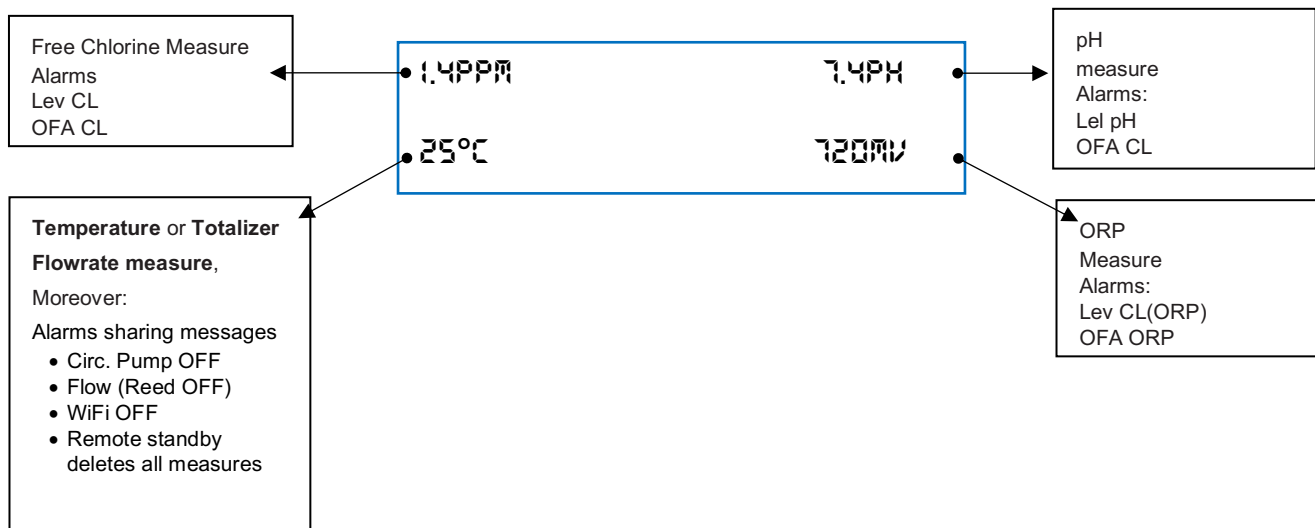
5 ADVANCED MENU

- CIRCULATION PUMP – (Enabled/Disabled)
- IN FREQ (Input flow rate)
 - OFF/ON
 - Pulse/Liter:1 or Liter/pulse:1 – Set value
 - Unit: L or m³
- CALIBRATION PH: 2 points, 1 point, Reference, Disable
- CALIBRATION ORP: 1 point, Reference, Disable

- CALIBRATION CL: 2 points, Disable,
- CALIBRATION TEMP: Reference, Disable,
- DOSING TYPE PH: Proportional, OFF, Timed, On/OFF
- DOSING TYPE ORP: Proportional, OFF, Timed, On/OFF
 - **Note:** The ORP dosing is disabled if DOSING TYPE CHLORINE is different than OFF
- DOSING TYPE CHLORINE: Proportional, OFF, Timed, On/OFF
- AUX RELAY
 - AUX1 RELAY: pH, Disable
 - AUX2 RELAY: Chlorine, ORP, Disable
 - **Note:** Aux1 and Aux2 relays dose with ON/OFF method
- PASSWORD: 0000 (**Note:** password disabled, set a value other than: 0000)
- RESET CALIBRATION: (**Note:** select the measure to reset: pH; Chlorine; ORP)
- RESET ALL PARAMETERS
- PROG CONTROL PANEL: displays the electrical signals
- REED (display error, when red): NO/NC
- POWER ON DELAY: Disables the dosing pumps for the set time
- FLOW DELAY: Disables the dosing pumps for the set time

Note: Timeout setting menu, after 120 seconds without action the controller escape itself without saving parameters.

