

KEMIDOSE DOUBLE

INSTRUCTIONS MANUAL **EN**

HANDBUCH **DE**

MANUAL DE INSTRUCCIONES **ES**

MANUEL D'INSTRUCTIONS **FR**

MANUALE D'INSTALLAZIONE **IT**

KemiDose | pH - ORP - Chlorine



WARNING!
 Before carrying out ANY work inside control panel of the KemiDose 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 Ball 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 | H: Mounting bracket kit (φ=6 mm screws) | I: Filter Minor (5") | J: Probe holder + Chlorine probe |
| | | | | |
| K: pH probe | L: Redox probe | M: Cleaning brush chlorine probe | N: Balls for chlorine probe | O: Water |
| | | | | |
| P: pH 4 Buffer solution | Q: pH 7 Buffer solution | R: 465 mv Calibration solution | S: Filter wrench | T: Hose PVC Crystal 8x12 for probes holder (4 m) |
| | | | | |
| U: Temperature Probe | | | | |

| Item* | System | Double pump | |
|-------|--------|-------------------|------------------------|
| | | KemiDose pH - ORP | KemiDose pH - ORP - CL |
| A | | 2 | 2 |
| B | | 2 | 2 |
| C | | 2 | 2 |
| D | | 2 | 2 |
| E | | 4 ^(*1) | 4 ^(*1) |
| F | | 2 | 2 |
| G | | 2 | 2 |
| H | | 1 | 1 |
| I | | - | 1 |
| J | | - | 1 |
| K | | 1 | 1 |
| L | | 1 | 1 |
| M | | - | 1 |
| N | | - | 1 |
| O | | 1 | 1 |
| P | | 1 | 1 |
| Q | | 1 | 1 |
| R | | 1 | 1 |
| S | | - | 1 |
| T | | - | 1 |
| U | | 1 ^(*2) | 1 ^(*2) |

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

(*1 One piece more for the WiFi model only), (*2 One piece for the WiFi model only)

KemiDose | 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 KemiDose or any of its peripheral components (including chemical products).

pH chemical products:

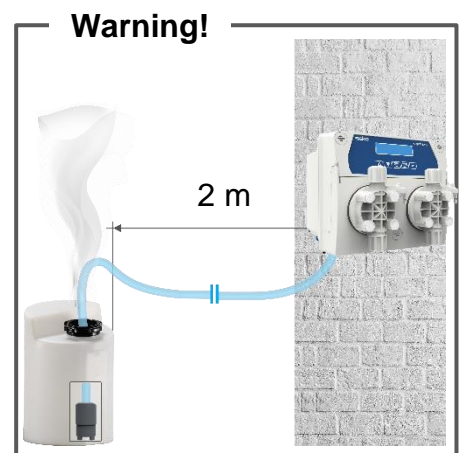
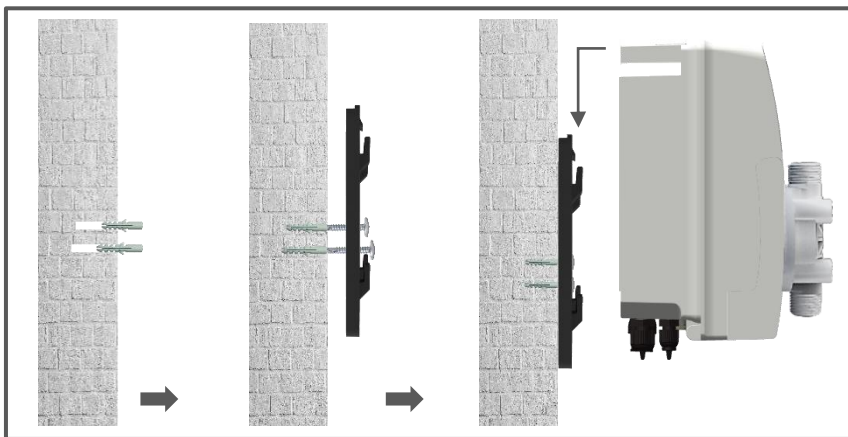
- **ABSOLUTELY** not recommended => pure sulphuric acid
- Recommended for lowering pH => negative pH (with a sulphuric acid base)
- Recommended for raising pH => positive pH (sodium carbonate or bicarbonate)

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.

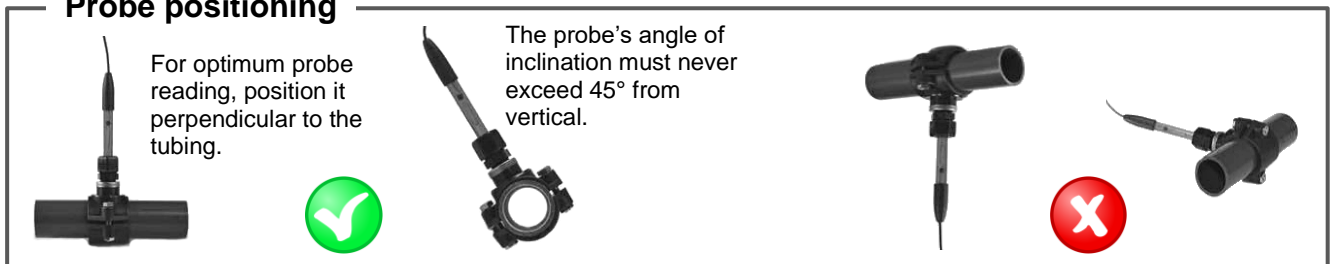
The pH / ORP probes are subject to wear and tear and therefore are not covered by the warranty.

2. INSTALLATION INSTRUCTIONS

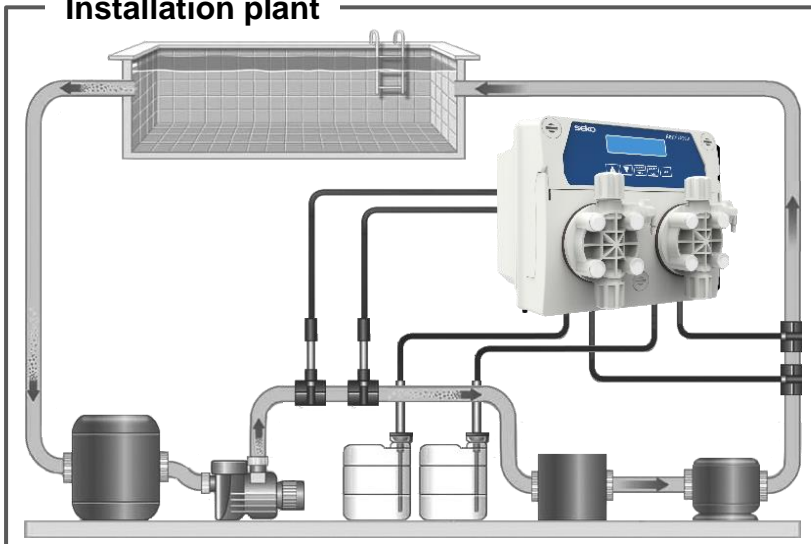


Make sure that the injection pressure is below 1.5 bar

Probe positioning



Installation plant



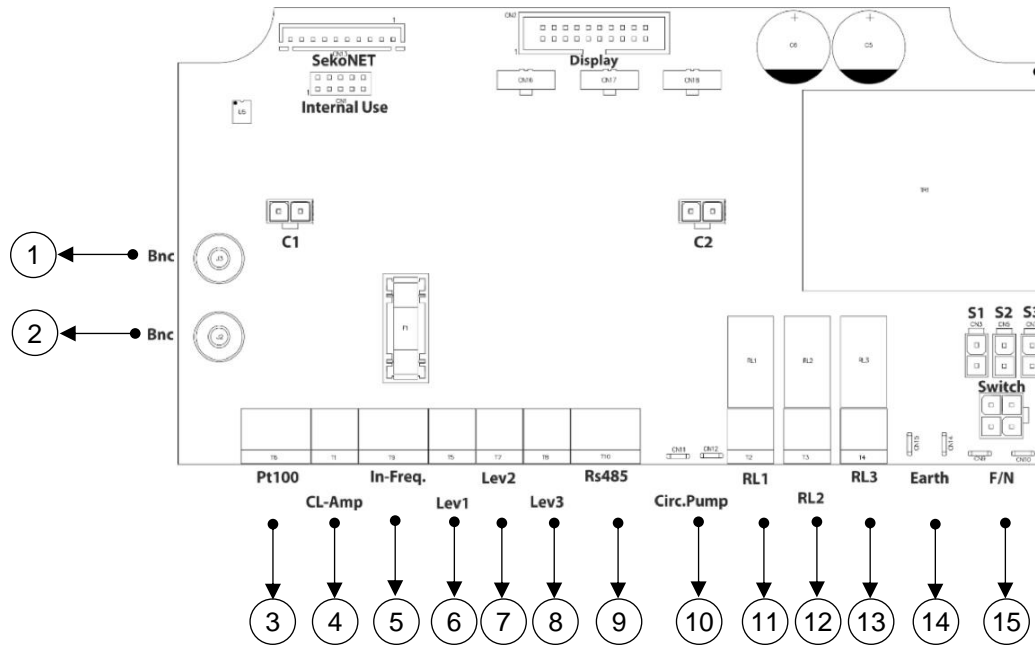
Warning!

Use with salt chlorinator:

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

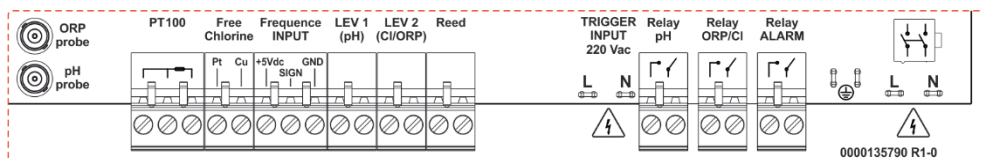
1. Position the pH measuring probe prior to the chlorinator cell.
2. To eliminate eddy currents, connect the pool water to an electrical ground point
3. Position the product injection point after the chlorinator cell.

3. ELECTRICAL CONNECTIONS



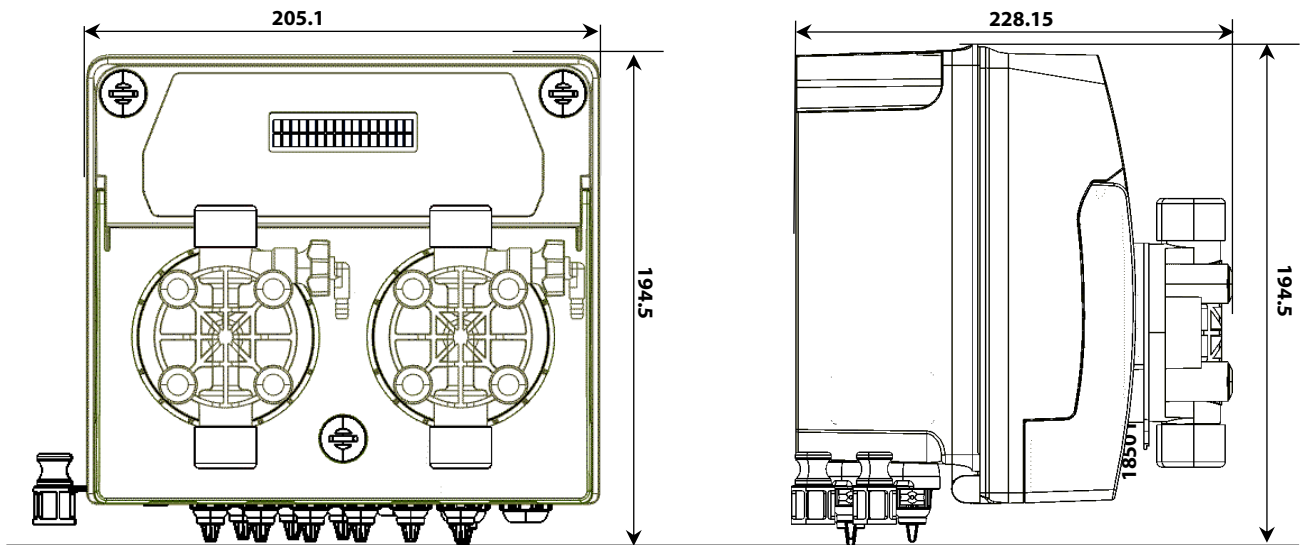
| Clamp | Description | Double pump system | |
|---------|----------------------|---------------------------------|---------------------------------|
| | | KemiDose pH · ORP | KemiDose pH · ORP · CL |
| 1 | Input Probe | ORP | ORP |
| 2 | Input Probe | pH | pH |
| 3 | Input Temperature | TEMP (PT100) | 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 (product tank) | Flow (REED sensor) | Flow (REED sensor) |
| 9 | Serial Port | Not present | Not present |
| 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 (F/N) | 220-240 Vac 50-60 Hz (F/N) |
| C1 | Pump connection | pH | pH |
| C2 | Pump connection | Chlorine (ORP) | Chlorine |
| SekoNet | WiFi Module | WiFi card (dedicate code) | WiFi card (dedicate code) |

Connection label:

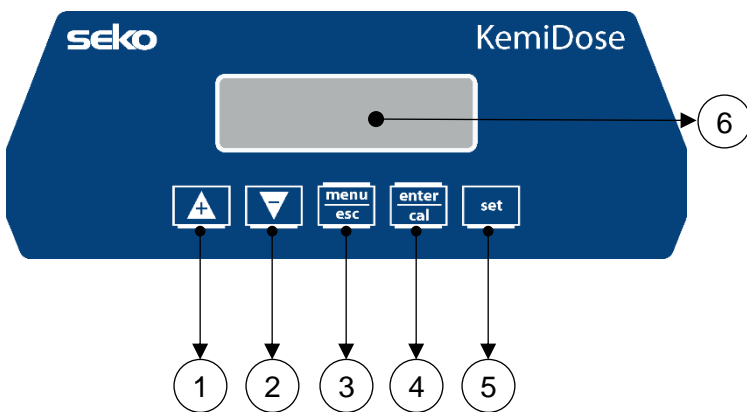


4. TECHNICAL SPECIFICATIONS

| Specifications | KemiDose Double pH/ORP | KemiDose Double pH/ORP/Chlorine |
|--------------------------|--------------------------------|-----------------------------------------|
| Dimensions (H-W-D) | H:196 x W:205 x D:171 mm | H:196 x W:205 x D:171 mm |
| Weight | 6 Kg | 6 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) | 32 Watt | 32 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) | 5 l/h | 5 l/h |
| Max. back-pressure | 5 bar | 5 bar |
| Relay contact (number 3) | 250 Vac 10A (resistive load) | 250 Vac 10A (resistive load) |
| Fuse | 500 mA (fast) | 500 mA (fast) |
| Frequency pump dosing | 160 strokes/minute | 160 strokes/minute |






5. SETTING PROGRAM




- 1) Button to increase the value
- 2) Button to decrease the value
- 3) Button Menu/Esc
- 4) Button Cal/OK
- 5) Button to set the setpoint
- 6) Digital display

Program Setup – Press  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  button.

