

VaDos Basic\Exact | pH · ORP · Chlorine



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 for securing PSS3 onto 2" hose (φ=50mm)	F: Reducer for injection valve (1/2" M to 3/8" F)
G: Foot filter (PP riser)	H: Additional cable for CN7 connector	I: Mounting bracket kit (φ=6 mm screws)	L: Temperature sensor	M: pH probe	N: Redox probe
O: Probes holder + Chlorine probe	P: Filter Minor (5")	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	W: EMI Coil	X: Ferrules peristaltic tubes	Y: Probe Holder Chlorine T90	Z: Santoprene® tube 3x7 mm

System Item*	Double pump			
	VaDos Basic pH / ORP	VaDos Basic pH / Oxy	VaDos Exact pH / ORP / CL-A	VaDos Exact pH / ORP / CL-T90
A	2	2	2	2
B	2	2	2	2
C	2	2	2	2
D	2	1	1	1
E	5	5	5	5
F	2	2	2	2
G	2	2	2	2
H	1	1	1	1
I	1	1	1	1
L	1	1	1	1
M	---	---	---	---
N	---	---	---	---
O	---	---	1	---
P	---	---	1	1
Q	---	---	1	---
R	---	---	1	---
S	1	1	1	1
T	1	1	1	1
U	1	---	1	1
V	1	1	1	1
W	1	1	1	1
X	2	2	2	2
Y	---	---	---	1
Z	---	1	---	---

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

VaDos Basic\Exact | 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 VaDos Basic\Exact or any of its peripheral components (including chemical products).

pH chemical products:

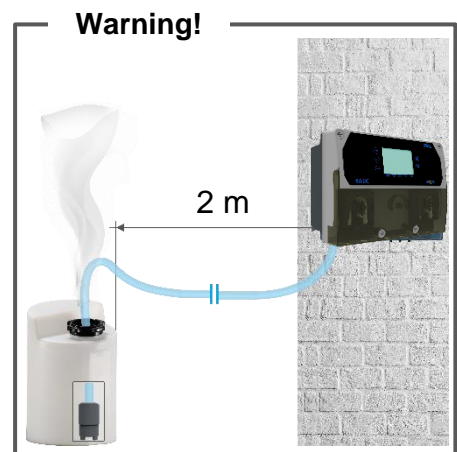
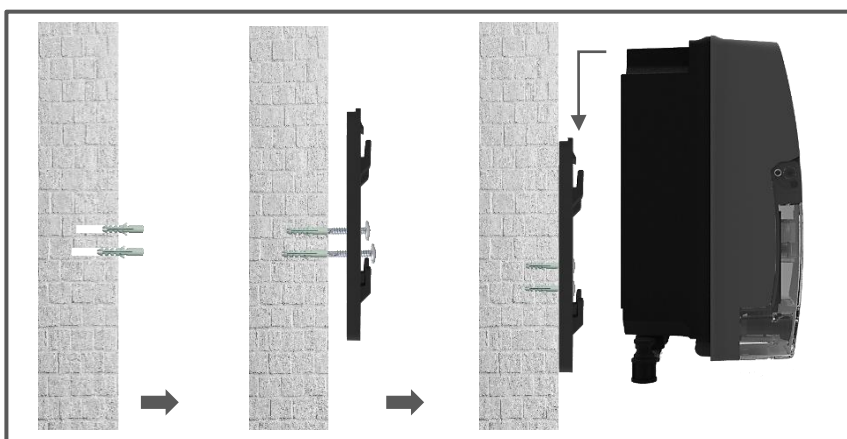
- **ABSOLUTELY** not recommended => pure sulphuric acid
- Recommended for lowering pH => negative pH (with a sulphuric acid base)
- Recommended for raising pH => positive pH (sodium carbonate or bicarbonate)

Redox 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.

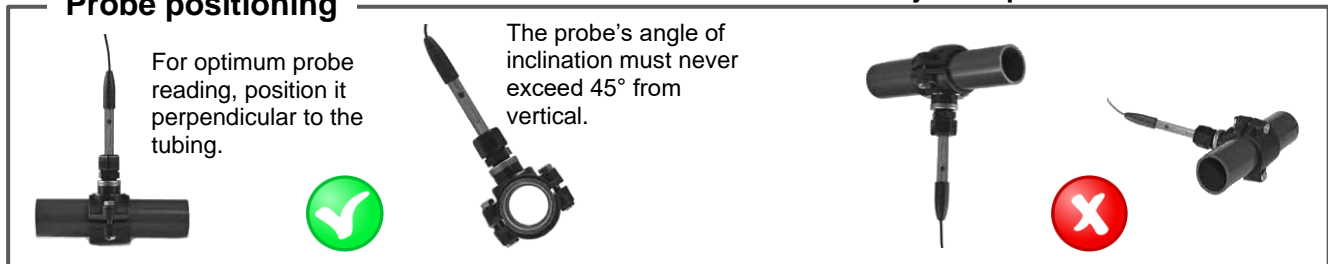
The pH / Redox probes are subject to wear and tear and therefore are not covered by the warranty.

2. INSTALLATION INSTRUCTIONS

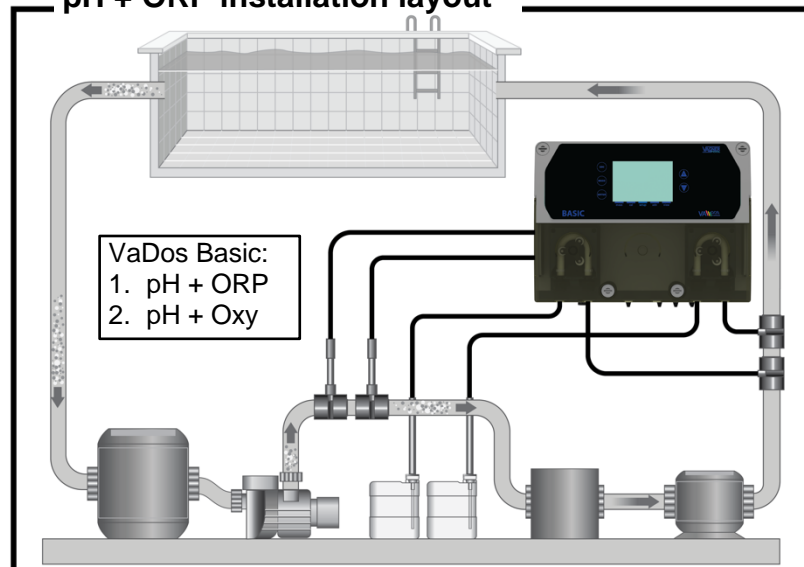


Probe positioning

Make sure that the injection pressure is below 1.5 bar



pH + ORP installation layout



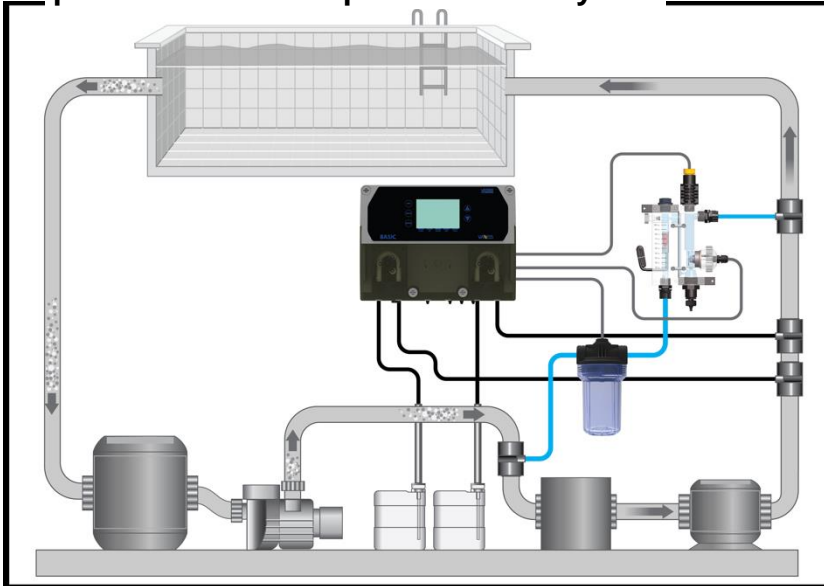
Warning!

Use with salt chlorinator:

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

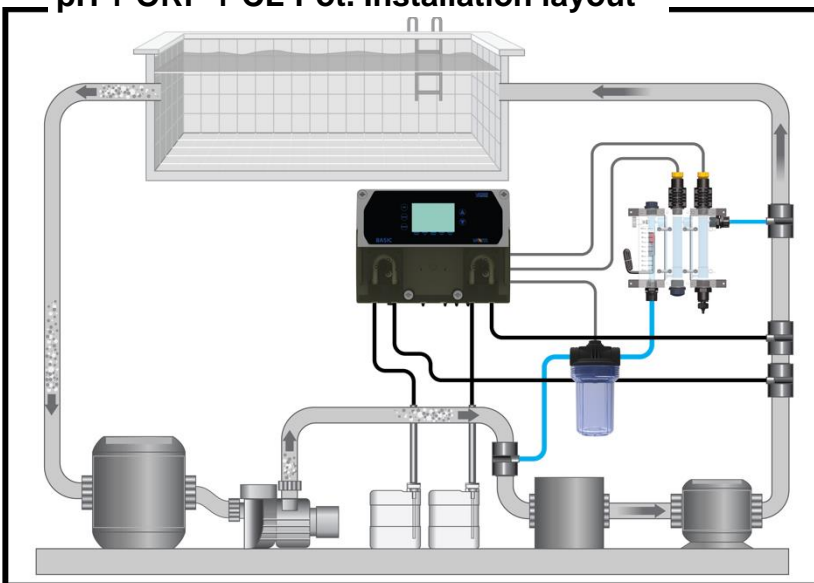
1. Position the pH measuring probe prior to the chlorinator cell.
2. To eliminate eddy currents, connect the pool water to an electrical ground point
3. Position the product injection point after the chlorinator cell.