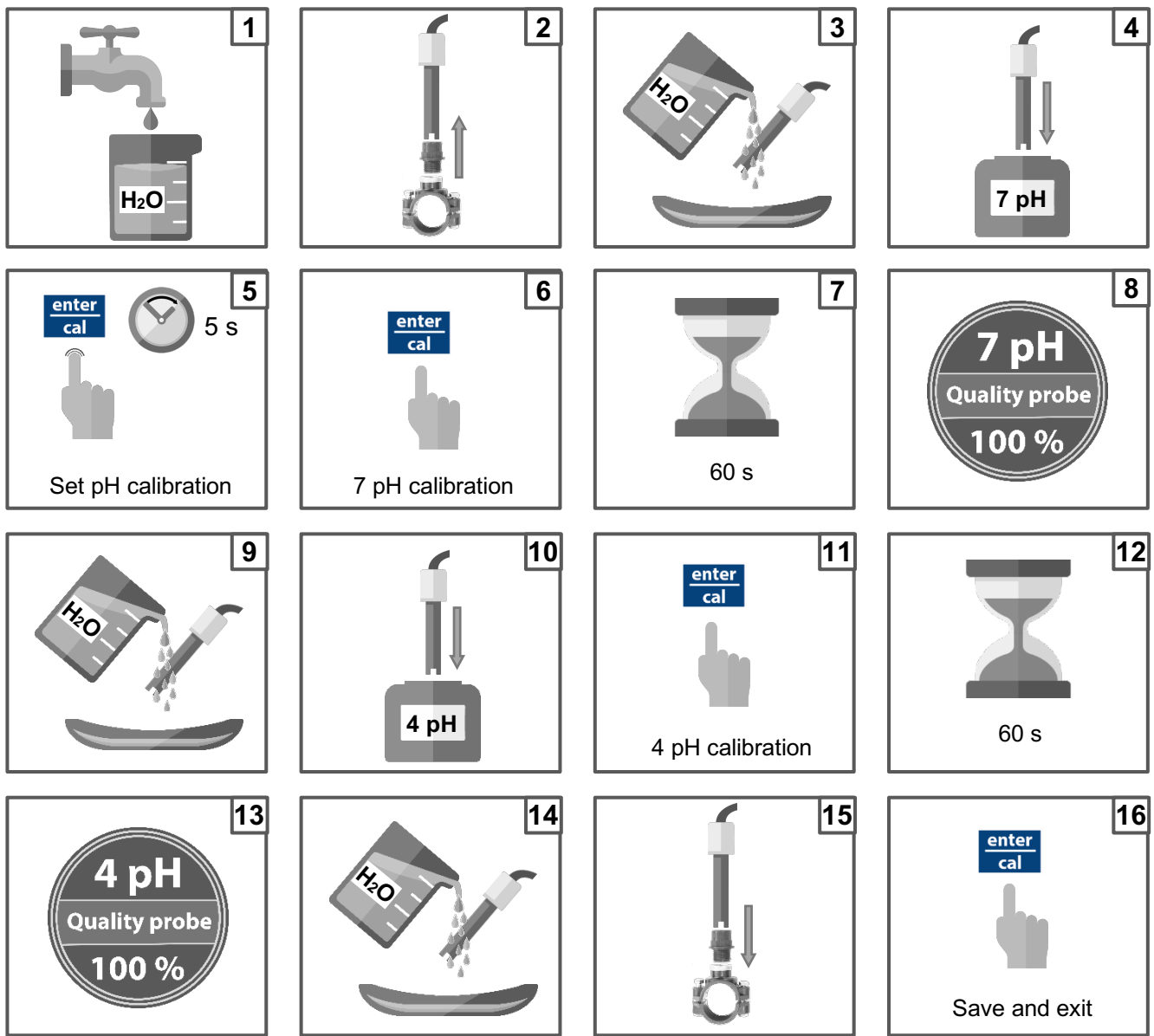
View Parameters



Calibration Menu:

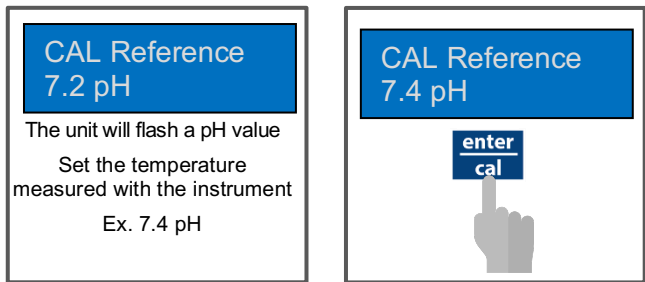
Press  (3 seconds) and calibrate probe pH, Chlorine, Temperature, ORP