The menu has a circular structure: once you arrive at last item, the confirmation of the parameter set by pressing , 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 – **7.5pH** (6-8pH)
 - SETPOINT TYPE: – **Acid** (Acid/Alka)
 - TEMPERATURE: 25°C; set °C/°F and the manual value
 - OFA ALARM: Off, 1-60' (minutes)
 - PROP. BAND = 1.0pH (default: 1.0pH, range: 0.4-2.5 pH)
- 3 ORP
 - SETPOINT – **700 mV** (400-850mV)
 - SETPOINT TYPE: **Low** (Low/High)
 - OFA ALARM: Off, 1-60' (minutes)
 - PROP. BAND = 250mV (default: 250mV, range: 100-350 mV)
 - **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)
 - OFA ALARM: Off, 1-60' (minutes)
 - PROP. BAND = 0.8 ppm (default: 0.8ppm, range: 0.3-1.2 ppm)
- 5 ADVANCED MENU
 - CIRCULATION PUMP – (Enabled/Disabled)
 - IN FREQ
 - 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

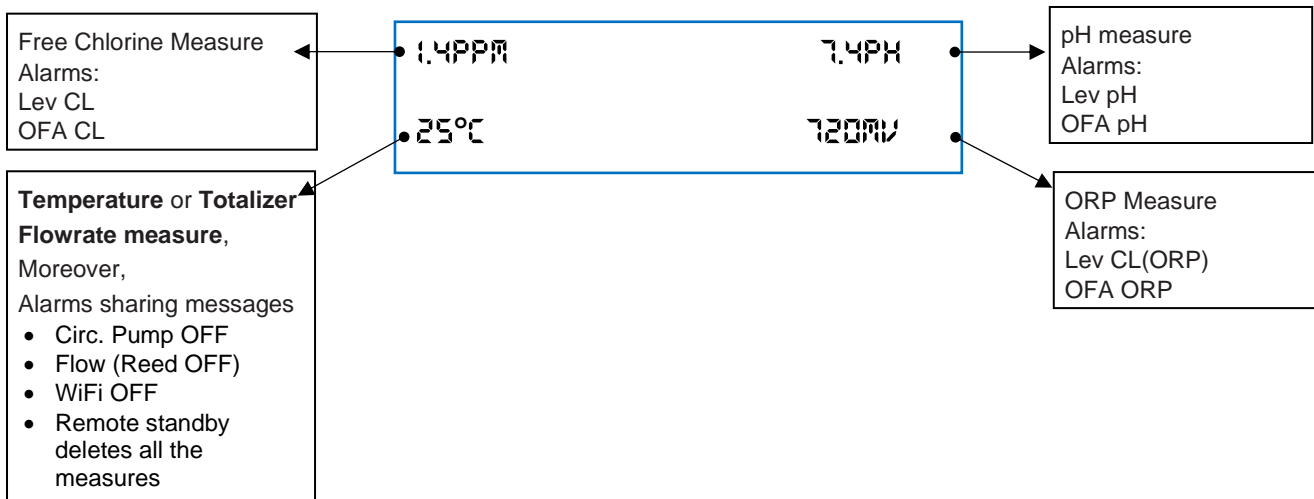
KemiDose | pH · ORP · Chlorine

- DOSING TYPE PH: Proportional, OFF, On/OFF
- DOSING TYPE ORP: Proportional, OFF, On/OFF
 - **Note:** The ORP dosing is disabled if DOSING TYPE CHLORINE is different than OFF
- DOSING TYPE CHLORINE: Proportional, OFF, On/OFF
- MAX FLOW RATE PUMPS:
 - PH 100% (default: 100% [160 strokes/min], range:10-100%)
 - RX/CHLORINE 100% (default: 100% [160 strokes/min], range:10-100%)
- 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
- WIFI CONFIGURATION
 - WiFi network name
 - WiFi password
 - WiFi network IP address.


Note: This menu is only available in WiFi products
- 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.

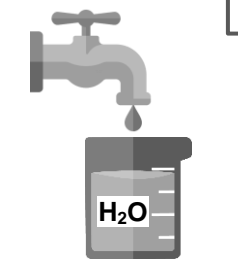
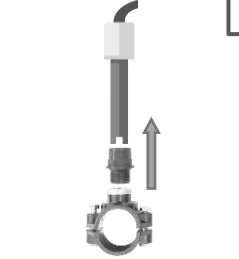
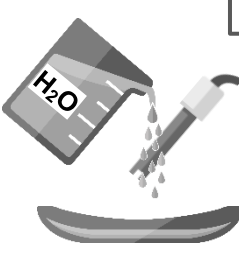
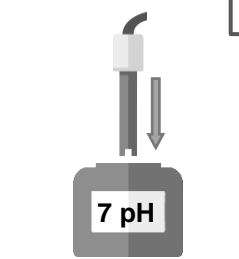
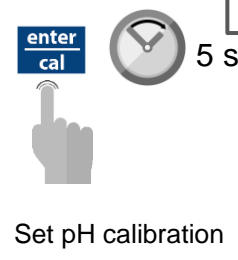
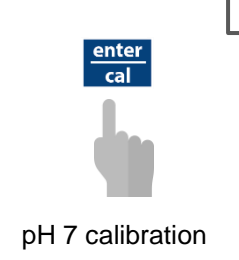
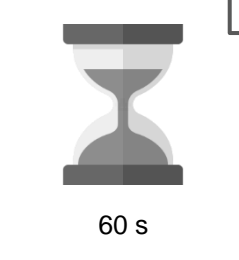

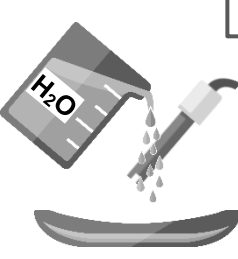
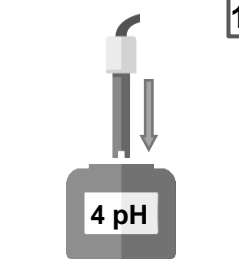
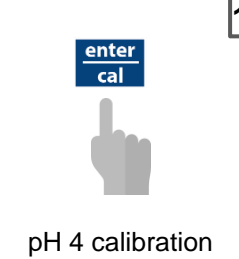
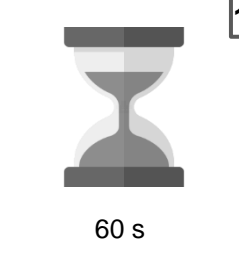

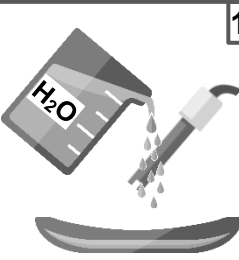
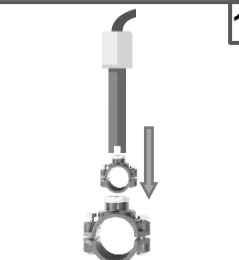

View Parameters



Calibration Menu:


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

6. 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>pH 7 calibration</p> |  <p>7</p> <p>60 s</p> |  <p>8</p> |
|  <p>9</p> |  <p>10</p> |  <p>11</p> <p>pH 4 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.” function, the calibration will be made only in 1 point using the 7 pH buffer solution.

Reference calibration

| | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div style="background-color: #0070C0; color: white; padding: 5px; text-align: center;"> <p>CAL Reference 7.2 pH</p> </div> <p>The unit will flash a temperature value</p> <p>Set the temperature value measured with the instrument</p> <p>Ex. 7.4 pH</p> | <div style="background-color: #0070C0; color: white; padding: 5px; text-align: center;"> <p>CAL Reference 7.4 pH</p> </div>  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

7. ORP CALIBRATION

Reference calibration

CAL Reference
720 mV

The unit will flash a temperature value

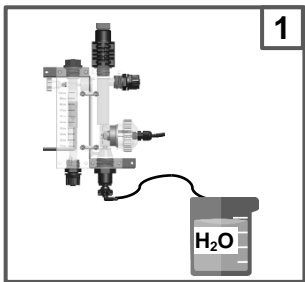
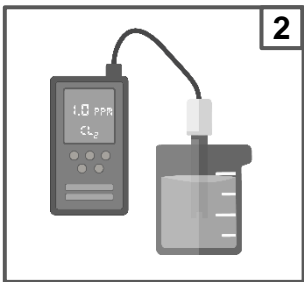
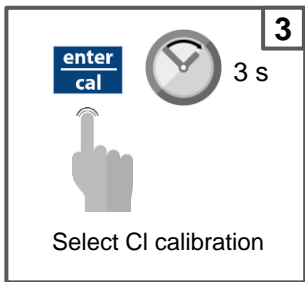
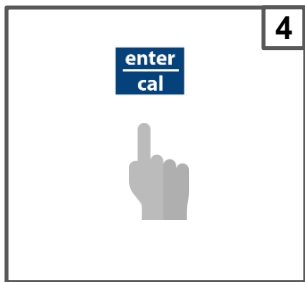
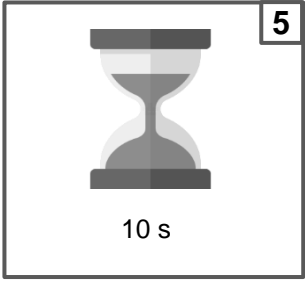
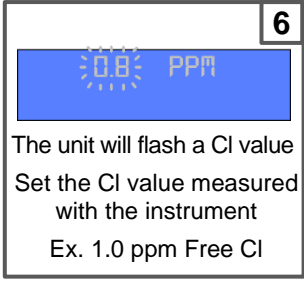
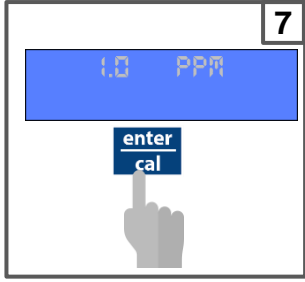
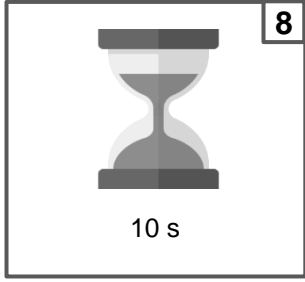
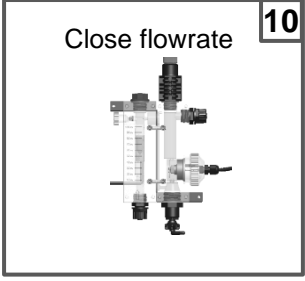
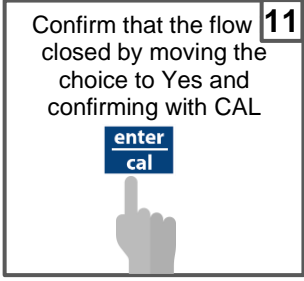
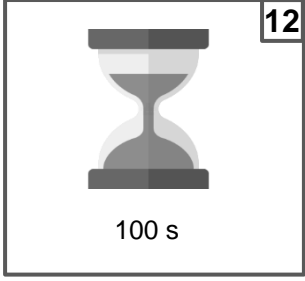
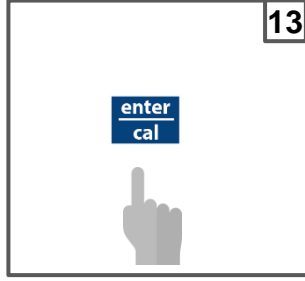
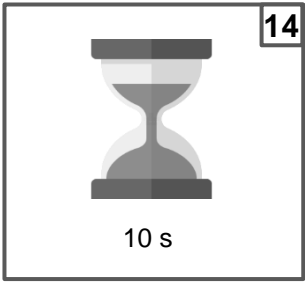
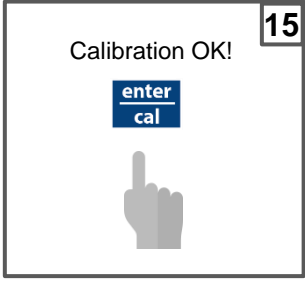
Set the temperature value measured with the instrument

Ex. 750 mV

CAL Reference
750 mV

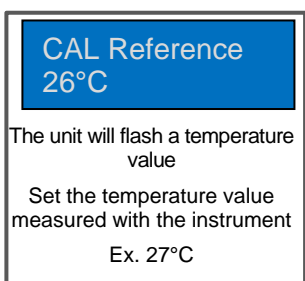
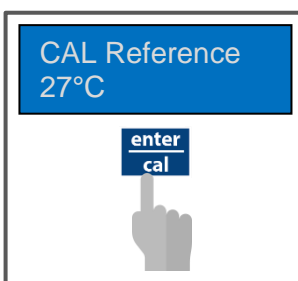
enter cal

8. CHLORINE CALIBRATION

| | | | |
|--------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
|  <p>1</p> |  <p>2</p> |  <p>3</p> <p>3 s</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>1.0 PPM</p> <p>enter cal</p> |  <p>8</p> <p>10 s</p> |
|  <p>10</p> <p>Close flowrate</p> |  <p>11</p> <p>Confirm that the flow closed by moving the choice to Yes and confirming with CAL</p> <p>enter cal</p> |  <p>12</p> <p>100 s</p> |  <p>13</p> <p>enter cal</p> |
|  <p>14</p> <p>10 s</p> |  <p>15</p> <p>Calibration OK!</p> <p>enter cal</p> | | |

* Press ESC to exit the calibration menu.