pH + ORP + CL-Amp installation layout



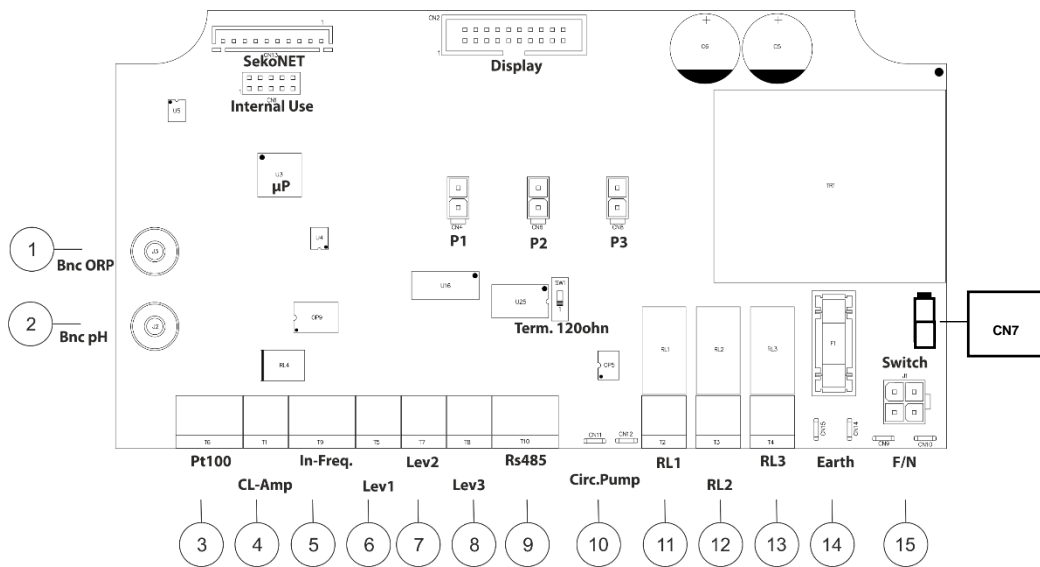
VaDos Exact pH, ORP, Free Chlorine (Amperometric)

pH + ORP + CL-Pot. Installation layout

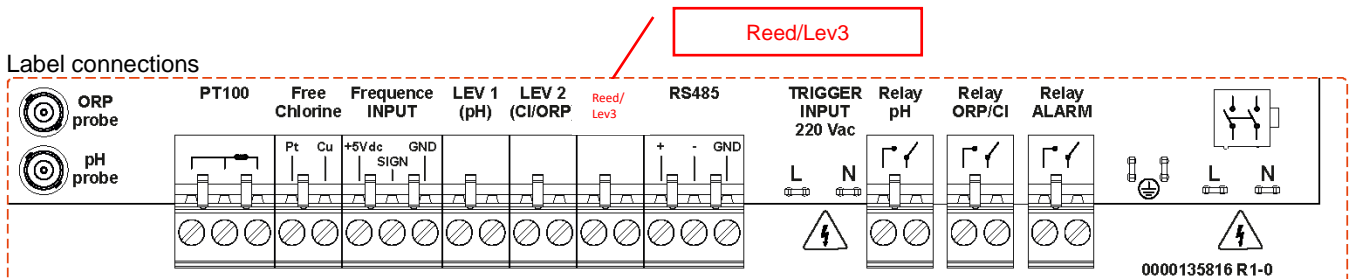


VaDos Exact pH, ORP, Free Chlorine (T90)

3. ELECTRICAL CONNECTIONS

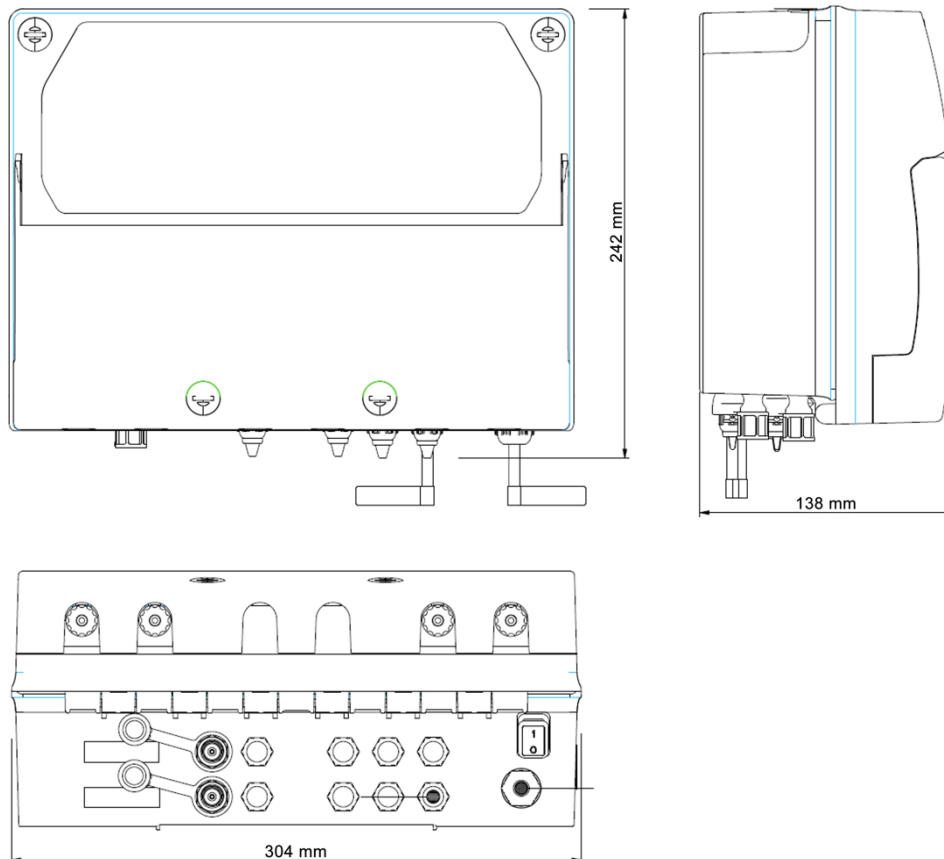


Clamp	Description	Double pump system	
		VaDos Basic pH · ORP	VaDos Exact pH · ORP · CL
1	Input Probe	ORP	ORP
2	Input Probe	pH	pH
3	Input Probe	TEMP (PT100)	TEMP (PT100)
4	Input Temperature	Not used	Free Chlorine
5	Input Freq. signal	Flow Rate (Freq.Input)	Flow Rate (Freq.Input)
6	Level (product tank)	pH Level probe	pH Level probe
7	Level (product tank)	Chlorine (ORP) level probe	Chlorine level probe
8	Flow sensor /Level (p. tank)	Flow (REED sensor) / Level 3	Flow (REED sensor) / Level 3
9	Serial Port	RS485 ModBus RTU	RS485 ModBus RTU
10	Trigger Input	Circulation Pump (220Vac input)	Circulation Pump (220Vac input)
11	Output Relay	RL1 AUX1 pH	RL1 AUX1 pH
12	Output Relay	RL2 AUX2 OPR/Chlorine	RL2 AUX2 OPR/Chlorine
13	Output Relay	RL3 Alarm	RL3 Alarm
14	Earth connector	Earth	Earth
15	Power Supply	220-240 Vac 50-60 Hz	220-240 Vac 50-60 Hz
P1	Peristaltic pump connection	pH	pH
P2	Peristaltic pump connection	Chlorine (ORP)	Chlorine
P3	Peristaltic pump connection	Optional	Optional
SekoNet	WiFi Module	WiFi card (dedicate code)	WiFi card (dedicate code)
CN7	Power Supply connector	220-240 Vac 50-60 Hz	220-240 Vac 50-60 Hz



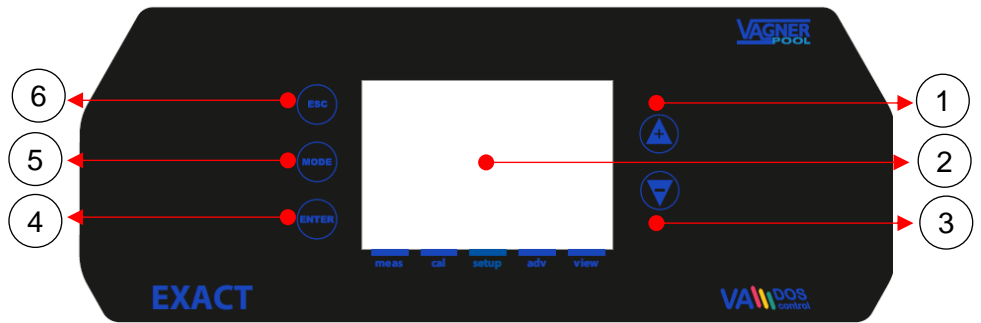
4. TECHNICAL SPECIFICATIONS

Specifications	VaDos Basic pH/ORP	VaDos Exact PH/ORP/Chlorine
Dimensions (H–W–D)	H: 242 x L:304 x D:138 mm	H: 242 x L:304 x D:138 mm
Weight	2,5 Kg	2,5 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)	28Watt	28Watt
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 (timed)	500 mA (timed)



5. SETTING PROGRAM

- 1) Button to increase the value
- 2) Digital display
- 3) Button to decrease the value
- 4) Button Enter
- 5) Button Mode
- 6) Button Esc



Press Mode key button to move icon menu and press enter con confirm

N	Function	Graphic display icon
1	Measure	
2	Calibration menu	
3	Setup menu	
4	Advanced setting menu	
5	View level menu	

Measure view parameters

Instant value parameters family or technical view



Icon table:

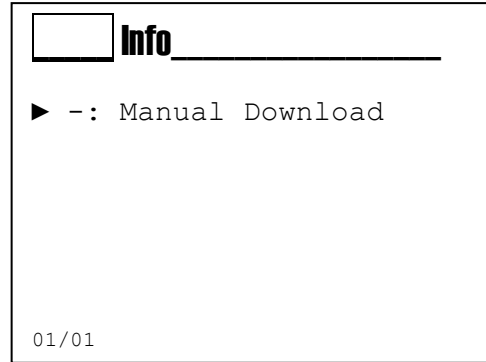
Item	Icon status ok/on	Icon status Err/Off
Circulation pump		
Tank level1		
Tank level2		
Reed sensor (Probe Holder)		
WiFi signal		
Alarm Relay		
Aux1 Relay1		
Aux2 Relay2		
Pump 1		
Pump 2		
Pump 3 (External device)		



INFO MENU

In **View measure** mode, press the **ESC** key to access the **Info** menu.