6. PH CALIBRATION

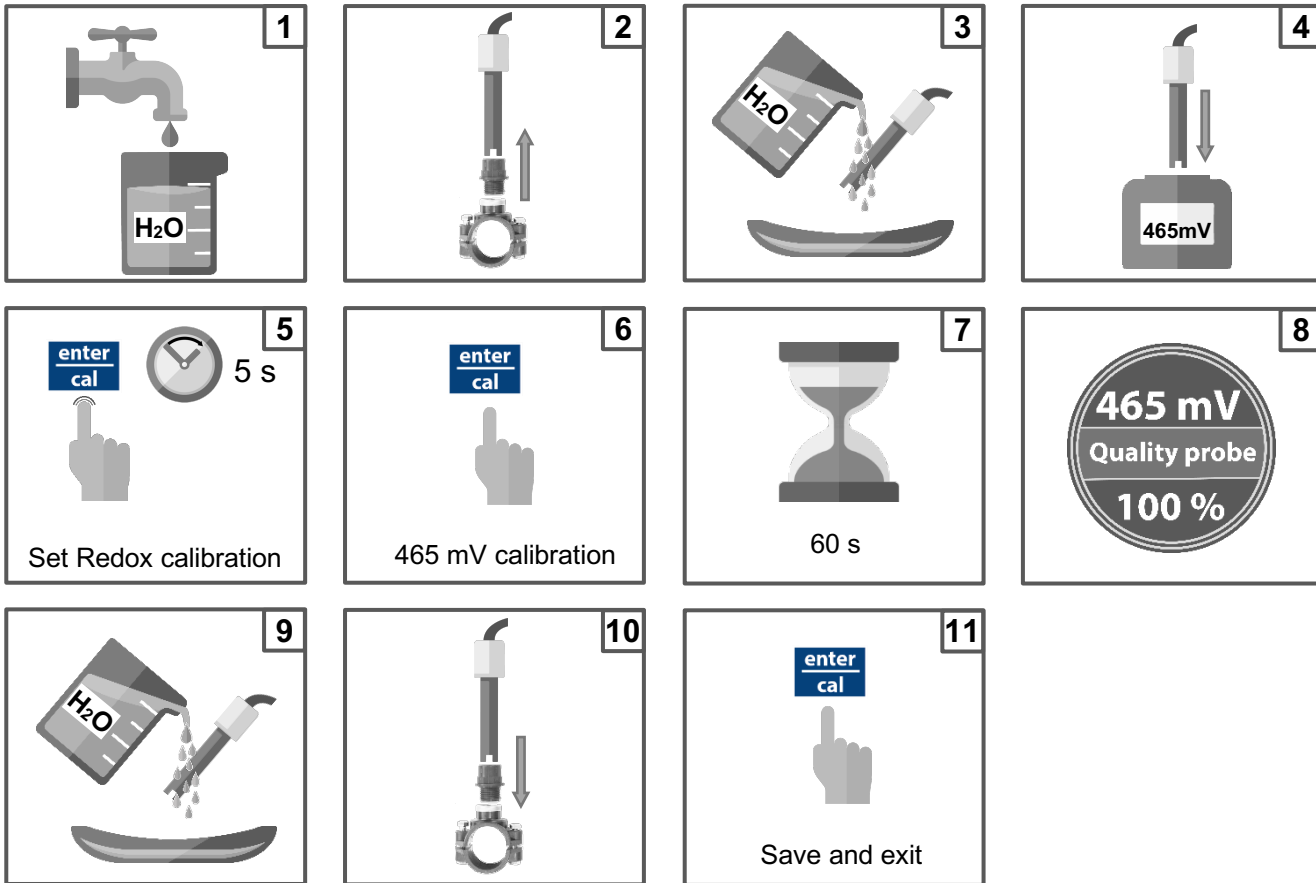


Note: If you have selected the “1 point cal.”, the calibration will be made only in 1 point using the 7 pH buffer solution.