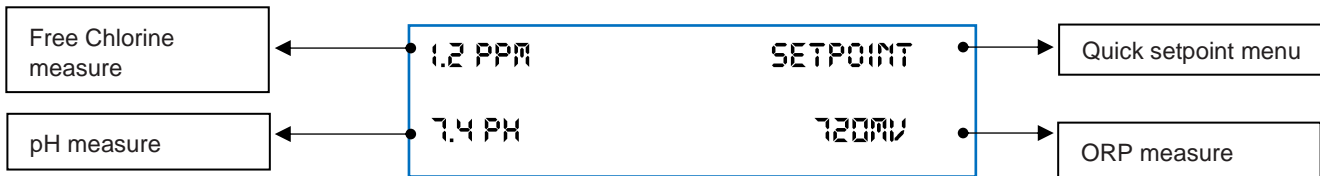
9. TEMPERATURE CALIBRATION

| | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
|  <p>CAL Reference 26°C</p> <p>The unit will flash a temperature value Set the temperature value measured with the instrument Ex. 27°C</p> |  <p>CAL Reference 27°C</p> <p>enter cal</p> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|

KemiDose | 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

System StandBy

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

Reset OFA Timer

Press **menu esc** (3 seconds) to reset OFA Alarm or press **▲ ▼** (5 seconds) to reset OFA Alarm.

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 Aux1 relay, press **set** to run Aux2 relay

To restore the default parameters, follow the steps below:

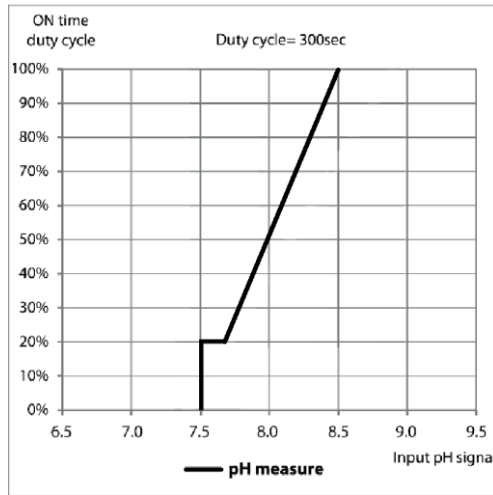
- Power off the KemiDose unit
- Keep **▲** and **▼** pressed and power on the unit
- The unit will flash **INIT.DEFAULT__NO**
- Select the unit to reset - WiFi module or dosing system.
- Press **▲** **INIT.DEFAULT__YES**
- Press **enter cal** to restore the default parameters.

Default parameters:

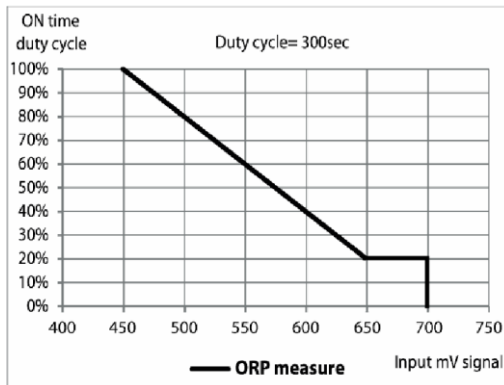
- Language = **EN**
- Set Point value = **7.5 pH; 700 mV; 1.2 ppm**
- Dosing method = **Acid (pH); Low (Redox); Low (Cl)**
- OFA Time = **OFF**
- Calibration = **Full**
- Flow Input = **OFF (recirculation pump)**
- Dosing type = **PROP; ON/OFF Relay Aux1 and Aux2**
- IN Freq. = **OFF**
- Reed = **NC (normally closed)**
- P.ON (On delay) = **OFF**
- Flow delay = **OFF**

10. DOSING METHOD

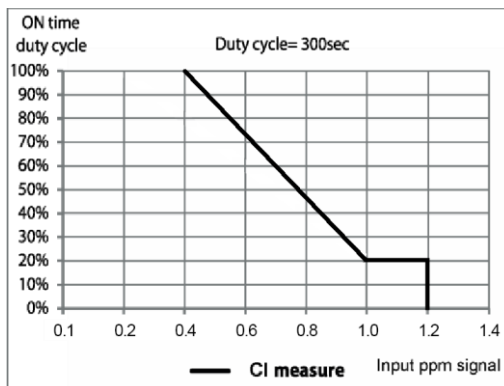
Setpoint = 7.5 pH
Dosing mode = Acid
Prop. Band= 1.0 pH



Setpoint = 700 mV
Dosing mode = Low
Prop. Band = 250mV

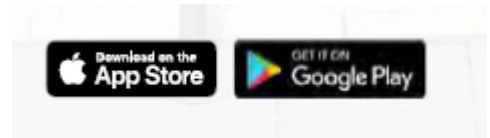


Setpoint = 1.2ppm Free Chlorine
Dosing mode = Low
Prop. Band = 0.8ppm

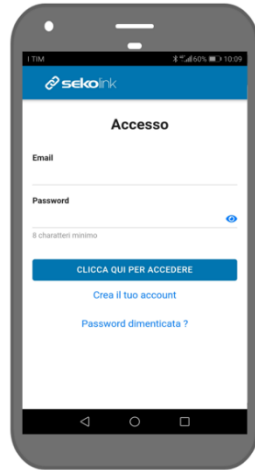


11. INTERNAL WEB SERVER

Download **SekoLink**



Register your account



Using the QrCode, login to the internal webpages
Set:

User = ADMIN
Password = 0000



Set your WiFi LAN name and password and confirm.



Complete your device registration

KemiDose | 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

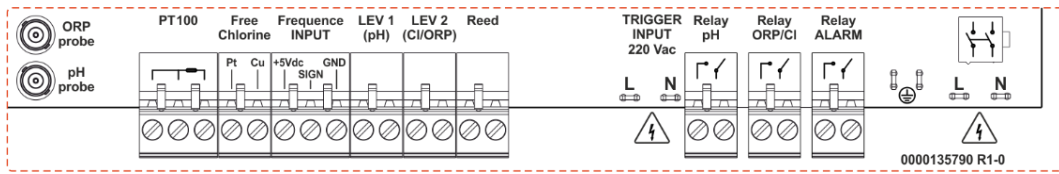
| Alarm | Display | Actions to do |
|---------------------------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Level *only active measures | LEVEL_LOW | <ul style="list-style-type: none"> - Press  for 3 seconds to reset or press   for 5 seconds to reset - Restore Product tank |
| Out of Range measure | RLR_BAND | <ul style="list-style-type: none"> - Replace or check the measure probe - Press  for 3 seconds to reset or press   for 5 seconds to reset - Restore measure |
| OFA First Alarm (time >70%) | OFA_1 | <ul style="list-style-type: none"> - Press  for 3 seconds to reset or press   for 5 seconds to reset |
| OFA Second Alarm (time 100%) | OFA_2 | <ul style="list-style-type: none"> - Press  for 3 seconds to reset or press   for 5 seconds to reset |
| Flow Rate | FLOW | <ul style="list-style-type: none"> - Restore Flow Rate |
| Calibration Function | ERROR | <ul style="list-style-type: none"> - Restore Probe or Buffer solution and repeat calibration procedure |
| System Error | PARAMETER ERROR | <ul style="list-style-type: none"> - Press  to restore Default parameter - Broken Unit |
| Alarm measure (*1) | HIGH MEASURE LOW MEASURE | <ul style="list-style-type: none"> - 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 ppm |

KemiDose | pH · ORP · Chlorine

Connection label:



Wire connection:

| Clamp | Description | KemiDose pH · ORP | Details |
|-------|----------------------------|--------------------------------------------------------------------------|-------------------------------|
| 1 | Input Probe | ORP | |
| 2 | Input Probe | pH | |
| 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: Copper 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) | Flow Sensor |
| 9 | Serial Port | Not present | None |
| 10 | Trigger Input | Circulation Pump (220Vac input) | Line/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 | 220-240 Vac 50-60 Hz (F/N) | -- |



ACHTUNG!

Vor jeder Maßnahme innerhalb der Steuertafel des KemiDose ist sicherzustellen, dass diese Vorrichtung vom Netz getrennt ist.

Die Nichteinhaltung der in dieser Anleitung enthaltenen Anweisungen kann zu Personenschäden, Schäden am Gerät und Schäden am System führen.

1. LIEFERUMFANG

| | | | | |
|-------------------------------------------------------------------------|--------------------------------------------|----------------------------------------------|----------------------------------------|------------------------------------------------------------|
| A: PVC Crystal 4x6 mit Ansaugschlauch (4 m) | B: Polyäthylen-Auslassschlauch (5m) | C: FPM-Lippenventil (3/8" Gas) | D: PSS3-Sondenträger (1/2" Gas) | E: Selbstschneidende Rohrschlauchklemme (φ=50mm) |
| F: Reduzierstück für Einspritzventil (1/2" außen auf 3/8" innen) | G: Fußfilter | H: Halterungssatz (φ= 6 mm-Schrauben) | I: Minorfilter (5") | J: Sondenträger + Chlorsonde |
| K: pH-Sonde | L: Redox-Sonde | M: Reinigungsbürste für Chlorsonde | N: Kugeln für Chlorsonde | O: Wasser |
| P: Pufferlösung pH | Q: Pufferlösung pH 7 | R: Kalibrierlösung 465 mV | S: Filterschlüssel | T: Schlauch PVC Crystal 8x12 für Sondenträger (4 m) |
| U: Temperature Probe | | | | |

| Artikel * | System | Doppelpumpensystem | |
|-----------|--------|--------------------|------------------------|
| | | KemiDose pH - ORP | KemiDose pH - ORP - CL |
| A | | 2 | 2 |
| B | | 2 | 2 |
| C | | 2 | 2 |
| D | | 2 | 2 |
| E | | 4 ^(*1) | 4 ^(*1) |
| F | | 2 | 2 |
| G | | 2 | 2 |
| H | | 1 | 1 |
| I | | - | 1 |
| J | | - | 1 |
| K | | 1 | 1 |
| L | | 1 | 1 |
| M | | - | 1 |
| N | | - | 1 |
| O | | 1 | 1 |
| P | | 1 | 1 |
| Q | | 1 | 1 |
| R | | 1 | 1 |
| S | | - | 1 |
| T | | - | 1 |
| U | | 1 ^(*2) | 1 ^(*2) |

* Die Zahlen in der Tabelle geben die Anzahl der jeweiligen Artikel im Lieferumfang an.

(*1 Ein Stück mehr nur für das WiFi-Modell), (*2 Ein Stück nur für das WiFi-Modell)

KemiDose | pH · ORP · Chlor

ACHTUNG!

Diese Produkte sind **GEFÄHRLICH (I✳A)** und der Umgang mit ihnen, der Gebrauch und die Lagerung erfordern besondere Vorsichtsmaßnahmen.

- **Chemikalien niemals miteinander vermischen!**
- Niemals Kinder oder mit dieser Anleitung nicht vertraute Personen die KemiDose oder zugehörige Komponenten einschließlich der Chemikalien verwenden oder damit hantieren lassen.

pH-Werte der Chemikalien

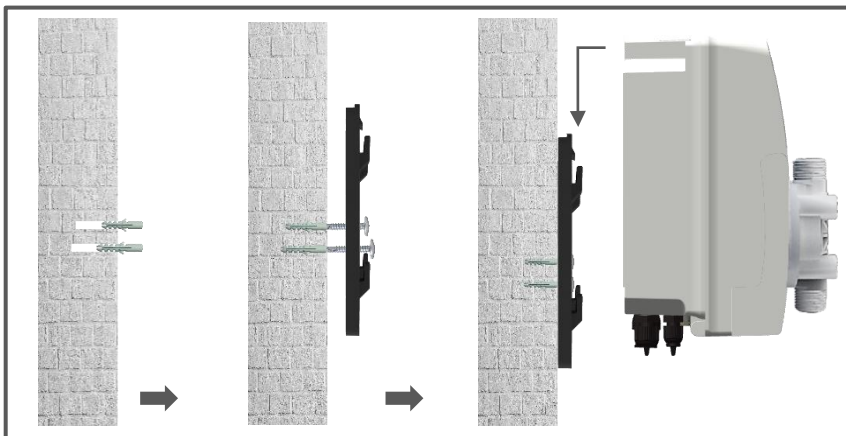
- **Absolut** nicht empfohlen => reine Schwefelsäure
- Zum Senken des pH-Werts wird negativer pH-Wert empfohlen (auf der Grundlage von Schwefelsäure).
- Zum Erhöhen des pH-Werts wird positiver pH-Wert empfohlen (Natriumcarbonat oder Bicarbonat)

Redox-Chemikalien

- **Absolut** nicht empfohlen: Alle Arten organischer Chlorverbindungen
- Flüssige Chlorverbindungen und 12%-Bleichmittel sind ohne weiteres verwendbar. Mittel mit 48%-iger Konzentration müssen im Verhältnis 1:3 in Wasser gelöst werden.