Select the item “Download Manual” and press the **Enter** key.

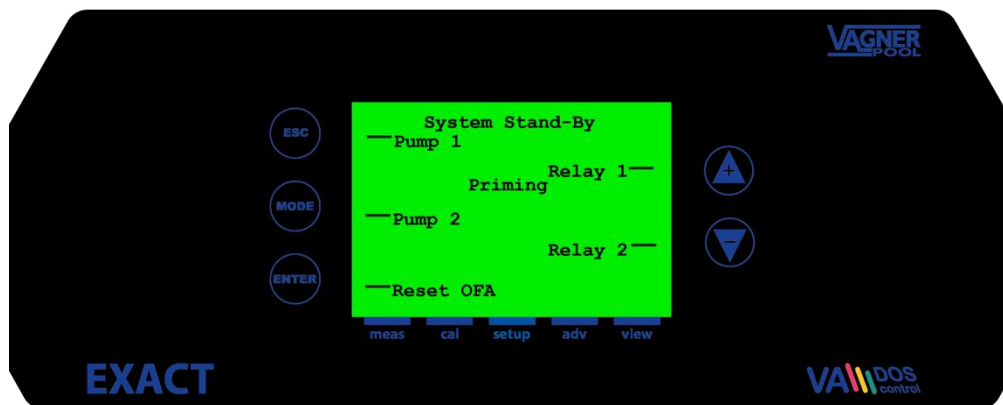


On the screen will be displayed QR-Code with which you can start downloading the user manual in pdf format.



Priming function:

Press **UP+Down** keys to set Stand by status, the unit show green colour backlight and it is available the manually action of peristaltic pump (Priming action), Relay activation and OFA reset timer



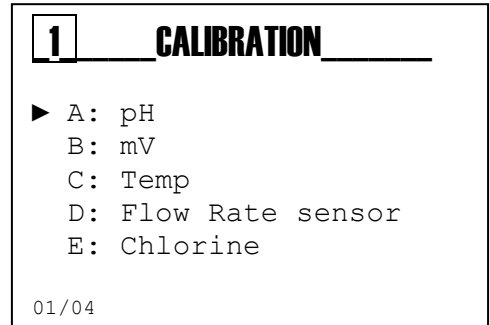


Calibration Menu (Index 1)

The Calibration menu consists of five (5) items or sub-menus:

- A: pH probe
- B: Redox probe
- C: Free Chlorine probe
- D: Temperature probe
- E: Flow Rate sensor

Scroll through the menu using the **(+)** or **(-)** key, select the item and confirm with the **Enter** key.

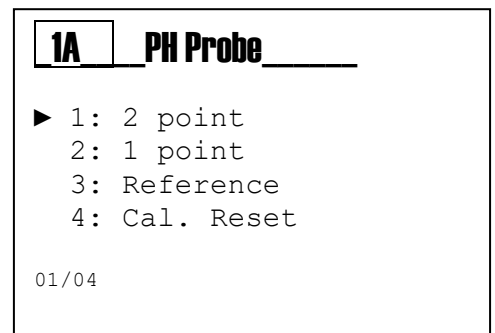


Menu 1A pH Probe Chemical Measure (Menu 1A)

The Chemical Measure Calibration menu consists of five (5) items or sub-menus:

- 1A1: **Automatic**: the instrument requires the standard buffer solutions 7 pH, 4 pH or 9.22 pH.
- 1A2: **Manual**: the instrument will suggest the buffer solutions from the default values, but the value can be changed.
- 1A3: **Reference**: the instrument accepts the calibration of one point with a manually set value.
- 1A4: **Reset (Calibration)**: the calibrations can be deleted and restored the default values.

Scroll through the menu using the **(+)** or **(-)** key, select the item and confirm with the **Enter** key.

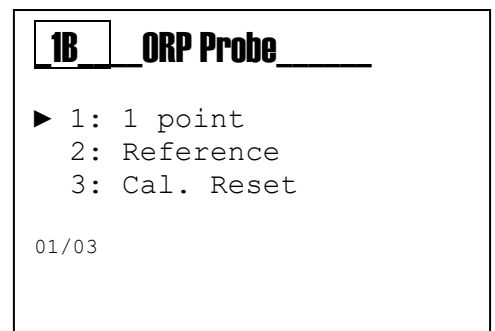


Menu 1B ORP Probe Chemical Measure (Menu 1B)

The Chemical Measure Calibration menu consists of five (5) items or sub-menus:

- 1B1: **Automatic**: the instrument requires the standard buffer solutions 465mV.
- 1B2: **Reference**: the instrument accepts the calibration of one point with a manually set value.
- 1B3: **Reset (Calibration)**: the calibrations can be deleted and restored the default values.

Scroll through the menu using the **(+)** or **(-)** key, select the item and confirm with the **Enter** key.



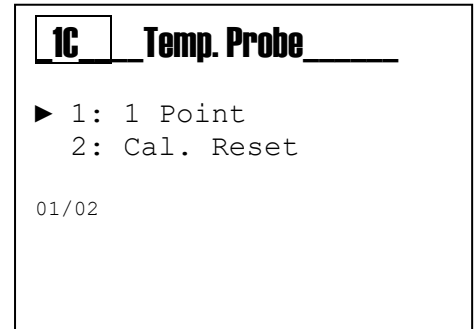
VaDos Basic\Exact | pH · ORP · Chlorine

Menu 1C Temperature Probe Chemical Measure (Menu 1D)

The Chemical Measure Calibration menu consists of three (3) items or sub-menus:

- 1C1: **1 Point**: the instrument requires a **single point** calibration by external reference.
- 1C2: **Reset (Calibration)**: the calibrations can be deleted and restored the default values.

Scroll through the menu using the **(+)** or **(-)** key, select the item and confirm with the **Enter key**.

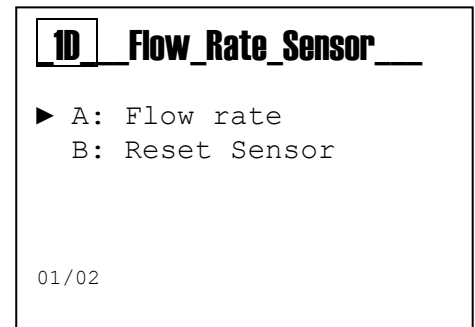


Menu 1D Flow Rate Sensor (Menu 1D)

The Calibration menu consists of three (3) items or sub-menus:

- A: Flow rate**: Sensor calibration with active flow
- B: Reset Sensor**: Delete all calibrations performed previously.

Scroll through the menu using the **(+)** or **(-)** key, select the item and confirm with the **Enter key**.



Note:

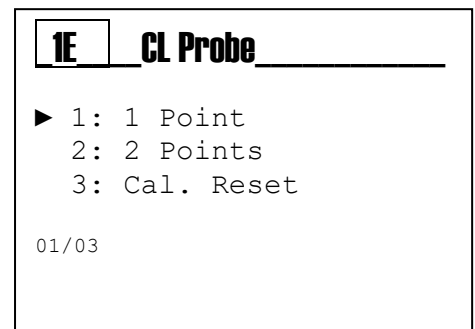
The flow calibration is always recommended even if the settings used on **advanced menu** are correct, according to the installed sensor model.

Menu 1E Chlorine Probe Chemical Measure (Menu 1E)

The Chemical Measure Calibration menu consists of four (4) items or sub-menus:

- 1E1: **Automatic 1 Point**: the instrument requires a **single point** calibration by external reference.
- 1E2: **Automatic 2 Points**: the instrument requires a **double point** calibration by external reference.
- 1E2: **Reset (Calibration)**: the calibrations can be deleted and restored the default values.

Scroll through the menu using the **(+)** or **(-)** key, select the item and confirm with the **Enter key**.



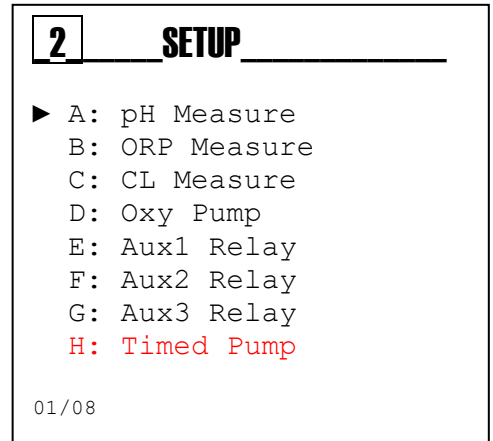
SETUP MENU (INDEX MENU 2)

Use the **MODE key** to scroll through the icons on the status bar, from left to right, select the **setup** menu and confirm with the **Enter key**.