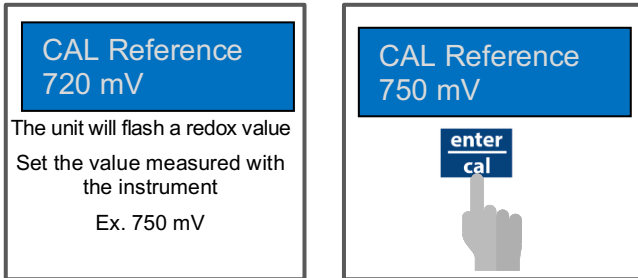
Reference calibration



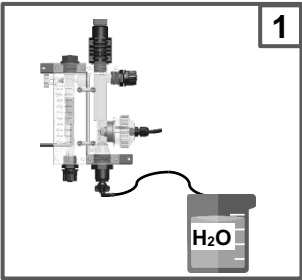
7. ORP CALIBRATION

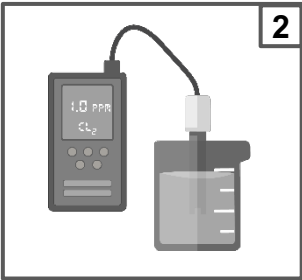


Reference calibration



8. CHLORINE CALIBRATION

1

2

3

enter
cal



Select Cl calibration

4

enter
cal



5

10 s

6

0.8 PPM

The unit will flash a Cl value
Set the Cl value measured
with the instrument
Ex. 1.0 ppm Free Cl

7

1.0 PPM

enter
cal



8

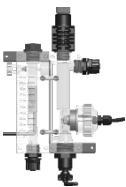
10 s

9

The unit saves the
parameters.

10

Close flowrate



11

If flowrate is closed

enter
cal



12

100 s

13

0.0 PPM

enter
cal



14

10 s

15

Save and exit

9. TEMPERATURE CALIBRATION

CAL Reference
26°C

The unit will flash a temperature
value
Set the temperature value
measured with the instrument
Ex. 27°C

CAL Reference
27°C

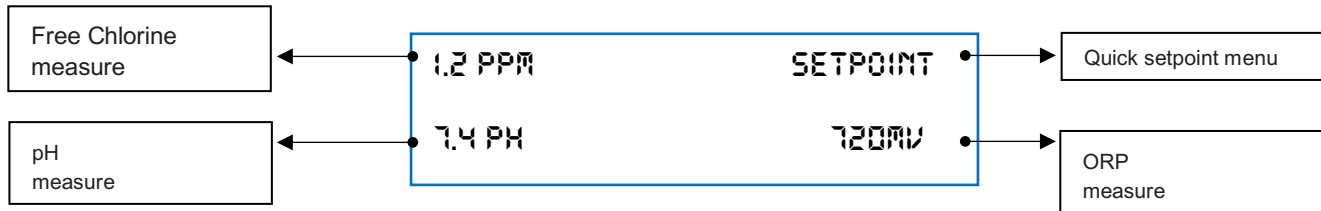
enter
cal



PoolDose | pH · ORP · Chlorine

Set menu:

Press **set** (3 seconds) and adjust set point value and press SET to confirm.



Calibration Menu:

Press **enter cal** (3 seconds) and calibrate probe pH, Chlorine, Temperature, ORP,

StandBy system

Press **▼ ▲** (5 seconds) the system sets in StandBy mode; all functions are disabled.

Reset OFA Timer

Press **menu esc** (click) and reset countdown OFA time

Priming pumps

Only while the pump is in “stand-by mode” press down **▲** to reset flow totalizer, **▼** to run pH pump, press **menu esc** to run ORP/Chlorine pump, press **enter cal** to run the Aux1 Relay, press **set** to run the Aux2 Relay.

To restore the default parameters, follow the steps below:

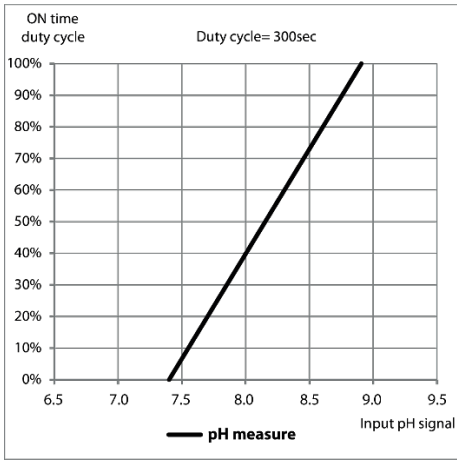
- Power off the PoolDose unit
- Keep **▲** and **▼** pressed and power on the unit
- The unit will flash **INIT.DEFAULT__NO**
- Press **▲** **INIT.DEFAULT__YES**
- Press **enter cal** to restore the default parameters.