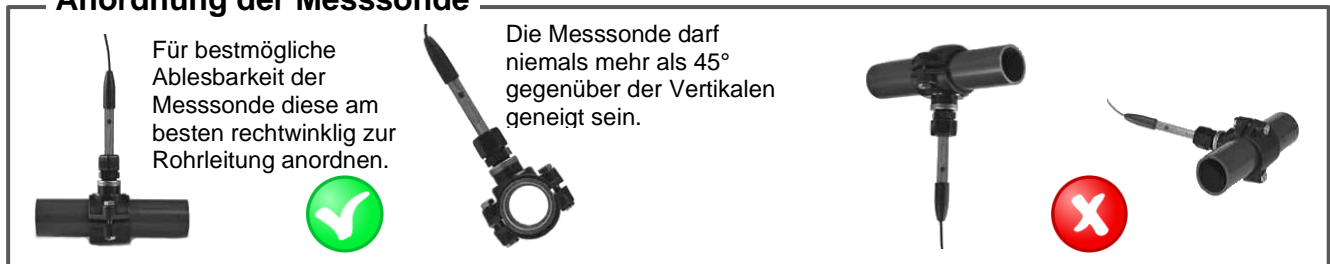
Alle pH- und Redoxsonden sind Verschleißteile und daher von jeglicher Garantie ausgeschlossen.

2. EINBAUANLEITUNG

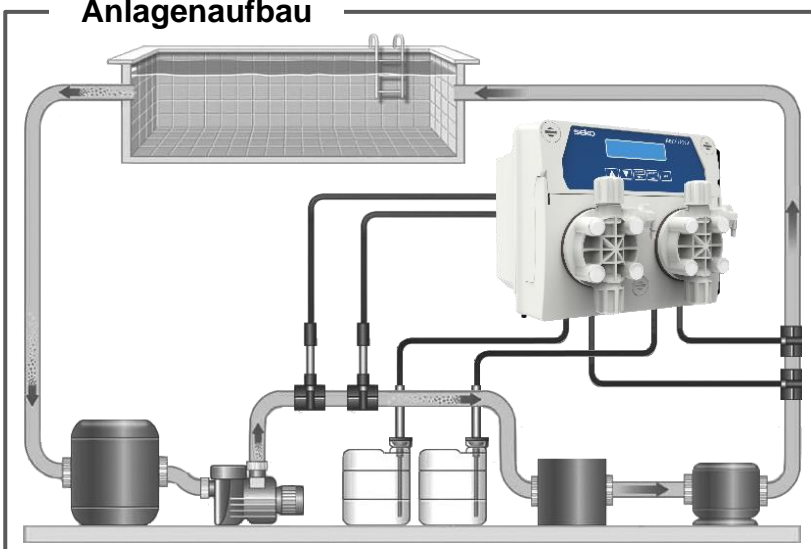


Vergewissern Sie sich, dass der Einspritzdruck weniger als 1,5 bar beträgt!

Anordnung der Messsonde



Anlagenaufbau



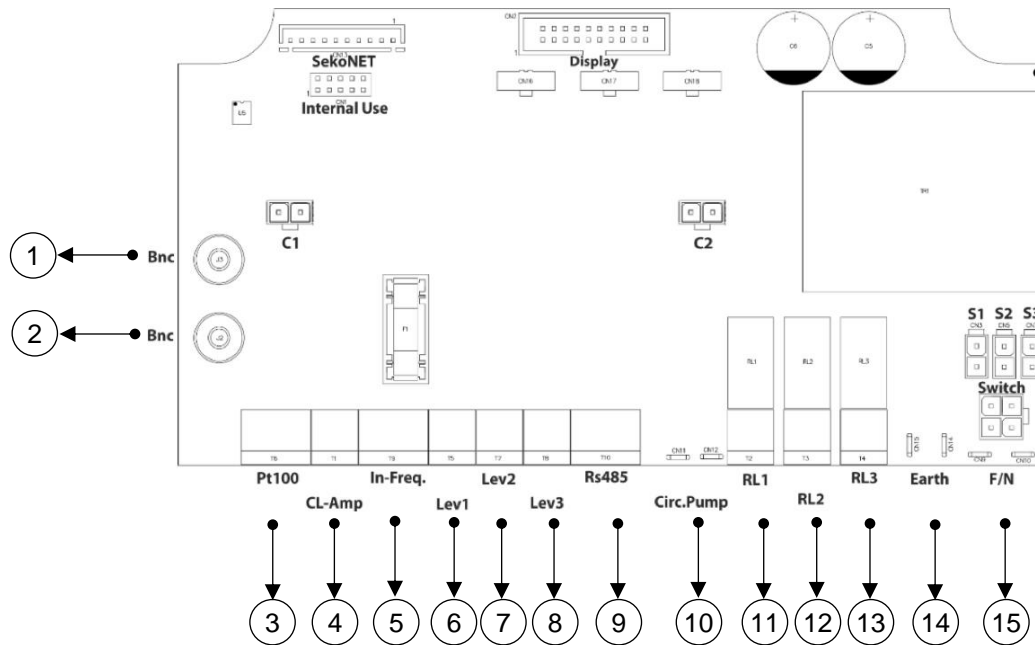
Achtung!

Verwendung mit Salzchlorungsmittel

Um bei pH-Systemen Systemstörungen und Systemschäden vorzubeugen, ist Folgendes zu beachten:

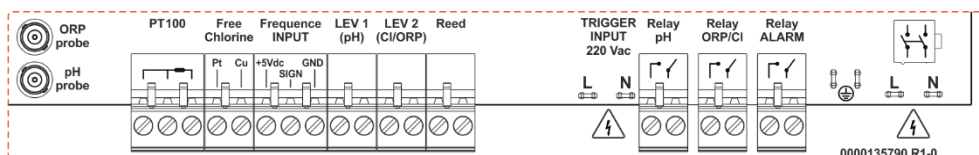
1. Die pH-Messsonde vor der Chlorierungszelle anordnen.
2. Zur Vermeidung von Fehlerströmen das Poolwasser erden.
3. Den Einspritzzeitpunkt für das Mittel hinter der Chlorierungszelle anordnen.

3. ELEKTROANSCHLÜSSE



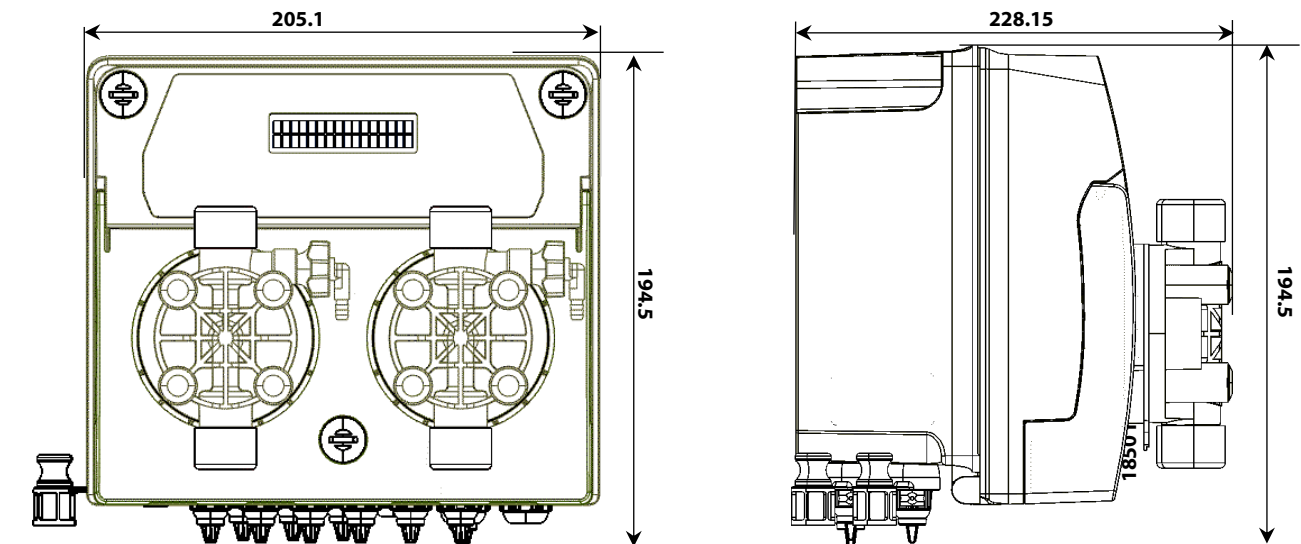
| Klemme | Beschreibung | Doppelpumpensystem | |
|---------|--------------------------------------------|------------------------------------|------------------------------------|
| | | KemiDose pH · ORP | KemiDose pH · ORP · CL |
| 1 | Einlasssonde | ORP | ORP |
| 2 | Einlasssonde | pH | pH |
| 3 | Eingangstemperatur | TEMP (PT100) | TEMP (PT100) |
| 4 | Einlasssonde | Nicht benutzt | Freies Chlor |
| 5 | Eingangsfrequenz Signal | Durchfluss (Freq. Eingang) | Durchfluss (Freq. Eingang) |
| 6 | Füllstand (Produktbehälter) | pH Füllstandssonde | pH Füllstandssonde |
| 7 | Füllstand (Produktbehälter) | Chlor (ORP) Füllstandssonde | Chlor Füllstandssonde |
| 8 | Füllstand (externer Reed-Durchflusssensor) | Durchfluss (REED Sensor) | Durchfluss (REED Sensor) |
| 9 | Serielle Schnittstelle | Nicht vorhanden | Nicht vorhanden |
| 10 | Triggereingang 220Vac (Hochspannung) | Umwälzpumpe (Eingang 220Vac) | Umwälzpumpe (Eingang 220Vac) |
| 11 | Ausgangsrelais R1 | RL1 AUX1 pH | RL1 AUX1 pH |
| 12 | Ausgangsrelais R2 | RL2 AUX2 ORP/Chlor | RL2 AUX2 ORP/Chlor |
| 13 | Ausgangsrelais R3 | RL3 Alarme | RL3 Alarme |
| 14 | Erdungsanschluss | Erdung | Erdung |
| 15 | Stromversorgung | 220-240 Vac 50-60 Hz (F/N) | 220-240 Vac 50-60 Hz (F/N) |
| C1 | Pumpenanschluss | pH | pH |
| C2 | Pumpenanschluss | Chlor (ORP) | Chlor |
| SekoNet | WiFi-Modul | WiFi-Karte (separater Produktcode) | WiFi-Karte (separater Produktcode) |

Beschrifteten Verbindungen

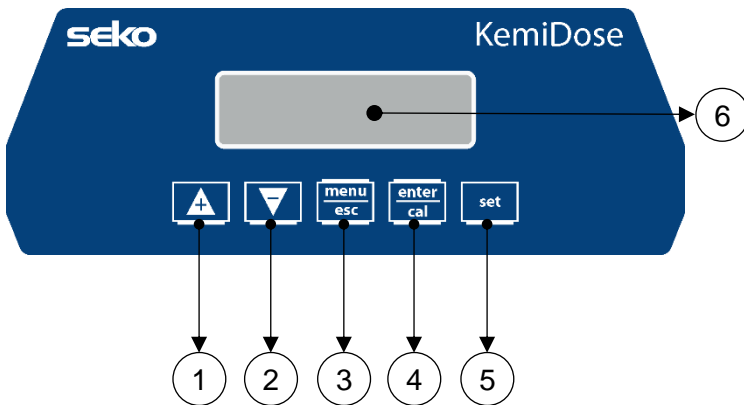


4. TECHNISCHE DATEN


| Daten | KemiDose Double pH/ORP | KemiDose Double pH/ORP/Chlor |
|--------------------------|--------------------------------|-----------------------------------------|
| Abmessungen (H-B-T) | H:196 x B:205 x T:171 mm | H:196 x B:205 x T:171 mm |
| Gewicht | 6 Kg | 6 Kg |
| Pumpenstatus | Unterbrechung - Ein | Unterbrechung - Ein |
| Sondenkalibrierung | Automatisch | Automatisch |
| Stromversorgung | 220-240 VAC 50-60 Hz | 220-240 VAC 50-60 Hz |
| Leistungsaufnahme | 32 Watt | 32 Watt |
| Genauigkeit des Geräts | ± 0,1 pH; ±10mV; ±1°C | ± 0,1 pH; ±10mV; 0,1 ppm; ±1°C |
| Genauigkeit | ±0,02pH, ±3mV; ±0,5°C | ±0,02pH, ±3mV; 0,05 ppm; ±0,5°C |
| Bereich | 0-14pH; -99 -1000mV; 0...+55°C | 0-14pH; -99 -1000mV; 0-5 ppm; 0...+55°C |
| Durchflussmenge Pumpe | 5 l/h | 5 l/h |
| Maximaler Gegendruck | 5 bar | 5 bar |
| Relaiskontakt (Nummer 3) | 250 Vac 10A (ohmsche Last) | 250 Vac 10A (ohmsche Last) |
| Sicherung | 500 mA (schnelle) | 500 mA (schnelle) |
| Dosierpumpe Frequenz | 160 Hübe/Minuten | 160 Hübe/Minuten |






5. SETUP-ANLEITUNGEN




- 1) Taste zur Erhöhung des Wertes
- 2) Taste zum Verringern des Wertes
- 3) Taste Menü/Esc
- 4) Taste Cal/OK
- 5) Taste zum Einstellen des Sollwerts
- 6) Digitalanzeige

Programm-Einstellung - 5 Sekunden  lang gedrückt halten

Bei der Eingabe jedes Menüpunktes kann der Parameter direkt mit den Pfeiltasten geändert werden ( und .