The **Setup menu** consists of eight (8) items or sub-menus:

- 2A: pH **Measure**
- 2B: ORP (*A & *B: **Measure**)
- 2C: CL **Measure** (*B)
- 2D: Oxy Pump (*C)
- 2E: Aux1 Relay
- 2F: Aux2 Relay
- 2G: Aux3 Relay
- 2H: Timed Pump (Option third external pumps)



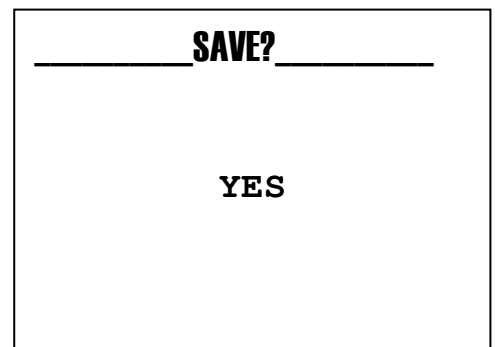
Note: Select configuration Device measures

- pH+ORP (*A)
- pH+ORP+CL (*B)
- pH+ Oxy (volumetric dosing with temp. compensation) (*C)

Below are illustrated the settings required for each sub-menu indicated above.

To exit the menu, press the **Esc key**; the instrument will display the question "save?"; confirm with the **Enter key**.

For not saving, select NO using the **(+)** or **(-)** key and confirm with the **Enter key**.



VaDos Basic\Exact | pH · ORP · Chlorine

Setup Menu (INDEX MENU 2)

Below we summarize the different view item menu of your dosing system please check your model.

Model of dosing system setup menu:

VaDos Basic **pH + ORP** Menu Setup

2 **SETUP**

- ▶ A: pH Measure
- B: ORP Measure
- C: Aux1 Relay
- D: Aux2 Relay
- E: Aux3 Relay
- F: Timed Pump

01/05

VaDos Basic **pH + Oxy** Menu Setup

2 **SETUP**

- ▶ A: pH Measure
- B: Oxy Pump
- C: Aux1 Relay
- D: Aux2 Relay
- E: Aux3 Relay
- F: Timed Pump

01/07

VaDos Exact **pH + ORP+ Free Chlorine** Menu Setup

2 **SETUP**

- ▶ A: pH Measure
- B: ORP Measure
- C: CL Measure
- D: Aux1 Relay
- E: Aux2 Relay
- F: Aux3 Relay
- G: Timed Pump

01/07

pH Pump menu

2A1 **SetPoint**: Chemical value to maintain into the process

2A2 **SetPoint Type**:

Acid: the pump doses acid product to reduce pH value

Alca: the pump doses alkaline product to increase pH value

2A3 **OFA**: Over feed alarm timer, maximum activation time

In advanced menu-> Advanced features

2A4 **Time ON**: Activation time pump range: Off..5" to 3600" (*1)

2A5 **Time OFF**: Wait time pump range: Off..5" to 3600" (*1)

(*1 Time on and off are present if set Type dosing= Timed)

2A		pH_Pump	
▶ 1: SetPoint		7.40	pH
2: SP Type		Acid	
3: OFA		00'	
4: Time On		00'	
5: Time Off		00'	
6: min Alarm		6	pH
7: Max Alarm		8	pH
01/07			

ORP Pump menu

2B1 **SetPoint**: Chemical value to maintain into the process

2B2 **SetPoint Type**:

Rx+: the pump doses chlorine product and increase ORP

Rx-: the pump doses no chlorine product and reduce ORP

2B3 **OFA**: Over feed alarm timer, maximum activation time.

2B4 **Time ON**: Activation time pump range: Off..5" to 3600" (*1)

2B5 **Time OFF**: Wait time pump range: Off..5" to 3600" (*1)

(*1 Time on and off are present if set Type dosing= Timed)

2B		ORP_Pump	
▶ 1: SetPoint		7.40	pH
2: SP Type		Acid	
3: OFA		00'	
4: Time On		00'	
5: Time Off		00'	
6: min Alarm		600	mV
7: Max Alarm		800	mV
01/07			

CL Pump menu

2C1 **SetPoint**: Chemical value to maintain into the process

2C2 **SetPoint Type**:

Cl+: the pump doses chlorine product and increase value

Cl-: the pump doses no chlorine product and reduce value

2C3 **OFA**: Over feed alarm timer, maximum activation time.

(range:1-240 min)

2C4 **Time ON**: Activation time pump range: Off..5" to 3600" (*1)

2C5 **Time OFF**: Wait time pump range: Off..5" to 3600" (*1)

(*1 Time on and off are present if set Type dosing= Timed)

2C		CL_Pump	
▶ 1: SetPoint		7.40	pH
2: SP Type		Acid	
3: OFA		00'	
4: Time On		00'	
5: Time Off		00'	
6: min Alarm		0.5	ppm
7: Max Alarm		2.0	ppm
01/07			

Oxy Pump menu (Active Menu)

- 2B1 **Volume cc/m³**: Chemical value cc per cubic meter(*1)
- 2B2 **Circulation pump**: Flow rate of circulation pump m³/h(*1)
- 2B3 **Peri Pump size**: set type of peristaltic tube(*1)
 - 3x7: diameter tube
 - 6x10: diameter tube

2B
Oxy_Pump

- ▶ 1: Volume cc/m³
- 2: C.Pump m³/h
- 3: Peri Pump size

01/03

(*1 **Volume cc/m³, Circulation pump, Peri Pump size** are present if set Type dosing= Active)

H2O2 dosing

The dosage is compensated in according with the water temperature, below the reference table used in the software:

Temp. °C	<12	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	>30
Time (%)	35	35	40	45	50	55	60	65	70	75	80	85	90	95	100	110	120	130	140	150	150

Oxy Pump menu (Timed Menu)

- 2B1 **Time ON**: Activation time pump range: Off..1" to 3600" (*2)
- 2B2 **Time OFF**: Wait time pump range: Off..1" to 3600" (*2)

2B
Oxy_Pump

- ▶ 1: Time ON
- 2: Time OFF

01/02

(*2 Time on and off are present if set Type dosing= Timed)

AUX1 Relay

2D Aux1 Relay 1: Set function for:

- Disable (OFF)
- pH;
- Redox (ORP);
- Chlorine
- Timer R1 (Timer 1)
- Alarm

2D Aux1_Relay

▶ OFF
 pH
 ORP
 Chlorine
 Timer R1
 Alarm

01/06

AUX2 Relay

2E Aux2 Relay: Set function for:

- Disable (OFF)
- pH;
- Redox (ORP)
- Chlorine
- Timer R2 (Timer 2)
- Alarm

2E Aux2_Relay

▶ OFF
 pH
 ORP
 Chlorine
 Timer R2
 Alarm

01/06

AUX3 Relay

2F Aux3 Relay: Set function for:

- Disable (OFF)
- pH;
- Redox (ORP);
- Chlorine
- Timer R3 (Timer 3)
- Alarm

2F Aux3_Relay

▶ OFF
 pH
 ORP
 Chlorine
 Timer R3
 Alarm

01/06

Timed pump menu

2G Timed Pump;

1. Timer 1: set Time On e OFF of the timed pump 1
2. Timer 2: set Time On e OFF of the timed pump 2
3. Timer 3: set Time On e OFF of the timed pump 3

2G Timed_Pump

▶ 1: Timer 1
2: Timer 2
3: Timer 3

01/03

2G1 Timed_Pump_1

▶ 1: Time On "
1: Time Off "

01/02

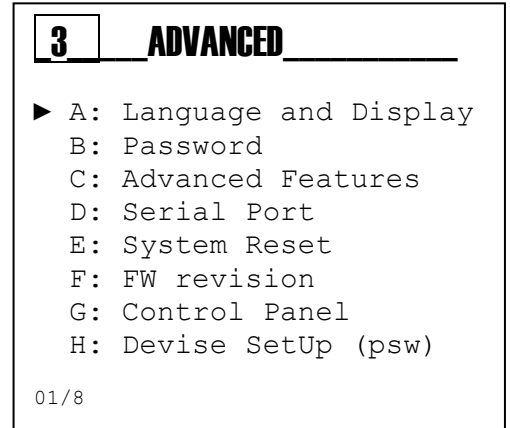
ADVANCED MENU (MENU INDEX 3)

Use the **MODE key** to scroll through the icons on the status bar, from left to right, select the **adv** menu and confirm with the **Enter key**.



The **Advanced** menu consists of thirteen (13) items or sub-menus, as follows:

- A: Language and Display
- B: Password
- C: Advanced Features
- D: Serial Port
- E: System Reset
- F: FW revision
- G: Control Panel
- H: Devise Setup (psw)

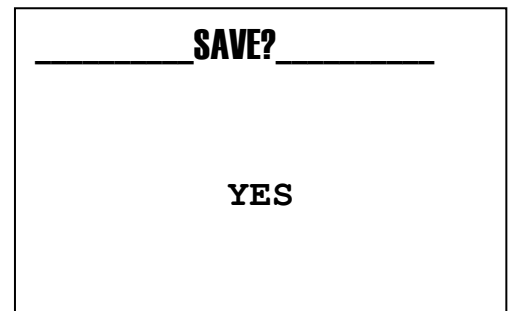


Below are illustrated the settings required for each sub-menu indicated above.

To exit the menu, press the **Esc key**; the instrument will display the question "save?"; confirm with the **Enter key**.



For not saving, select NO using the **(+)** or **(-)** key and confirm with the **Enter key**.



3A Language menu

The instrument automatically changes the language of the menu and returns to the previous level, menu 3.