Default parameters:

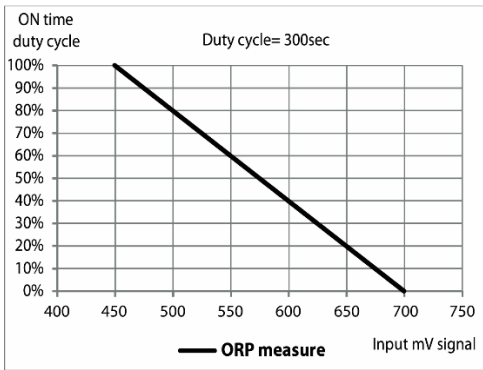
- Language = **EN**
- Set Point value = **7.4 pH; 700 mV; 1.2 ppm**
- Dosing method = **Acid (pH); Low (Redox)**
- OFA Time = **OFF**
- Calibration = **Full**
- Flow Input = **OFF**
- Dosing type = **PROP; ON/OFF Relay Aux1 e Aux2**

10.DOSING METHOD

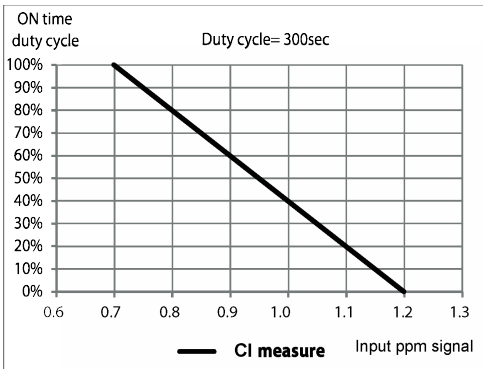
Setpoint = 7.4 pH
Dosing mode = Acid
Prop. Band= 1.5 pH) (* Fixed value)



Setpoint = 700 mV
Dosing mode = Low
Prop. Band= 250mV (* Fixed value)



Setpoint =1.2ppm free Chlorine
Dosing mode = Low
Prop. Band: 0.5ppm (* Fixed value)



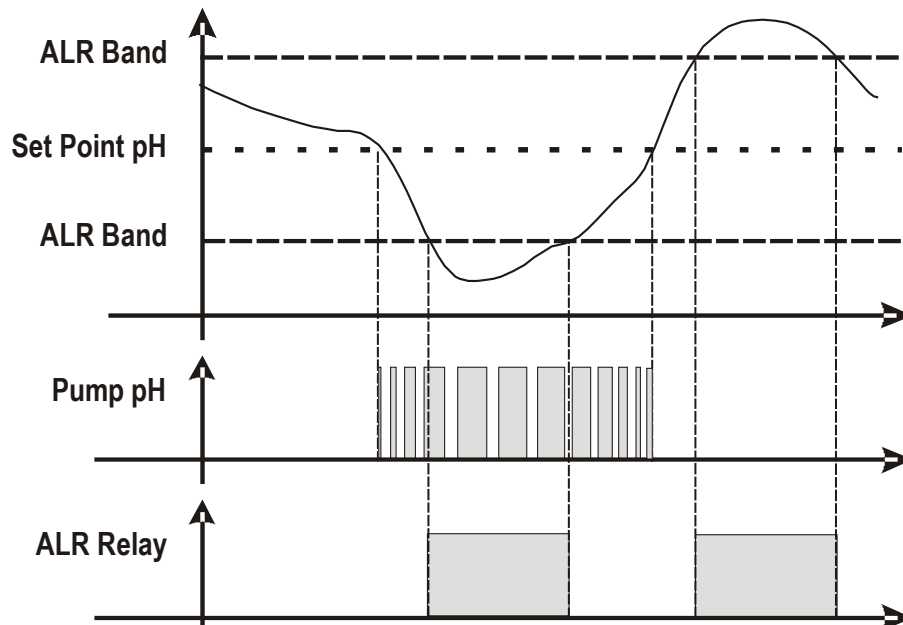
Alarm for the pH/ORP Set Point

When the alarm band is set, a work window is created. If the allowed limits are exceeded the alarm relay closes and remains closed until the measurement is reset or **enter cal** is pressed to deactivate the alarm.

When the OFA time (Over Feed Alarm) is set, the dosing time of Set Point pH/ORP in time is controlled with two alarms:

- First alarm at 70% of the time set is seen on the display, the alarm relay closes.
- Second alarm at 100% of the time set is seen on the display and the alarm relay closes and the pH/ORP pump is blocked.

Press **enter cal** to eliminate the alarm and initialize the OFA time.