Die Bestätigung der aktuellen Einstellung und das Umschalten zum nächsten Punkt erfolgen durch Drücken der Taste .

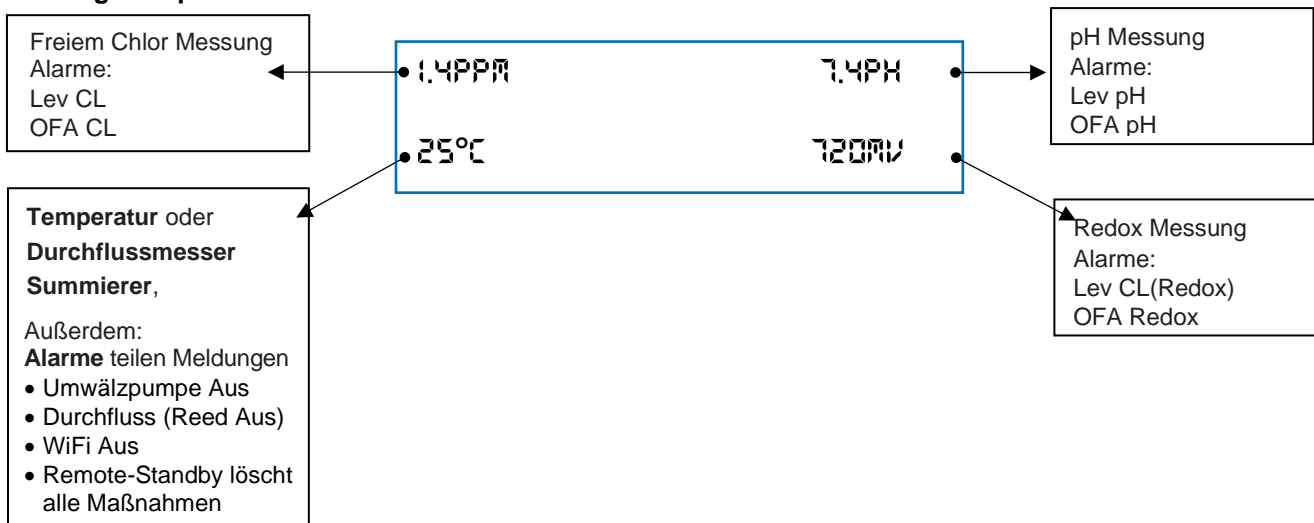
Das Menü ist kreisförmig aufgebaut: Wenn Sie den letzten Punkt erreicht haben, bestimmt die Bestätigung der Parametereinstellung durch Drücken von  die Rückkehr zum ersten Menüpunkt.

- 1 **SPRACHE**: Es stehen fünf Sprachen zur Verfügung, aus denen gewählt werden kann: **EN**, FR, IT, DE, ES
- 2 **PH**
 - **SOLLWERT: 7,5pH** (5-9pH)
 - **ART_DOSIERUNG: Säure** (Sauer/Alka)
 - **TEMPERATUR: 25°C**; Stellen Sie °C/°F und den manuellen Wert ein
 - **OFR ALARM**: Aus, 1-60' (Minuten)
 - **PROP. BRAND** = 1,0pH (default: 1,0pH, range: 0,4-2,5 pH)
- 3 **ORP**
 - **SOLLWERT: 700 mV** (400-850mV)
 - **ART_DOSIERUNG: Niedrig** (Niedrig/Hoch)
 - **OFR ALARM**: Aus, 1-60' (Minuten)
 - **PROP. BRAND** = 250mV (default: 250mV, range: 100-350 mV)
 - **Hinweis**: Die Redox-Dosierung in Gegenwart von Chlor hat keinen Einfluss auf die Dosierpumpe. Es kann das Aux2-Relais mit EIN/AUS-Aktivierung in Bezug auf den Sollwert handhaben.
- 4 **CHLOR**
 - **SOLLWERT: 1,2 ppm** (0,3-3,0 ppm)
 - **ART_DOSIERUNG: Niedrig** (Niedrig/Hoch)
 - **OFR ALARM**: Aus, 1-60' (Minuten)
 - 0,8 ppm (default: 0,8ppm, range: 0,3-1,2 ppm)
- 5 **ERWEITERTES MENÜ**
 - **UMWALZPUMPE**: (aktiviert/deaktiviert)
 - **EINGANG DURCHFLUSSMENGE**
 - AUS/AN
 - Impuls/Liter:1 oder Liter/Impuls: 1 - Einstellwert
 - Einheit Messung: L oder m³
 - **KALIBRIERUNG PH**: 2 Punkte, 1 Punkt, Referenz, Deaktivieren
 - **KALIBRIERUNG ORP**: 1 Punkt, Referenz, Deaktivieren


- KALIBRIERUNG CL: 2 Punkte, Deaktivieren
 - KALIBRIERUNG TEMP: Referenz, Deaktivieren
 - DOSIERUNGSTYP PH: Proportional, Aus, An/Aus
 - DOSIERUNGSTYP ORP: Proportional, Aus, An/Aus
 - **Hinweis:** Die Redox-Dosierung ist deaktiviert, wenn sich die DOSIERUNGSTYP CHLOR von AUS unterscheidet
 - DOSIERUNGSTYP CHLOR: Proportional, Aus, An/Aus
 - PUMPEN MAX DURCHFLUSS:
 - PH 100% (Default: 100% [160 Hübe/Min], Bereich:10-100%)
 - RX/CHLOR 100% (Default: 100% [160 Hübe/Min], Bereich:10-100%)
 - AUX RELAIS
 - AUX1 RELAIS: pH, Deaktivieren
 - AUX2 RELAIS: Chlor, ORP, Deaktivieren
 - **Hinweis:** Aux1- und Aux2-Relais dosieren mit EIN/AUS-Methode
 - PASSWORT: 0000 (**Hinweis:** Passwort deaktiviert; einen anderen Wert einstellen als: 0000)
 - RÜCKSETZEN KALIBRIERUNG: (**Hinweis:** Wählen Sie die Maßnahme zum Zurücksetzen: pH; Chlor; ORP)
 - ALLE PARAMETER RÜCKSETZEN
 - WLAN-KONFIGURATION
 - WLAN-Netzwerkname
 - WLAN Passwort
 - IP-Adresse des WLAN-Netzwerks.
- Hinweis:** Dieses Menü ist nur in WiFi-Produkten verfügbar
- PROG-SYSTEMSTEUERUNG: Zeigt die elektrischen Signale an
 - REED (Anzeigefehler, wenn Rot): NO/NC
 - EINSCHALT VERZÖGERUNG: Deaktiviert die Dosierpumpen für die eingestellte Zeit
 - DURCHFLUSS VERZÖGERUNG: Deaktiviert die Dosierpumpen für die eingestellte Zeit

Hinweis: Timeout-Einstellungsmenü: Nach 120 Sekunden ohne Aktion wird der Controller ohne Speichern von Parametern beendet.

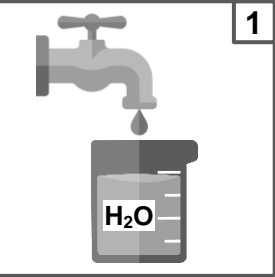
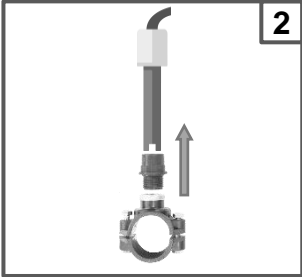
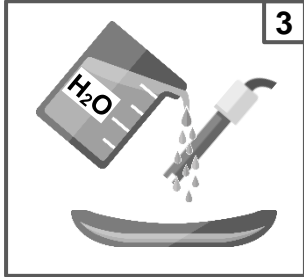
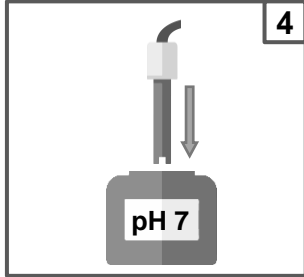
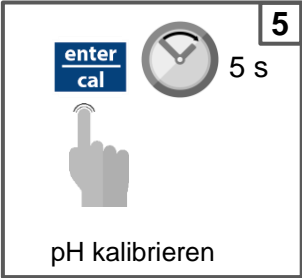
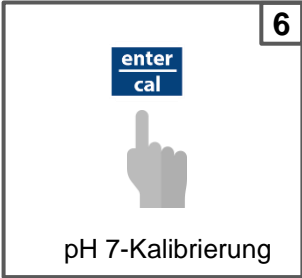
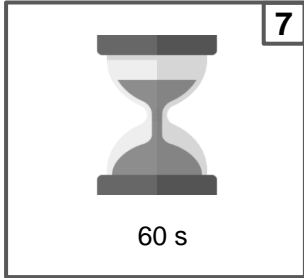
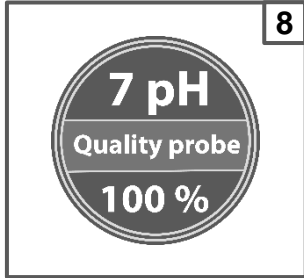
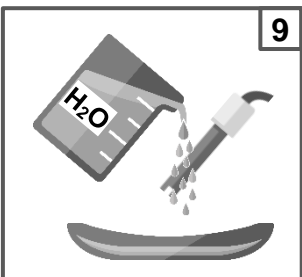
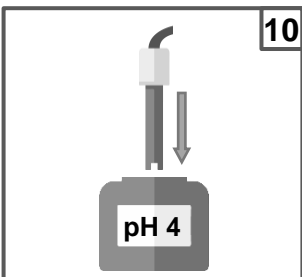
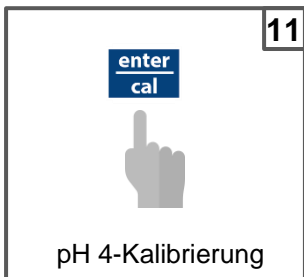
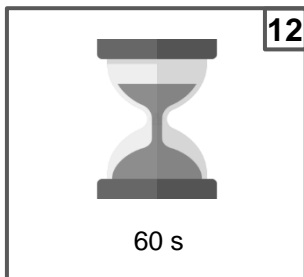
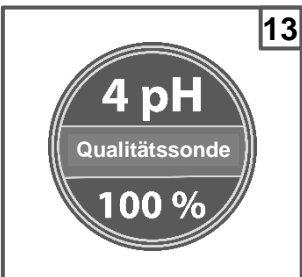
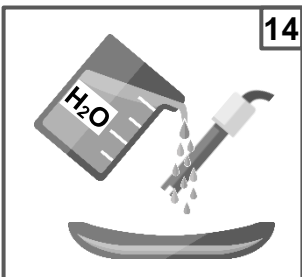
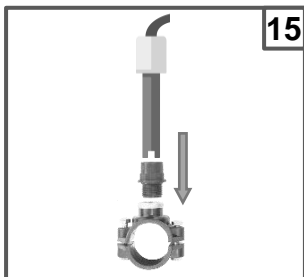
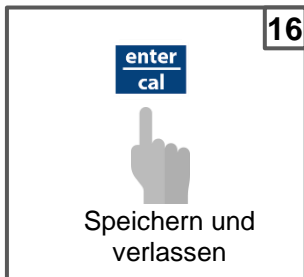
Anzeigebeispiel



Kalibrierungsmenü


Die -Taste 3 Sekunden lang drücken und kalibrieren Sie die pH-Sonde, die Redox-Sonde, die Chlorsonde oder die Temperatur.

6. pH-KALIBRIERUNG

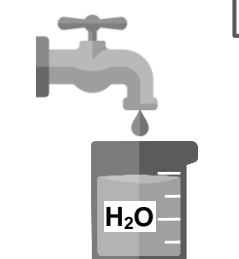
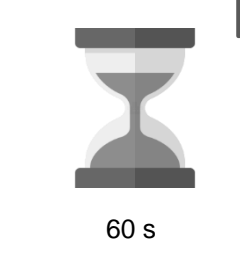
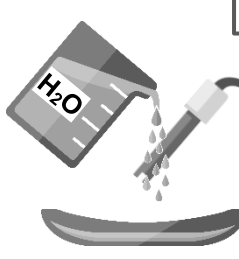
| | | | |
|-------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>1</p> |  <p>2</p> |  <p>3</p> |  <p>4</p> |
|  <p>5</p> <p>enter cal 5 s</p> <p>pH kalibrieren</p> |  <p>6</p> <p>enter cal</p> <p>pH 7-Kalibrierung</p> |  <p>7</p> <p>60 s</p> |  <p>8</p> <p>7 pH Quality probe 100 %</p> |
|  <p>9</p> |  <p>10</p> <p>pH 4</p> |  <p>11</p> <p>enter cal</p> <p>pH 4-Kalibrierung</p> |  <p>12</p> <p>60 s</p> |
|  <p>13</p> <p>4 pH Qualitätssonde 100 %</p> |  <p>14</p> |  <p>15</p> |  <p>16</p> <p>enter cal</p> <p>Speichern und verlassen</p> |

Hinweis: Wenn die Funktion „1 Punkt Kal.“ eingestellt wurde, wird nur an einem (1) Punkt kalibriert, und zwar mithilfe der Pufferlösung pH 7.