3A LANGUAGE and DISPLAY

- ▶ 1: Language
- ▶ 2: Display

01/02

3A1 LANGUAGE

- ▶ Czech (default)
- ▶ English
- ▶ German
- ▶ Russian
- ▶ Croatian

01/--

Display menu:

1. Adjust the contrast light of display
2. Enable or disable red colour of backlight
3. Enable or disable green colour of backlight

3A2 Display

- ▶ 1: Contrast
- ▶ 2: Red Alarm
- ▶ 3: Green light

01/03

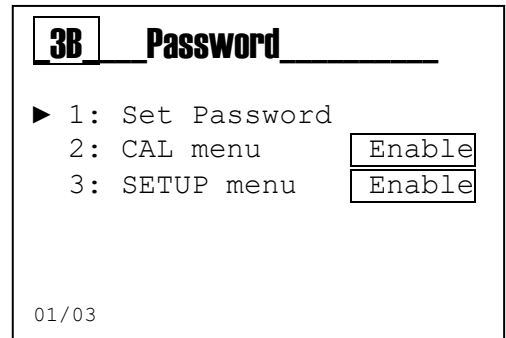
Password function

3B1 **Set Password**: set the numeric value

Note: If the password is present will be displayed
Example: "Old Password 1234"

3B2 **Calibration Menu**: Enable or Disable the Calibration menu

3B3 **Setup Menu**: Enable or Disable the Setup menu



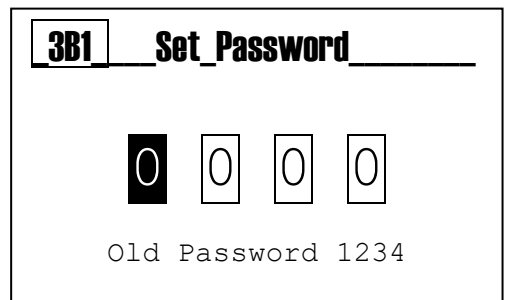
Note: To remove the password set four zeros (0000) and confirm with the **Enter key**.

The following are examples of the sub-menus shown above.



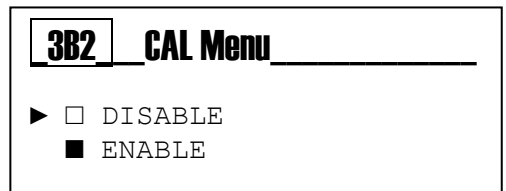
Menu 3B1

Set the value for password, other than 0000. Scroll through the menu using the **(+)** or **(-)** key, select the next item with **Mode** key. (Note: password disable, please set 0000)



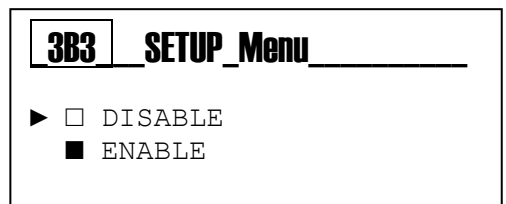
Menu 3B2

Enable= access password required
Disable= no need access password required



Menu 3B3

Enable= access password required
Disable= no need access password required



Advanced Features:

3C1 Temperature Measure menu

3C2 Flow rate Measure menu

3C3 Reed/LEV3 Input: Set logic contact Reed

Reed N.Open: normally open

Reed N.Close: normally close

Level 3: Input for chemical product level 3

3C4 Pump Mode:

- Define the Working method for the Peristaltic Pump onboard

3C5 WiFi Info:

- WiFi Alarm status
- SSID
- PSW
- IP Address

3C6 Power On Delay:

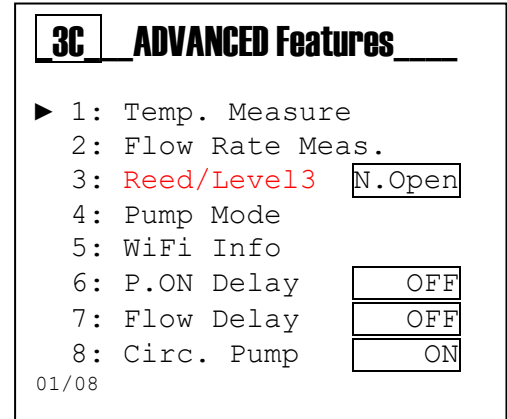
- Setting time of Power On Delay routine, it is function with countdown timer to disable the measure and dosing regulation when the system switch on, to ensure the right polarization of the probes

3C7 Flow delay:

- Setting time of Flow Delay routine, it is function with countdown timer to disable the measure and dosing regulation when the flow rate is present again, to ensure the right polarization of the probes

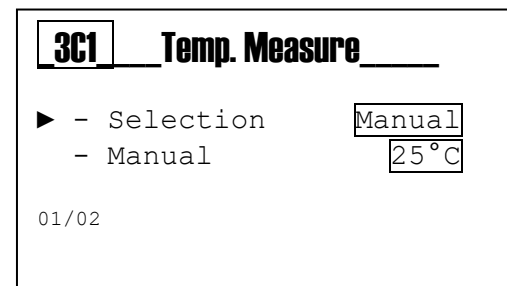
3C8 Circulation Pump:

- Enable or Disable the trigger input of Circulation pump, to enable or disable the dosing system.



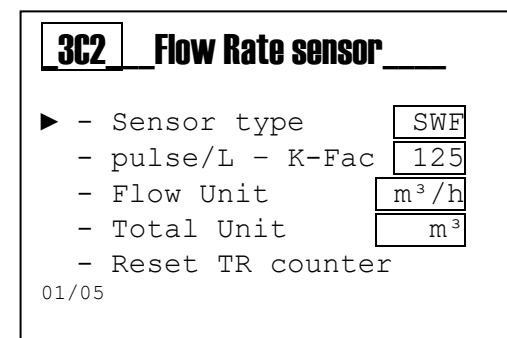
3C1 Temperature Measure menu

- Selection: Manual or automatic value
- Manual value: please set fixed value



3C2 Flow Rate Sensor

- Sensor type: WPS or KFactor
- Pulse/L – KFactor: set pulse number
- Flow unit
- Total unit
- Reset TR counter



3C3 Reed/LEVEL3: Set logic contact Reed

- N. Open: normally open
- N. Close: normally close
- **Level 3: enable the 3rd level input for 3rd pump, and disable the reed sensor**

3C3 Reed/Level_3

- ▶ 1: NC
- 2: NO
- 3: Level 3

01/03

3C4 Pump Mode:

Define the Working method for the Peristaltic Pump onboard the system and method dosing:

1. **Pump 1& 2:** set reference measure to drive dosing pump
 - a. pH (P1) – ORP (P2)
 - b. pH(P1) – Chlorine(P2)
2. **PH Dosing:** Set method: OFF, Proportional (Prop.), On-Off, Timed
3. **ORP Dosing:** Set method: OFF, Proportional (Prop.), On-Off, Timed
4. **CL Dosing:** Set method: OFF, Proportional (Prop.), On-Off, Timed
5. **STOP ORP-CL:** Enable/Disable stop dosing chlorine by ORP feedback measure
6. **Pump 3:** enable/disable third pump.

3C4 Pump Mode

- ▶ 1: Pump 1&2
- 2: pH
- 3: ORP
- 4: Chlorine
- 5: STOP ORP-CL
- 6: Pump 3

01/06

3C5 WiFi Info:

Menu WiFi info:

- 1) WiFi Alarm status, Errore con connessione remota
- 2) SSID: service set identifier
- 3) PSW: password
- 4) IP Address: number address

3C5 WiFi Info

- ▶ 1: WiFi Alarm
- 2: SSID
- 3: PSW
- 4: IP

3C6 Power on Delay:

Set timer (range 0..90 minutes)

timer= 0 minutes the function is disable

3C6 Power On Delay

00^m 01^s

3C7 Flow Delay:

Set timer (range 0..60 minutes)

timer= 0 minutes the function is disable

3C7 Flow Delay

00^m 01^s

VaDos Basic\Exact | pH · ORP · Chlorine

3C8 Circulation pump:

Enable or disable trigger input of circulation pump

3C8	Circulation pump
▶ <input type="checkbox"/>	OFF
■ <input checked="" type="checkbox"/>	ON
01/02	

Serial Port (INDEX MENU 3D)

- 3D1 **DOA**: Automatic device configuration at Kommbox unit.
- 3D2 **Address IS**: configuration address
- 3D3 **Baudrate**: speed communication
- 3D4 **Parity**: reference parity bit

3D	Serial_Port
▶ 1: DOA	<input type="text" value="ON"/>
2: Address ID	<input type="text" value="1"/>
3: Baudrate	<input type="text" value="19200"/>
4: Parity	<input type="text" value="Odd"/>
01/04	

System Reset menu (INDEX MENU 3E)

- 3E1 **Reset Unit**: Reload default parameters

3E	System_Reset
Are You Sure?	
<input type="text" value="NO"/>	
<input type="text" value="YES"/>	

Firmware Revision menu (INDEX MENU 3F)

- 3F1 **Revision**: Show the Firmware revision

3F	FW_Revision
▶ 1: FW Revision 1.0	

Control Panel menu (INDEX MENU 3G)

3G1 **Measure input:** Enable/Disable third pump
 3G2 **Digital Input:** ON/OFF Input flow rate sensor

3G	Control_Panel
▶	1: Measure input
	2: Digital input
01/02	

3G1	Measure Input	
▶	1: pH probe	58,1 mV
	2: ORP probe	700 mV
	3: Chlorine P.	32,4µA
	4: Flow Rate	5 Hz
	5: Temp. PT100	105,5 OHM
01/05		