(*1 Measure alarm Ranges - fixed values)

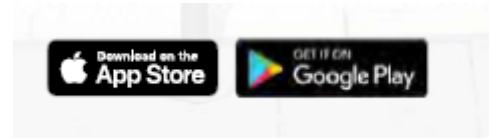
n	Item	Limits
1	Temp. Measure min	+ 10°C
2	Temp. Measure Max	+ 38°C
3	pH Measure min	6 pH
4	pH Measure Max	8 pH
5	ORP Measure min	+ 600 mV
6	ORP Measure Max	+ 800 mV
7	CL Measure min	0,50 ppm
8	CL Measure Max	2 ppm

11.INTERNAL WEB SERVER

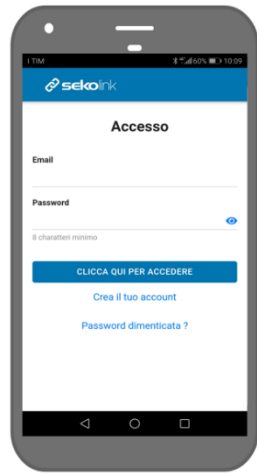
Download **SekoLink**



sekolink



Register your account



Thanks to QrCode login in internal webpages

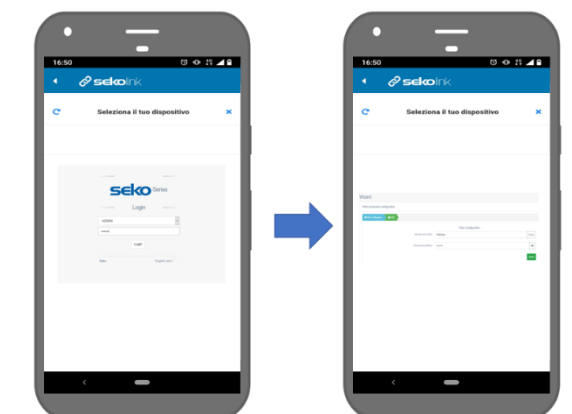
Set:

User name= ADMIN

Password= 0000



Set your WiFi lan name and Password and confirm.



Complete your device registration

PoolDose | pH · ORP · Chlorine

Thanks to your registration it is possible to use **sekolink** and **sekoweb**.



sekolink

Thanks to **sekolink** it is possible to manage your pool:

- Monitoring and limited management
- Smartphone app compatible with iPhone or Android
- For end users



sekoweb

Use **sekoweb** address link www.sekoweb.com or APP to manage your pools with professional webportal:

- Monitoring and complete management
- Internet portal accessible via online login or by scanning a product's QR code
- For pool and spa installers, technicians and engineers



12. ALARMS

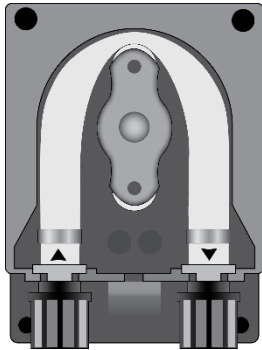
Alarm	Display	Actions to do
Level	LEVEL_____7.2_PH LEVEL_____750_MV LEVEL_____1.2_PPM	- Push  to open Alarm Relay - Restore Product tank
Out of Range measure	RLR_BAND	- Replace or check the measure probe - Push  to open Alarm Relay - Restore measure
OFA First Alarm (time >70%)	OFA_ALARM___7.2_PH OFA_ALARM	- Push  to reset
OFA Second Alarm (time 100%)	OFA_STOP___7.2_PH OFA_STOP	- Push  to reset
Flow Rate	FLOW_____7.2_PH FLOW	- Restore Flow Rate
Calibration Function	ERROR_____7_PH ERROR_____4_PH ERROR_____485_MV	- Restore Probe or Buffer solution and repeat calibration procedure
System Error	PARAMETER ERROR	- Press  to restore Default parameter - Broken Unit
Alarm measure (*1)	HIGH MEASURE LOW MEASURE	- Adjust the chemical concentration

(*1 Measure Alarm Ranges)

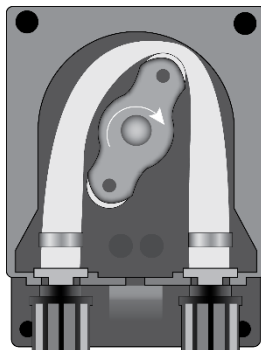
n	Item	Limits
1	Temp. Measure min	+ 10°C
2	Temp. Measure Max	+ 38°C
3	pH Measure min	6 pH
4	pH Measure Max	8 pH
5	ORP Measure min	+ 600 mV
6	ORP Measure Max	+ 800 mV
7	CL Measure min	0,50 ppm
8	CL Measure Max	2 ppm