Referenzkalibrierung

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| <p>Referenz KAL 7.2 pH</p> <p>Das Gerät blinkt einen Temperaturwert Stellen Sie den Temperaturwert mit dem Instrument gemessen Ex. 7.4 pH</p> | <p>Referenz KAL 7.4 pH</p>  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|

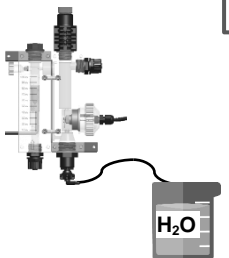
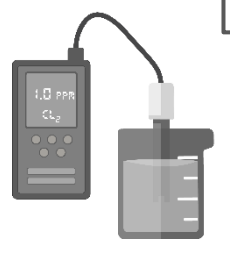


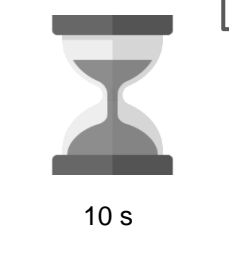
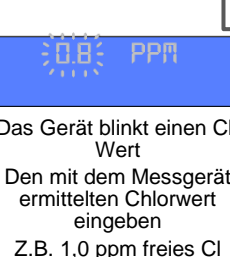
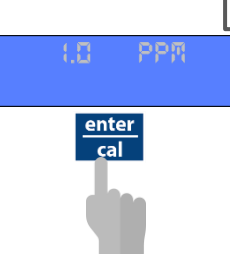
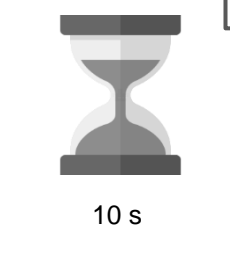
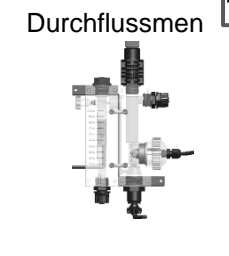

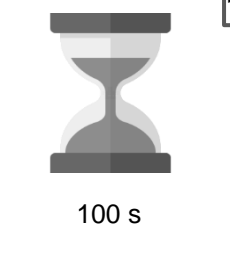

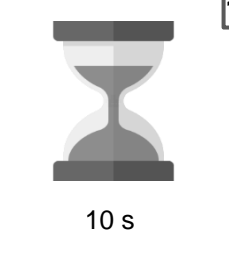

7. REDOX-KALIBRIERUNG

| | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
|  <p>1</p> |  <p>2</p> |  <p>3</p> |  <p>4</p> |
|  <p>5</p> <p>enter cal 5 s</p> <p>Redox-Kalibrierung aufrufen</p> |  <p>6</p> <p>enter cal</p> <p>465 mV-Kalibrierung</p> |  <p>7</p> <p>60 s</p> |  <p>8</p> <p>465 mV Quality probe 100%</p> |
|  <p>9</p> |  <p>10</p> |  <p>11</p> <p>enter cal</p> <p>Speichern und verlassen</p> | |

Referenzkalibrierung

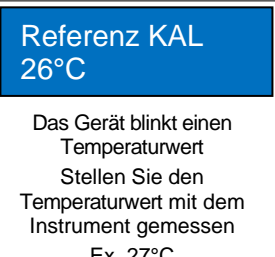
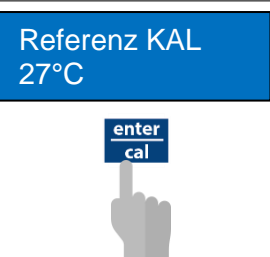
| | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Referenz KAL 720 mV</p> <p>Das Gerät blinkt einen Temperaturwert Stellen Sie den Temperaturwert mit dem Instrument gemessen Ex. 750 mV</p> | <p>Referenz KAL 750 mV</p>  <p>enter cal</p> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|

8. CHLOR-KALIBRIERUNG

| | | | |
|-------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
|  <p>1</p> |  <p>2</p> |  <p>3</p> <p>enter cal</p> <p>3 s</p> <p>Cl-Kalibrierung auswählen</p> |  <p>4</p> <p>enter cal</p> |
|  <p>5</p> <p>10 s</p> |  <p>6</p> <p>Das Gerät blinkt einen Cl-Wert Den mit dem Messgerät ermittelten Chlorwert eingeben Z.B. 1,0 ppm freies Cl</p> |  <p>7</p> <p>1.0 PPM</p> <p>enter cal</p> |  <p>8</p> <p>10 s</p> |
|  <p>10</p> <p>Durchflussmen</p> |  <p>11</p> <p>Bestätigen Sie, dass der F geschlossen ist, indem Sie die Auswahl auf Ja verschieben und mit CAL . bestätigen</p> <p>enter cal</p> |  <p>12</p> <p>100 s</p> |  <p>13</p> <p>enter cal</p> |
|  <p>14</p> <p>10 s</p> |  <p>15</p> <p>Kalibrierung OK!</p> <p>enter cal</p> | | |

* Drücken Sie ESC, um das Kalibrierungsmenü zu verlassen.

9. TEMPERATURKALIBRIERUNG

| | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
|  <p>Referenz KAL 26°C</p> <p>Das Gerät blinkt einen Temperaturwert Stellen Sie den Temperaturwert mit dem Instrument gemessen Ex. 27°C</p> |  <p>Referenz KAL 27°C</p> <p>enter cal</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|

Einstellungsmenü

Die **set**-Taste 3 Sekunden lang drücken, **▲** und **▼** verwenden, um den gewünschten Wert einzustellen.



Kalibrierungsmenü

Die **enter cal**-Taste 3 Sekunden lang drücken und kalibrieren Sie die pH-Sonde, die Redox-Sonde, die Chlorsonde oder die Temperatur.

Standby-Modus (Hintergrundbeleuchtung an)

Die Tasten **▲** und **▼** gleichzeitig 5 Sekunden lang drücken, um die Hintergrundbeleuchtung des Geräts auszuschalten. Dosierung und Kalibrierung sind deaktiviert.

OFA-Reset

Drücken Sie **menu esc** (3 Sekunden), um den OFA-Alarm zurückzusetzen oder drücken Sie die Tasten **▲** und **▼** gleichzeitig (5 Sekunden), um den OFA-Alarm zurückzusetzen.

Pumpe ansaugen

Nur während sich die Pumpe im Standby-Modus befindet, drücken Sie **▲** um den Durchflusszähler zurückzusetzen, drücken Sie **▼** um die pH-Pumpe zu betreiben, drücken Sie **menu esc** um die Redox-/Chlorpumpe zu betreiben, drücken Sie **enter cal** um das Aux1-Relais zu betreiben, drücken Sie **set** um das Aux2-Relais zu betreiben.

Um zur Standardeinstellung zurückzukehren, wie folgt vorgehen:

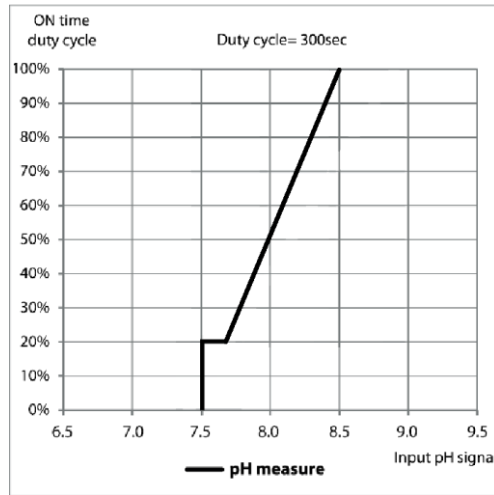
- Die KemiDose -Einheit ausschalten
- **▲** und **▼** gedrückt halten und Strom wieder einschalten
- Das Gerät blinkt mit **INIT.DEFAULT__NEIN**
- Wählen Sie die zurückzusetzende Einheit, ob WLAN-Modul oder Dosiersystem.
- **▲** **INIT.DEFAULT__JA** drücken
- **enter cal** drücken, um die Standardparameter wiederherzustellen.

Standardeinstellwerte:

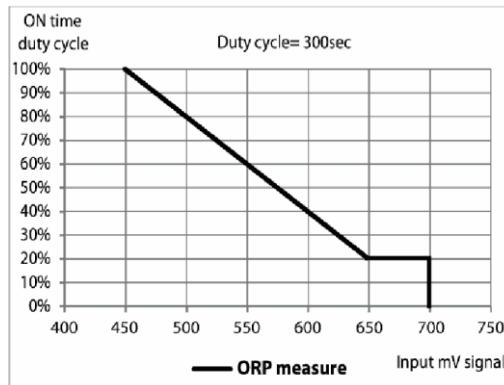
- Sprache = **EN**
- Sollwert = **pH 7,5; 700 mV (Redox); 1,2 ppm (Cl)**
- Zugabeverfahren = **Säure (pH), Niedrig (Redox), Niedrig (Cl)**
- OFA-Zeit = **Aus**
- Kalibrierung = **Voll**
- Durchflusseingang = **AUS (Umwälzpumpe)**
- Zugabeart = **PROP; ON/OFF Relais Aux1 und Aux2**
- IN-Frequenz. = **AUS**
- Reed = **NC (normalerweise geschlossen)**
- P.ON (Einschaltverzögerung) = **OFF**
- Durchflussverzögerung = **AUS**

10. DOSIERUNGSMETHODE

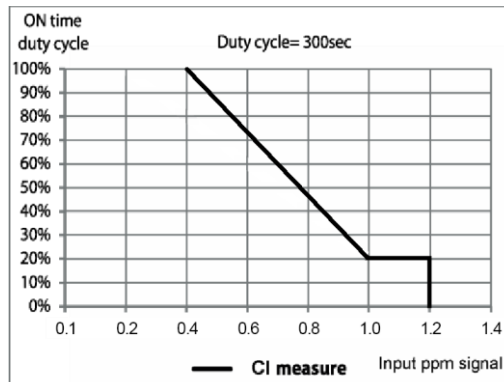
Sollwert = 7,5 pH
Dosiermodus = Säure
Proportionalband = 1,0 pH



Sollwert = 700 mV
Dosiermodus = Niedrig
Proportionalband = 250 mV

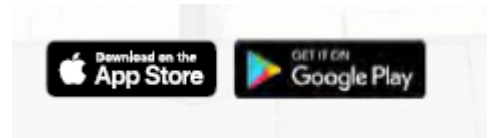


Sollwert = 1,2ppm freies Chlor
Dosiermodus = Niedrig
Proportionalband = 0,8ppm

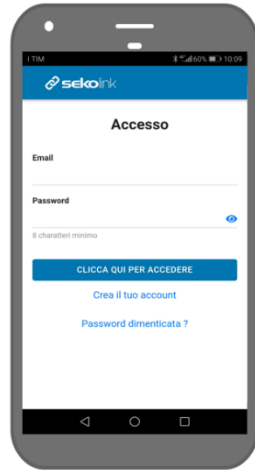


11. INTERNER WEBSERVER

Herunterladen **SekoLink** Anwendung



Registrierte dein Konto



Mit Hilfe der QrCode, loggen Sie sich in den internen Web-Seiten Set:

User name= ADMIN
Password= 0000



Stellen Sie Ihr WiFi-LAN Name und Passwort ein und bestätigen.