3G2	Digital Input	
▶	1: Reed	Close
	2: Level 1	Open
	3: Level 2	Open
	4: Cir. Pump	ON
01/04		

Device Setup Function (INDEX MENU 3H)



3H1 **Configuration unit:** Change the configuration measure

Insert the password 9999 and select the layout combination measures

3H Device_Setup

▶ 1: Configuration Unit

01/01

3M1 Device_Section_Password

0 0 0 0

Insert the Password

3M1 Configuration_Unit

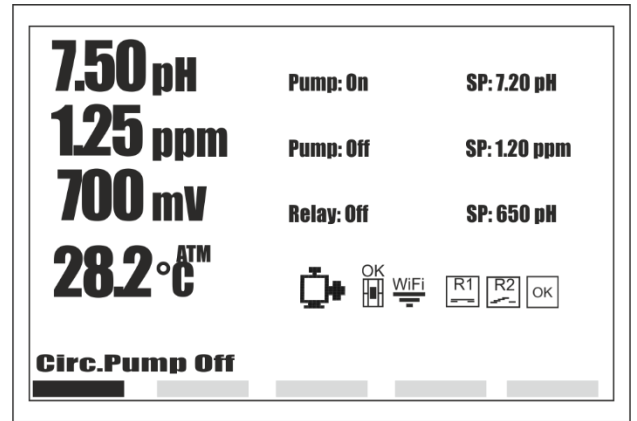
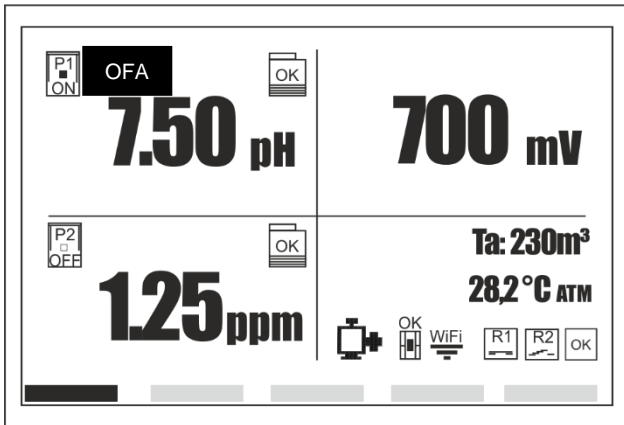
▶ pH + ORP
 pH + Oxy (H2O2)
 pH + ORP+ CHLORINE

01/03

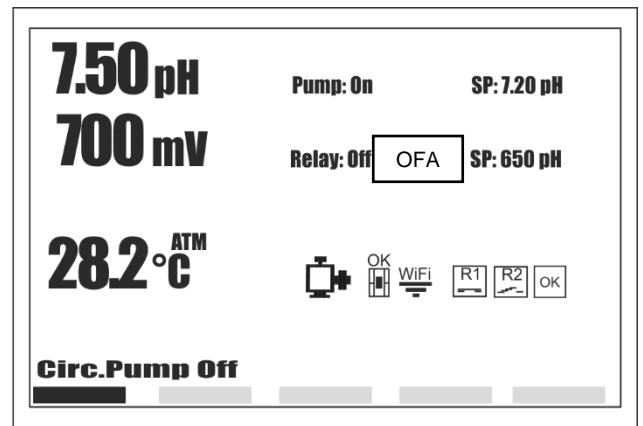
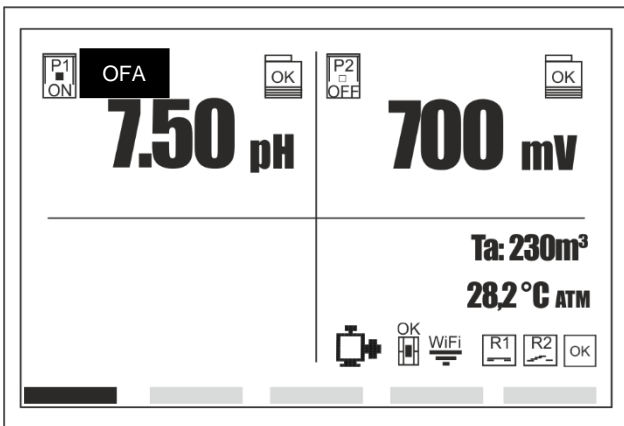
VaDos Basic\Exact | pH · ORP · Chlorine

View Level

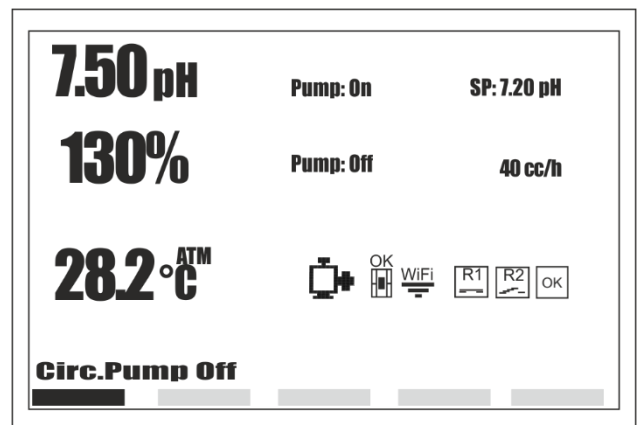
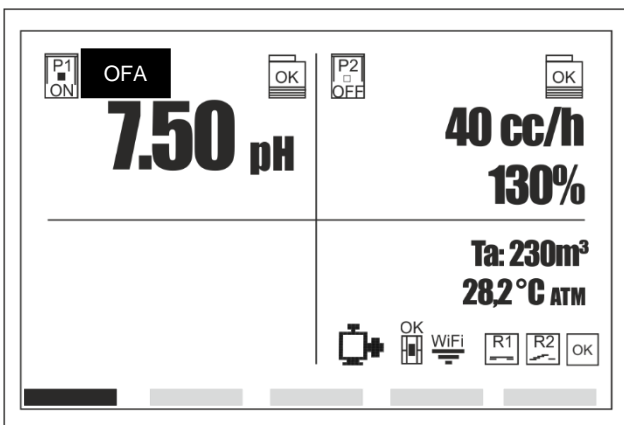
Three parameters (pH + ORP +Chlorine) family and technician view



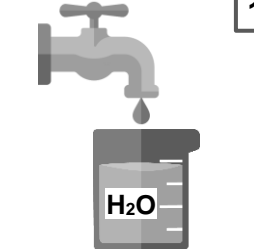
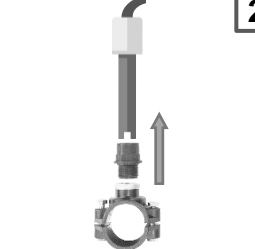
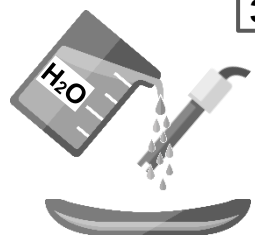
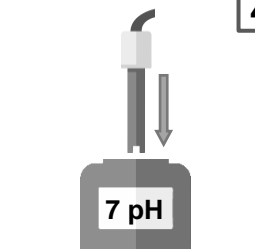
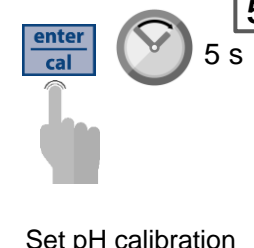
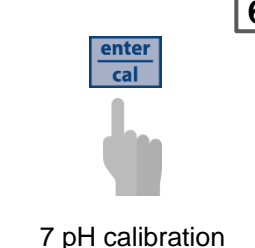
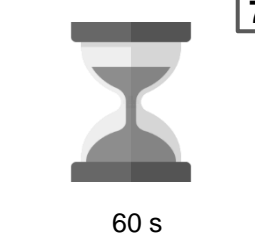

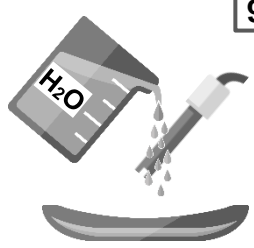
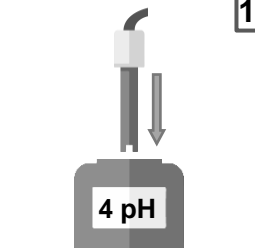
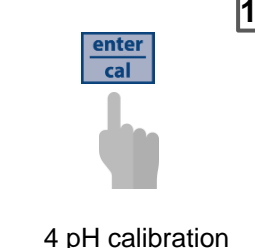
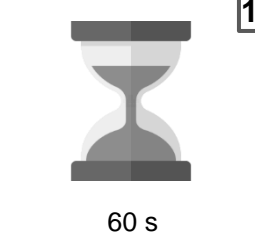

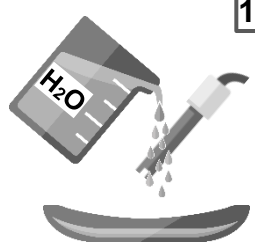
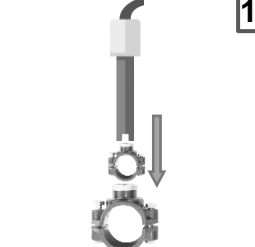

Two parameters (pH + ORP) family and technician view



Two parameters (pH + Oxy) family and technician view



PH CALIBRATION

 <p>1</p>	 <p>2</p>	 <p>3</p>	 <p>4</p>
 <p>5</p> <p>Set pH calibration</p>	 <p>6</p> <p>7 pH calibration</p>	 <p>7</p> <p>60 s</p>	 <p>8</p>
 <p>9</p>	 <p>10</p>	 <p>11</p> <p>4 pH calibration</p>	 <p>12</p> <p>60 s</p>
 <p>13</p>	 <p>14</p>	 <p>15</p>	 <p>16</p> <p>Save and exit</p>