13. HANDLING

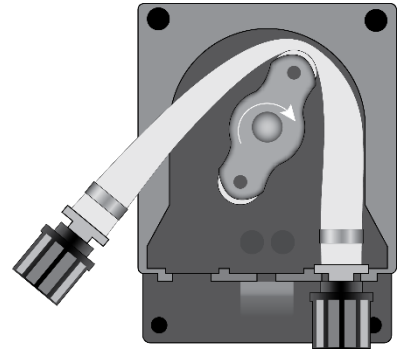
Hose replacement:



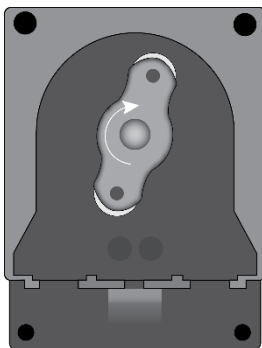
Open the pump's lid and release the hose by pulling the left connector upward.



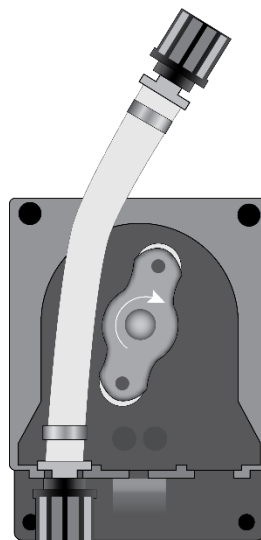
Position the roller at 7h05, turning it in the direction of the circular arrow.



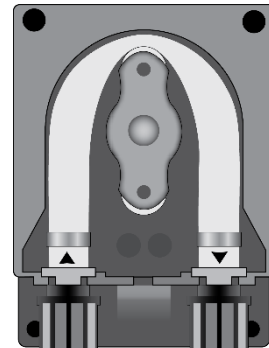
Completely release the left connector, holding it taut towards the outside, and turn the roller in the direction of the circular arrow so that the hose is freed up to the right connector.



Position the roller at 7h05, turning it in the direction of the circular arrow.

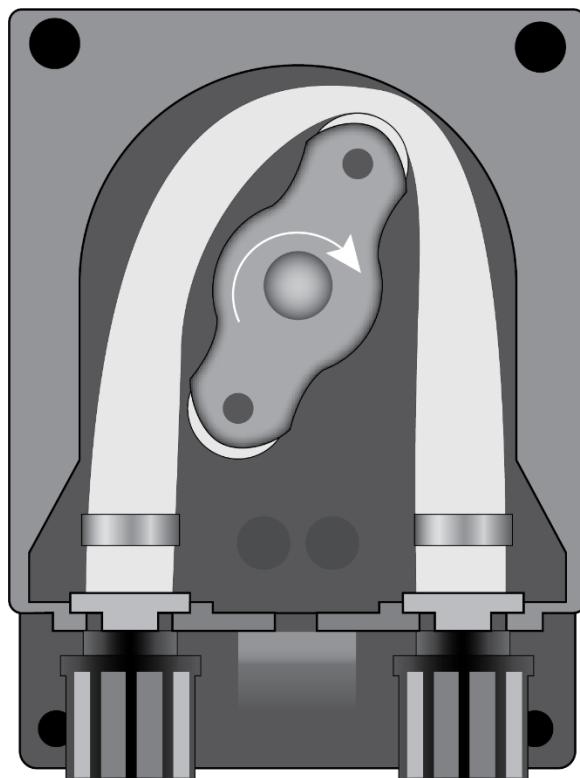


Insert the left connector into the relative housing and pass the hose under the roller's guide. Turn the roller in the direction of the circular arrow, simultaneously accompanying the hose into the pump's head, until the right connector is reached.



Close the pump's lid and press its surface hard so that it is properly locked into place.

14. STORING THE PUMP AFTER USE



When the regulation device must be stored, clean water should be pumped through the hose in order to rinse it. Then position the roller at 7h05, turning in the direction indicated by the circular arrow. These two precautions will facilitate the subsequent reactivation of the unit.