Füllen Sie das Geräteregistrierung

KemiDose | pH · ORP · Chlor

Dank Ihrer Registrierung können Sie **sekolink** und **sekoweb** kostenlos nutzen.



sekolink

Dank der **sekolink** APP Sie Ihren Pool steuern:

- Überwachung und begrenzte Verwaltung
- Smartphone-App kompatibel mit iPhone oder Android
- Für Endbenutzer












sekoweb

Verwenden Sie die **sekoweb**-Adresse www.sekoweb.com oder die APP, um Ihre Pools mit einem professionellen Webportal zu verwalten:

- Überwachung und vollständige Verwaltung
- Internetportal zugänglich über Online-Anmeldung oder durch Scannen eines QR-Code des Produkts
- Für Pool- und Spa-Installateure, Techniker und Ingenieure



12. ALARME

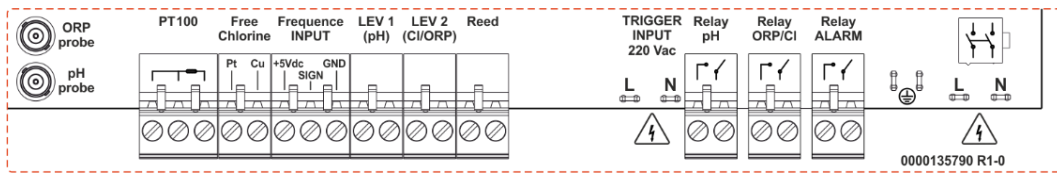
| Alarmer | Display | Maßnahmen |
|----------------------------------------------|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Stufe *nur aktive Maßnahmen | FULLSTAND_NIEDRIG | - Zum Zurücksetzen 3 Sekunden lang drücken oder 5 Sekunden lang   drücken, um zurückzusetzen - Produktbehälter zurücksetzen/auffüllen |
| Messung außerhalb des Arbeitsbereichs | RLR_BAND | - Den Messfühler prüfen, ggf. ersetzen - Zum Zurücksetzen 3 Sekunden lang   drücken oder 5 Sekunden lang drücken, um zurückzusetzen - Messung wiederholen |
| Erste OFA-Alarmstufe (Zeit >70%) | OFA_1 | - Zum Zurücksetzen 3 Sekunden lang   drücken oder 5 Sekunden lang drücken, um zurückzusetzen |
| Zweite OFA-Alarmstufe (Zeit 100%) | OFA_2 | - Zum Zurücksetzen 3 Sekunden lang   drücken oder 5 Sekunden lang drücken, um zurückzusetzen |
| Durchfluss | FLOW | - Durchfluss wiederherstellen |
| Kalibrierfunktion | FEHLER | - Sonde oder Pufferlösung ersetzen und neu kalibrieren |
| Stufe | PARAMETERFEHLER | -  drücken, um zur Standardeinstellung zurückzukehren - Gerät defekt |
| Alarm Messungen (*1) | MESSUNG ZU NIEDRIG MESSUNG ZU HOCH | - Passen Sie die chemische Konzentration an |

(*1 Messen Alarmbereiche)

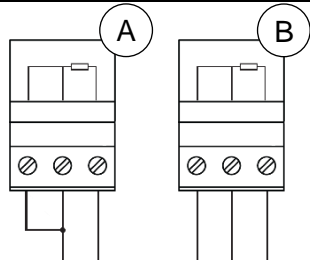
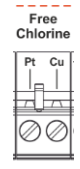
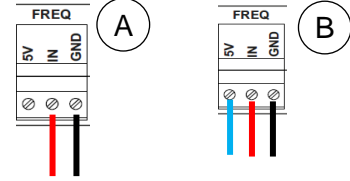
| n | Item | Grenzen |
|---|--------------------|----------|
| 1 | Temp.- Messung min | +10°C |
| 2 | Temp.- Messung Max | +38°C |
| 3 | pH-Messung min | 6 pH |
| 4 | pH- Messung Max | 8 pH |
| 5 | ORP- Messung min | +600 mV |
| 6 | ORP- Messung Max | +800 mV |
| 7 | CL- Messung min | 0,50 ppm |
| 8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

KemiDose | pH · ORP · Chlor

Beschrifteten Verbindungen:



Kabelverbindungen:

| Klemme | Beschreibung | KemiDose pH · ORP | Einzelheiten |
|--------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| 1 | Einlasssonde | ORP | |
| 2 | Einlasssonde | pH | |
| 3 | Einlasssonde | Temperatursensoreingang (PT100): A: Temperaturfühler mit zwei Drähten B: Temperaturfühler mit drei Drähten |  |
| 4 | Eingang freies Chlor-Sensor | Eingang freies Chlor-Sensor: Pt: Platin Sensor Cu: Kupfer Sensor |  |
| 5 | Eingangsfrequenz Signal | Frequenzsignaleingang für Wasserzähler A: Mechanischer Wasserzähler mit Reedsensor B: Padwheel Wasserzähler mit Hallsensor |  |
| 6 | Füllstand | pH Füllstandssonde | Produktbehälter Füllstandssonde |
| 7 | Füllstand | Chlor (ORP) Füllstandssonde | Produktbehälter Füllstandssonde |
| 8 | Füllstand | Durchfluss (REED Sensor) | Durchflusssensor |
| 9 | Serielle Schnittstelle | Nicht vorhanden | Keiner |
| 10 | Triggereingang | Umwälzpumpe (Eingang 220Vac) | Fase / Neutral-Drähte |
| 11 | Ausgangsrelais | RL1 AUX1 pH | Trockenkontakt |
| 12 | Ausgangsrelais | RL2 AUX2 ORP/Chlor | Trockenkontakt |
| 13 | Ausgangsrelais | RL3 Alarme | Trockenkontakt |
| 14 | Erdungsanschluss | Erdung | --- |
| 15 | Stromversorgung | 220-240 Vac 50-60 Hz (F/N) | --- |



¡ADVERTENCIA!

Antes de llevar a cabo CUALQUIER TIPO de trabajo en el interior del panel de control del dispositivo KemiDose, asegúrese de desconectarlo de la fuente de alimentación.

El incumplimiento de las instrucciones recogidas en el presente manual puede ocasionar lesiones a las personas y/o daños al aparato y al sistema.

1. CONTENIDO DEL EMBALAJE

| | | | | |
|--|--|--|--|--|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |

| Sistema | | Sistema de bomba doble | |
|------------|--|------------------------|------------------------|
| | | KemiDose pH - ORP | KemiDose pH - ORP - CL |
| Elemento * | | | |
| A | | 2 | 2 |
| B | | 2 | 2 |
| C | | 2 | 2 |
| D | | 2 | 2 |
| E | | 4 ^{(*)1} | 4 ^{(*)1} |
| F | | 2 | 2 |
| G | | 2 | 2 |
| H | | 1 | 1 |
| I | | - | 1 |
| J | | - | 1 |
| K | | 1 | 1 |
| L | | 1 | 1 |
| M | | - | 1 |
| N | | - | 1 |
| O | | 1 | 1 |
| P | | 1 | 1 |
| Q | | 1 | 1 |
| R | | 1 | 1 |
| S | | - | 1 |
| T | | - | 1 |
| U | | 1 ^{(*)2} | 1 ^{(*)2} |

* Los valores de la tabla representan el número de elementos que vienen dentro del paquete.

(*)1 Una pieza más solo para el modelo WiFi), (*)2 Una pieza solo para el modelo WiFi)

¡ADVERTENCIA!

Estos productos son **PELIGROSOS (I✳A)** y requieren precauciones especiales durante su uso, manejo y almacenamiento.

- **No mezcle NUNCA productos químicos.**
- No permita NUNCA que niños o personas que no hayan leído este manual usen o manipulen KemiDose o alguno de sus componentes periféricos (incluidos los productos químicos).

Productos químicos de pH:

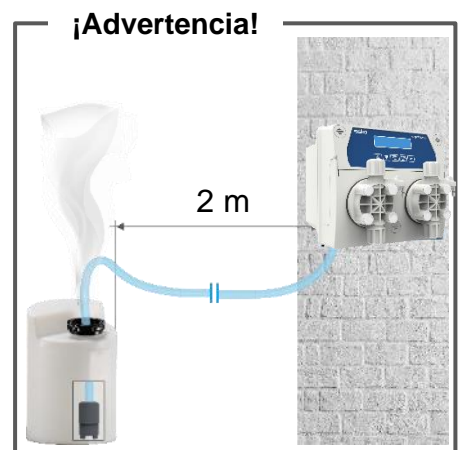
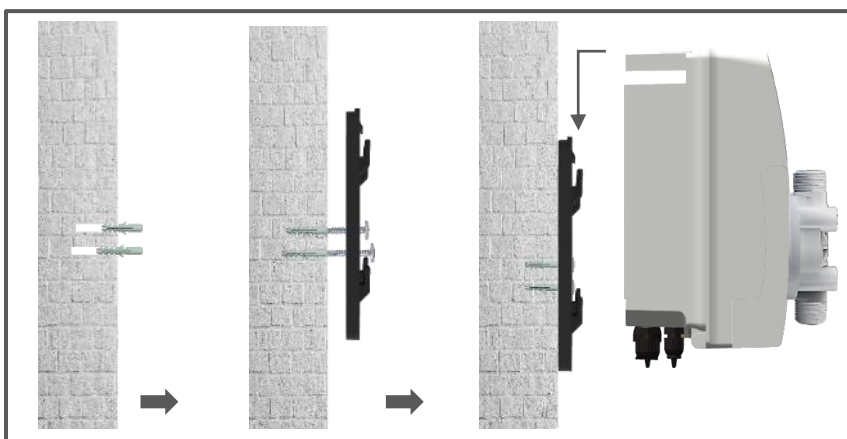
- No recomendado **EN ABSOLUTO** => ácido sulfúrico puro
- Recomendado para reducir el pH => pH negativo (con una base de ácido sulfúrico)
- Recomendado para aumentar el pH => pH positivo (carbonato de sodio o bicarbonato)

Productos químicos Redox:

- No recomendado **EN ABSOLUTO** => cualquier tipo de cloro orgánico
- Puede usarse cloro líquido o lejía de 12% puros. Si el producto tiene una concentración de 48%, es necesario diluirlo en agua en una proporción de 1:3.

Las sondas de pH/Redox están sujetas a desgaste y al deterioro, por lo que no están cubiertas por la garantía.

2. INSTRUCCIONES DE INSTALACIÓN



Asegúrese de que la presión de inyección esté por debajo de 1,5 bar.

Colocación de la sonda



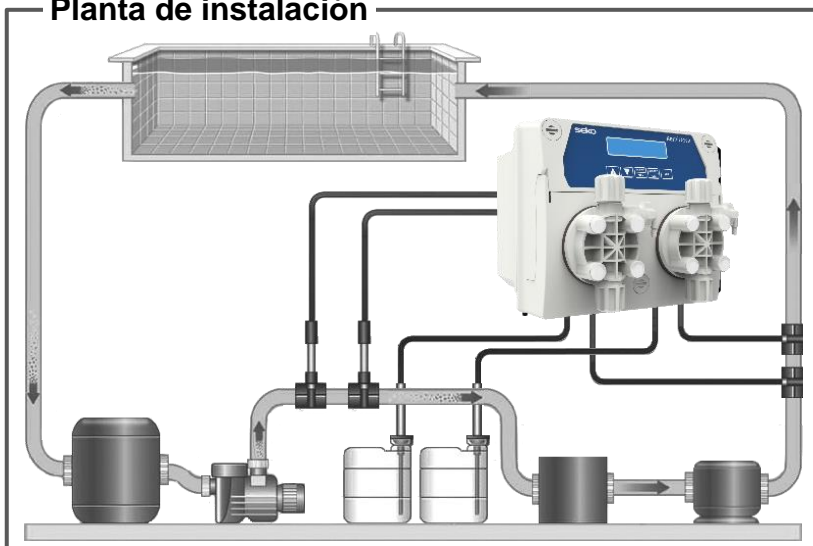
Para una lectura óptima de la sonda, colóquela en perpendicular a la tubería.



El ángulo de inclinación de la sonda nunca debe sobrepasar los 45° de



Planta de instalación



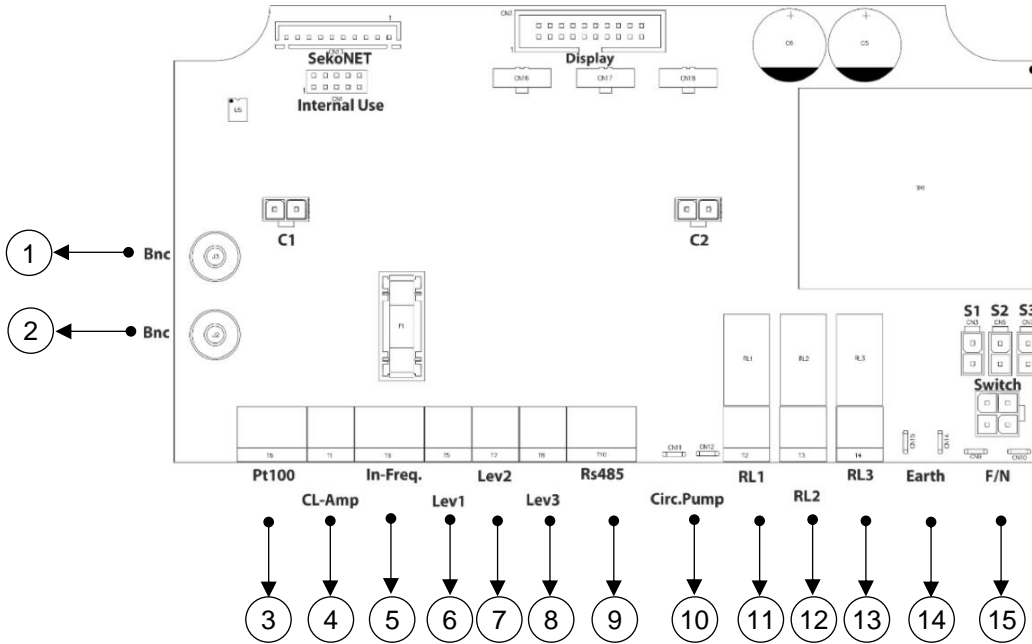
¡Advertencia!

Usar con clorador salino:

En los sistemas de pH, para evitar el riesgo de que el sistema funcione incorrectamente o se dañe, respete las siguientes instrucciones:

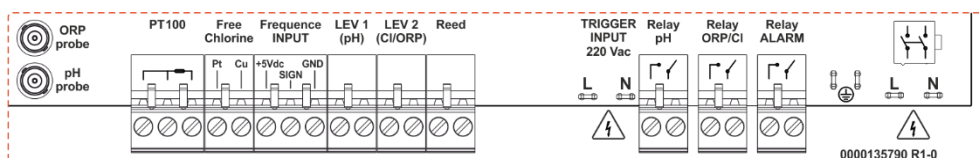
1. Coloque la sonda de medición de pH antes de la célula del clorador.
2. Para eliminar las corrientes parásitas, conecte el agua de la piscina a un punto eléctrico de tierra.
3. Coloque el punto de inyección de producto tras la célula del clorador.