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


CAL Reference
7.2 pH

The unit will flash a temperature value

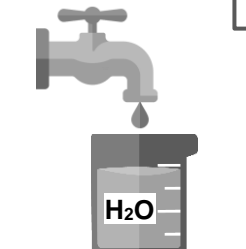
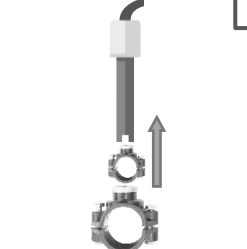
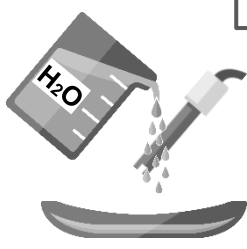
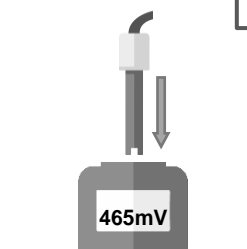
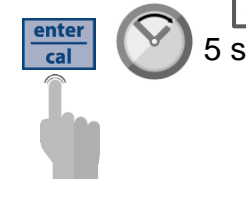



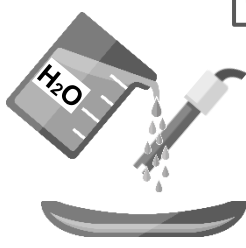
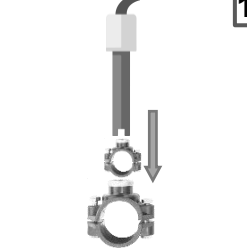

Set the temperature value measured with the instrument

Ex. 7.4 pH


CAL Reference
7.4 pH



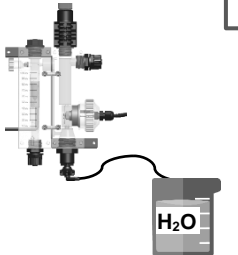
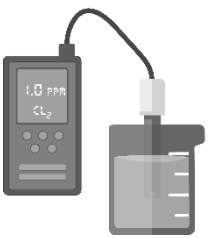
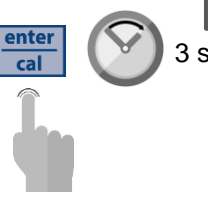



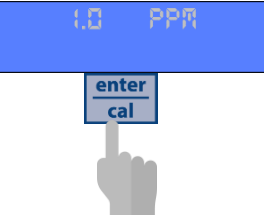

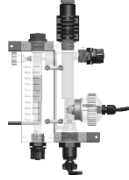


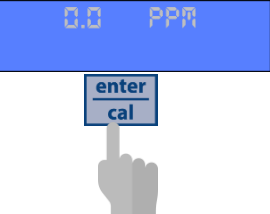

REDOX CALIBRATION

 <p>1</p>	 <p>2</p>	 <p>3</p>	 <p>4</p>
 <p>5</p> <p>Set Redox calibration</p>	 <p>6</p> <p>465 mV calibration</p>	 <p>7</p> <p>60 s</p>	 <p>8</p>
 <p>9</p>	 <p>10</p>	 <p>11</p> <p>Save and exit</p>	

Reference calibration

<p>CAL Reference 720 mV</p> <p>The unit will flash a temperature value</p> <p>Set the temperature value measured with the instrument</p> <p>Ex. 750 mV</p>	<p>CAL Reference 750 mV</p> 
--	---

CHLORINE CALIBRATION

 <p>1</p>	 <p>2</p>	 <p>3</p> <p>Select Cl calibration</p>	 <p>4</p>
 <p>5</p> <p>10 s</p>	 <p>6</p> <p>The unit will flash a Cl value Set the Cl value measured with the instrument Ex. 1.0 ppm Free Cl</p>	 <p>7</p>	 <p>8</p> <p>10 s</p>
<p>9</p> <p>The unit saves the parameters.</p>	<p>10</p> <p>Close flowrate</p> 	<p>11</p> <p>If flowrate is closed</p> 	<p>12</p>  <p>99 s</p>
 <p>13</p>	 <p>14</p> <p>10 s</p>	<p>15</p> <p>Save and exit</p>	

(Single point calibration the steps routine are from 1 to 8)

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



Calibration Menu Flow with Batch method (Menu 1A)

Menu 1B Batch Function

With the Batch calibration method, the sensor can be calibrated by measuring a specific volume of liquid associated to the received pulses.

Select the **menu 1B** Batch.

Before activating the pulse count make sure that the flow is stopped.

Activate the Batch function by pressing the **Enter** key and make sure the instrument does not count anything when the flow is stopped.

Open the liquid flow; the instrument displays the pulse count while the flow is in transit.

Close the liquid flow and wait for the count to stop, press **Enter** key to stop the count.

Measure the sampled volume and set the value according to the displayed unit of measure.

The instrument displays:

- 1: The calibration value used.
- 2: The “K” value of the probe calculated according to the calibration expressed in pulses per liter.
- 3: **Enter** to confirm and save all the calibration parameters.

Menu 1C Reset Calibration

This function allows the user to delete all the calibrations and to restore the default values.

1 **CALIBRATION**

A: Flow Rate (Batch)
 ▶ B: Reset Sensor

01/02

1B **Batch**

▶ 1: Enter Start Batch

1B **Batch**

▶ 2: Enter Stop

1B **Batch**

▶ 2: Enter x Stop

1B **Batch**

▶ 3: Value L

1B **Batch**

▶ -: Set. Val. L

 -: Custom K

 -: Save?

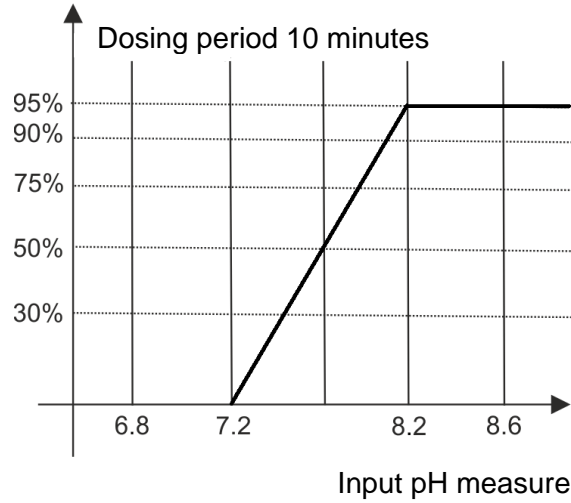
1C **Reset_Sensor**

Are you sure?

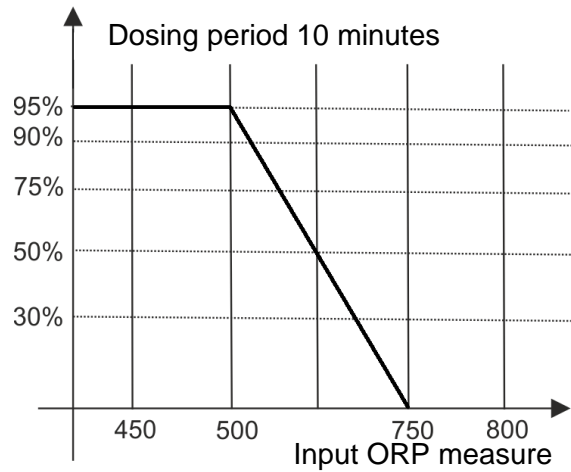
NO
YES

DOSING METHOD

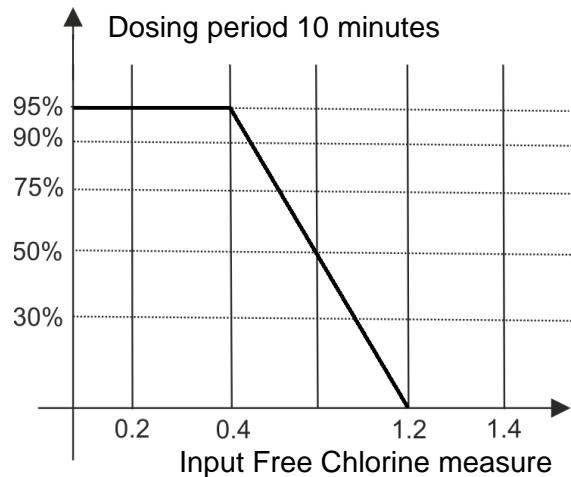
SetPoint = 7.2 pH
Dosing mode = Acid
Prop.Band= 1.0 pH)



SetPoint = 750 mV
Dosing mode = Low
Prop.Band= 250mV



SetPoint = 1.2ppm free Chlorine
Dosing mode = Low
Prop. Band: 0.8ppm



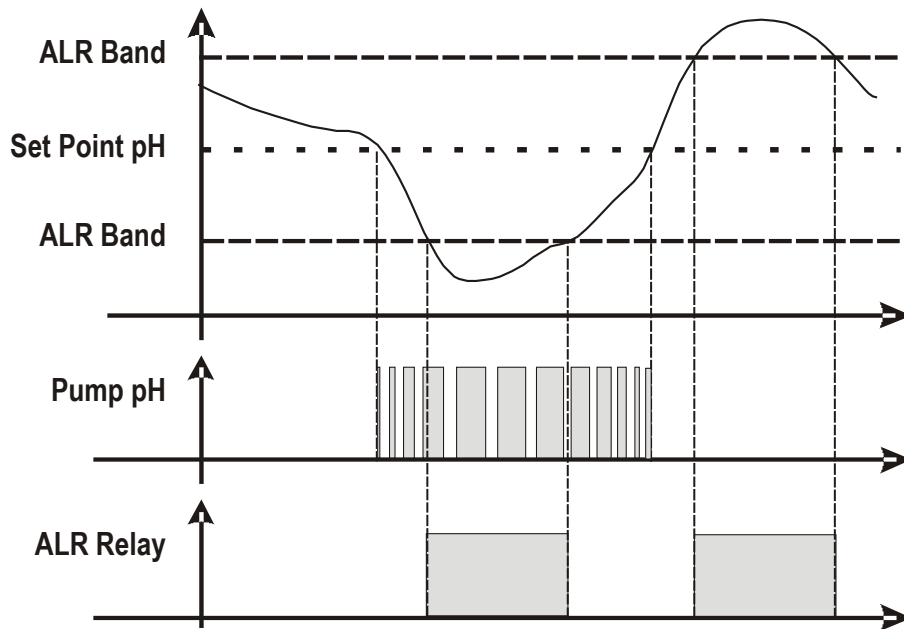
16.5 Alarm for the pH/Redox Set Point

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 is pressed to deactivate the alarm.

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

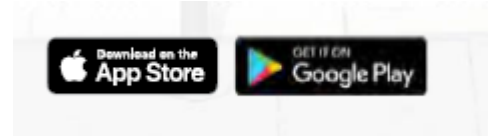
- First alarm at 70% of the time set is seen on the display, the alarm relay closes.
- Second alarm at 100% of the time set is seen on the display and the alarm relay closes and the pH/Redox pump is blocked.

Press to eliminate the alarm and initialize the OFA time.

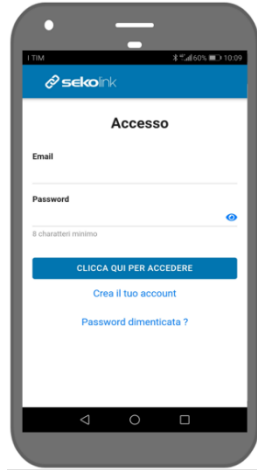


INTERNAL WEB SERVER

Download **SekoLink**



Register your account



Thanks to QrCode login in internal webpages
Set: User= ADMIN, Psw= 0000



Set your WiFi LAN name and Password and confirm.



Complete your device registration

VaDos Basic\Exact | pH · ORP · Chlorine

Thanks 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



6. ALARMS

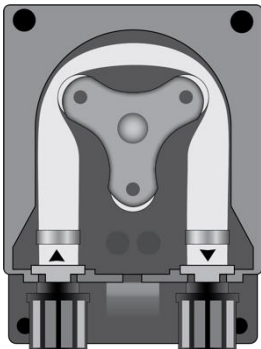
Alarm	Display	Actions to do
Level	Level _____ 7.2_pH Level _____ 750_mv Level _____ 1.2_ppm	- Push  to open Alarm Relay - Restore Product tank
Out of Range measure	Alr_band	- Replace or check the measure probe - Push  to open Alarm Relay - Restore measure
OFA First Alarm (time >70%)	OFA_Alarm _____ 7.2_pH 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 _____ 465_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 Ranges Measure alarms)

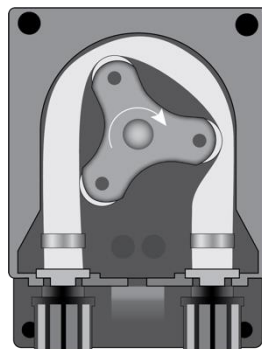
n	Item	Limits
1	Temp. Measure min	+10°C
2	Temp. Measure Max	+38°C
3	pH Measure min	6 pH
4	pH Measure Max	8 pH
5	ORP Measure min	+600 mV
6	ORP Measure Max	+800 mV
7	CL Measure min	0,50 ppm
8	CL Measure Max	2,00 ppm

HANDLING

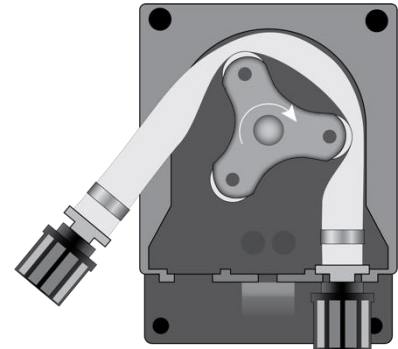
Hose replacement:



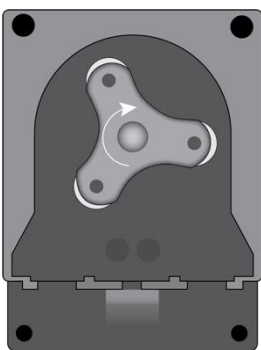
Open the pump's lid and release the hose by pulling the left connector upward.



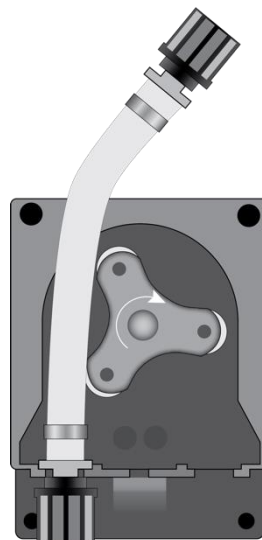
Position the roller at 7h05, turning it in the direction of the circular arrow.



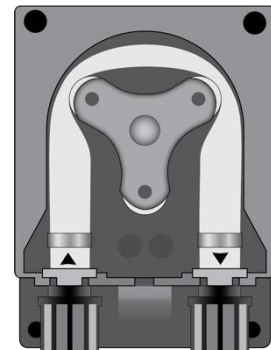
Completely release the left connector, holding it taut towards the outside, and turn the roller in the direction of the circular arrow so that the hose is freed up to the right connector.



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

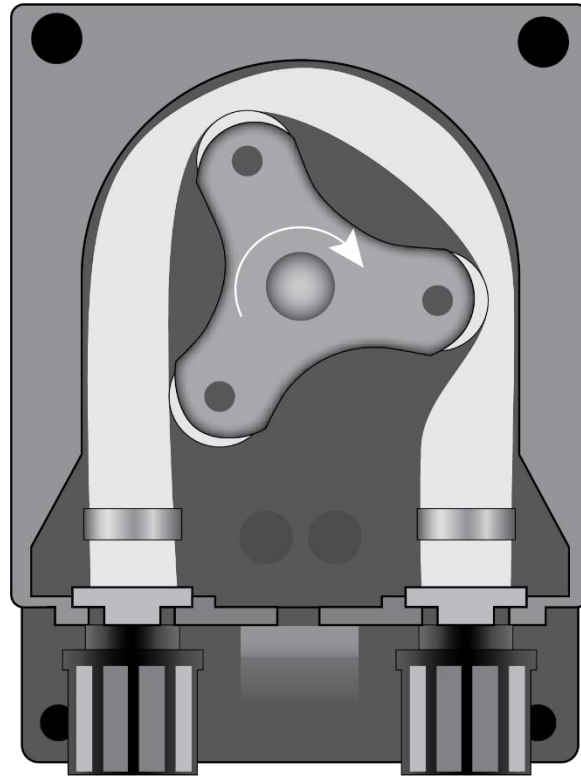


Insert the left connector into the relative housing and pass the hose under the roller's guide. Turn the roller in the direction of the circular arrow, simultaneously accompanying the hose into the pump's head, until the right connector is reached.



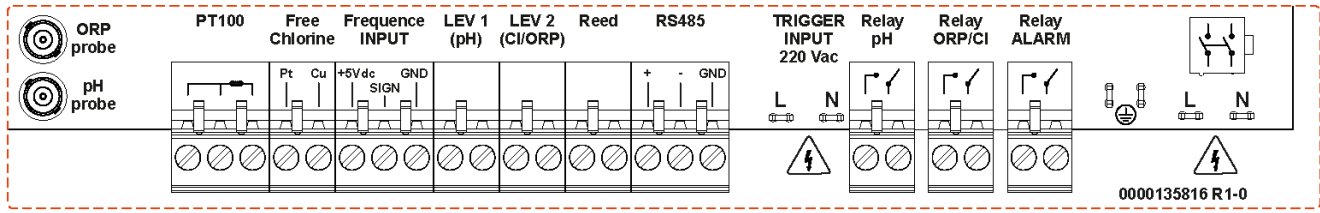
Close the pump's lid and press its surface hard so that it is properly locked into place.

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.

Wires connection:



Clamp	Description	VaDos Basic\Exact pH · ORP	Wire Connection
1	Input Probe	ORP	ORP Probe
2	Input Probe	pH	pH Probe
3	Input Probe	TEMP (PT100) A= two wires sensor B= three wires sensor	
4	Input Free Chlorine sensor	Input free chlorine probe: Pt: Platinum sensor Cu: Cupper sensor	
5	Input Freq. signal	Flow Rate (Freq.Input) A= Mechanical reed B= Padwheel hall sensor	
6	Level (product tank)	pH Level probe	Level probe for chemical tank
7	Level (product tank)	Chlorine (ORP) level probe	Level probe for chemical tank
8	Level (product tank)	Flow (REED sensor) or Chemical Level 3	
9	Serial Port	RS485 ModBus RTU	
10	Trigger Input	Circulation Pump (220Vac input)	Fase/Neutral wires
11	Output Relay	RL1 AUX1 pH	Dry contact
12	Output Relay	RL2 AUX2 OPR/Chlorine	Dry contact
13	Output Relay	RL3 Alarm	Dry contact
14	Earth connector	Earth	
15	Power Supply	220 Vac 50-60 Hz (F/N)	

Default parameters:

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

Init. Default. Menu

Press **Up+Down** keys and switch on device

Set reset routine:

- **Init. Default:** restore default parameters device only
- **Init. WiFi Module:** restore default parameters WiFi module only
- **Init. Calib. HW:** restore raw HW calibration parameters