3. CONEXIONES ELÉCTRICAS



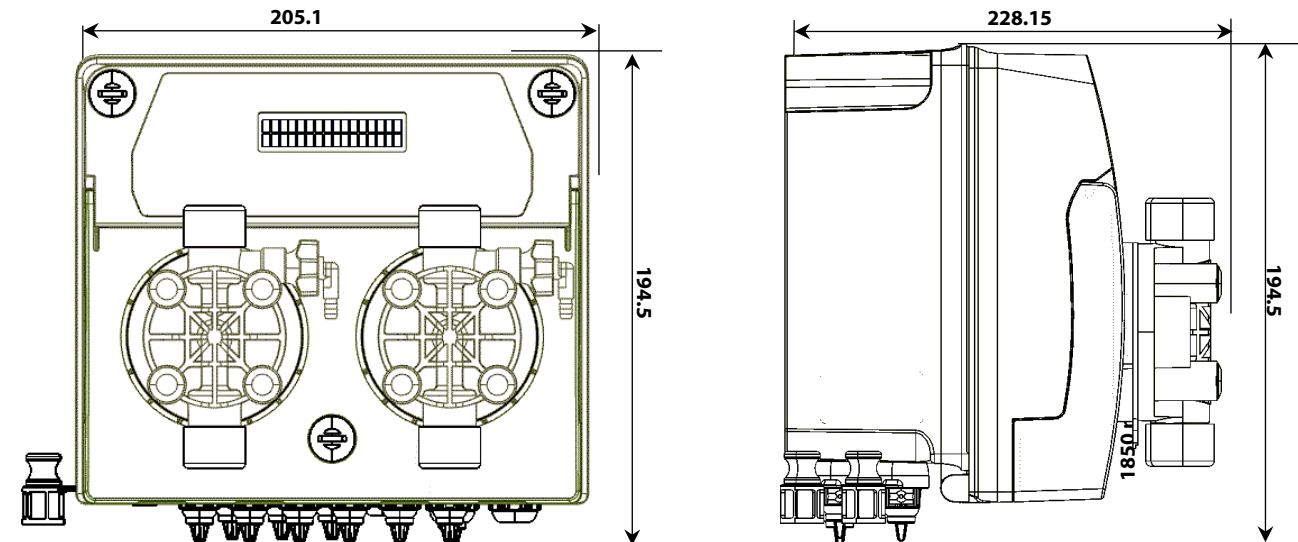
| Abrazadera | Descripción | Sistema de bomba doble | |
|------------|--------------------------------|-----------------------------------------|-----------------------------------------|
| | | KemiDose pH · ORP | KemiDose pH · ORP · CL |
| 1 | Entrada de sonda | ORP | ORP |
| 2 | Entrada de sonda | pH | pH |
| 3 | Entrada temperatura | TEMP (PT100) | TEMP (PT100) |
| 4 | Entrada de sonda | No utilizado | Cloro libre |
| 5 | Entrada de señal de frecuencia | Caudal (Entrada frec.) | Caudal (Entrada frec.) |
| 6 | Nivel (tanque de producto) | Sonda de nivel pH | Sonda de nivel pH |
| 7 | Nivel (tanque de producto) | Sonda de nivel Cloro (ORP) | Sonda de nivel Cloro |
| 8 | Nivel (tanque de producto) | Flujo (sensor REED) | Flujo (sensor REED) |
| 9 | Puerto serial | No presente | No presente |
| 10 | Entrada de disparo | Bomba de recirculación (Entrada 220Vac) | Bomba de recirculación (Entrada 220Vac) |
| 11 | Salida de relé R1 | RL1 AUX1 pH | RL1 AUX1 pH |
| 12 | Salida de relé R2 | RL2 AUX2 OPR/ Cloro | RL2 AUX2 OPR/ Cloro |
| 13 | Salida de relé R3 | RL3 Alarma | RL3 Alarma |
| 14 | Conector de tierra | Tierra | Tierra |
| 15 | Fuente de alimentación | 220-240 Vac 50-60 Hz (F/N) | 220-240 Vac 50-60 Hz (F/N) |
| C1 | Conexión de bomba | pH | pH |
| C2 | Conexión de bomba | Cloro (ORP) | Cloro |
| SekoNet | Módulo WiFi | Tarjeta WiFi (código dedicado) | Tarjeta WiFi (código dedicado) |

Etiqueta de conexiones

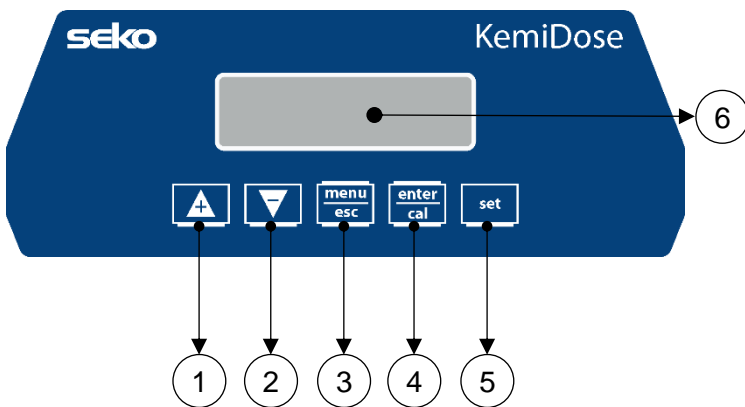


4. ESPECIFICACIONES TÉCNICAS

| Especificaciones | KemiDose Double pH/ORP | KemiDose Double pH/ORP/Cloro |
|----------------------------------------|--------------------------------|-----------------------------------------|
| Dimensiones (A-A-P) | A:196 x A:205 x P:171 mm | A:196 x A:205 x P:171 mm |
| Peso | 6 Kg | 6 Kg |
| Estado de la bomba | Pausa - Suministro | Pausa - Suministro |
| Calibración de sonda | Automático | Automático |
| Fuente de alimentación | 220-240 VAC 50-60 Hz | 220-240 VAC 50-60 Hz |
| Consumo (W) | 32 Watt | 32 Watt |
| Precisión del dispositivo | ± 0,1 pH; ±10mV; ±1°C | ± 0,1 pH; ±10mV; 0,1 ppm; ±1°C |
| Exactitud | ±0,02pH, ±3mV; ±0,5°C | ±0,02pH, ±3mV; 0,05 ppm; ±0,5°C |
| Rango | 0-14pH; -99 -1000mV; 0...+55°C | 0-14pH; -99 -1000mV; 0-5 ppm; 0...+55°C |
| Caudal de la bomba (l/h) | 5 l/h | 5 l/h |
| Contrapresión máx. | 5 bar | 5 bar |
| Contacto de relé (número 3) | 250 Vac 10A (carga resistiva) | 250 Vac 10A (carga resistiva) |
| Fusible | 500 mA (rápido) | 500 mA (rápido) |
| Frecuencia de dosificación de la bomba | 160 golpes/minuto | 160 golpes/minuto |



5. INSTRUCCIONES DE CONFIGURACIÓN DEL SISTEMA



- 1) Botón para aumentar el valor
- 2) Botón para reducir el valor
- 3) Botón Menú/Esc
- 4) Botón Cal/OK
- 5) Botón para configurar el punto de ajuste
- 6) Pantalla digital

Configuración del programa – Pulse **menu/esc** durante 5 segundos

En la entrada de cada elemento del menú, el parámetro puede ser modificado directamente utilizando las teclas de flecha (**▲** y **▼**). Para confirmar el ajuste actual y pasar al siguiente elemento, pulse el botón **enter/cal**.

El menú tiene una estructura circular: una vez en el último elemento, la confirmación del parámetro configurado se realiza pulsando **enter/cal**, y provoca el regreso al primer elemento del menú.

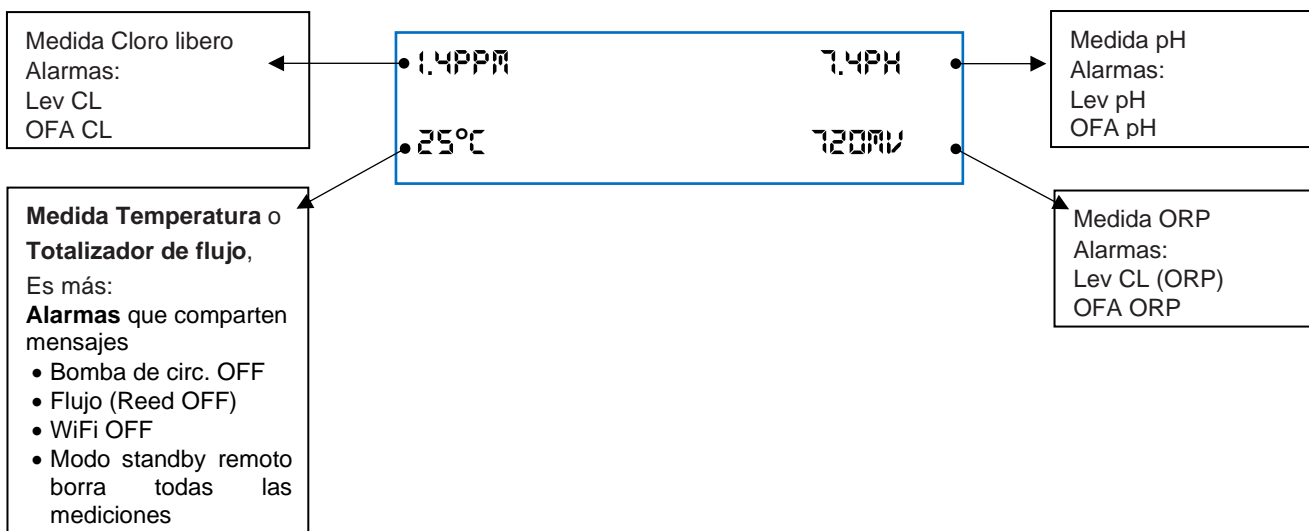
- 1 **IDIOMA** – Se puede seleccionar entre 5 idiomas disponibles: **EN**, FR, IT, DE, ES
- 2 **PH**
 - **SETPOINT** – **7,5pH** (5-9pH)
 - **TIPO SETPOINT:** – **Ácido** (Ácido/Alka)
 - **TEMPERATURA:** 25°C; impostare °C/°F e valore manuale
 - **ALARMA OFA:** Off, 1-60' (minutos)
 - **BANDA PROP.** = 1,0pH (defecto: 1,0pH, rango: 0,4-2,5 pH)
- 3 **ORP**
 - **SETPOINT** – **700 mV** (400-850mV)
 - **TIPO SETPOINT:** **Bajo** (Bajo/Alto)
 - **ALARMA OFA:** Off, 1-60' (minutos)
 - **BANDA PROP.** = 250mV (defecto: 250mV, rango: 100-350 mV)
 - **Nota:** La dosificación de ORP (redox) en presencia de cloro no tiene efecto sobre la bomba dosificadora, pero puede gestionar el Relé Aux2 con activación ON/OFF con respecto al Setpoint.
- 4 **CLORO**
 - **SETPOINT** – **1,2 ppm** (0,3-3,0 ppm)
 - **TIPO SETPOINT:** **Bajo** (Bajo/Alto)
 - **ALARMA OFA:** Off, 1-60' (minutos)
 - **BANDA PROP.** = 0,8 ppm (defecto: 0,8ppm, rango: 0,3-1,2 ppm)
- 5 **MENU AVANZADO**
 - **BOMBA DE CIRCULACION** – (Activada/desactivada)
 - **EN FREC** (Entrada caudal)
 - OFF/ON
 - Impulso/Litro:1 o Litro/Impulso:1 – Establecer el valor
 - Unidad de medida: L o m³
 - **CALIBRACION PH:** 2 puntos, 1 punto, Referencia, Desactivado
 - **CALIBRACION ORP:** 1 punto, Referencia, Desactivado
 - **CALIBRACION CL:** 2 puntos, Desactivado

- CALIBRACION TEMP: Referencia, Desactivado
- TIPO DOSIFICACION PH: Proporcional, OFF, On/OFF
- TIPO DOSIFICACION ORP: Proporcional, OFF, On/OFF
 - **Nota:** La dosificación de ORP está desactivada si el TIPO DOSIFICACION CLORO es diferente de OFF
- TIPO DOSIFICACION CLORO: Proporcional, OFF, On/OFF
- CAUDAL MAX BOMBAS:
 - PH 100% (defecto: 100% [160 golpes/min], rango:10-100%)
 - RX/CLORO 100% (defecto: 100% [160 golpes/min], rango:10-100%)
- RELE AUX
 - RELE AUX1: pH, Desactivado
 - RELE AUX2: Cloro, ORP, Desactivado
 - **Nota:** Los relés Aux1 y Aux2 dosifican con el método ON/OFF
- PASSWORD: 0000 (**Nota:** password desactivada, impostare un valore diverso da: 0000)
- RESTABLECER CALIBRACION: (**Nota:** seleccionar la medida para restablecer: pH; Cloro; ORP)
- RESTABLECER TODOS LOS PARÁMETROS
- PROG CONTROL PANEL: muestra las señales eléctricas
- CONFIGURACION WIFI
 - Nombre de la red Wi-Fi
 - Contraseña de wifi
 - Dirección IP de la red WiFi.


Nota: Este menú solo está disponible en productos WiFi
- REED (error de visualización, cuando está rojo): NO/NC
- POWER ON DELAY: (Retardo de encendido) Desactiva las bombas de dosificación durante el tiempo establecido
- FLOW DELAY: (Retardo de flujo) Desactiva las bombas de dosificación durante el tiempo establecido

Nota: Menú de configuración del tiempo de espera, después de 120 segundos sin acción, el controlador se escapa sin guardar los parámetros.

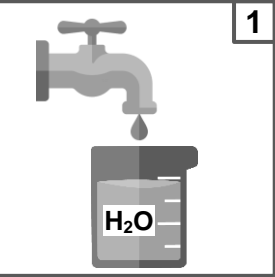
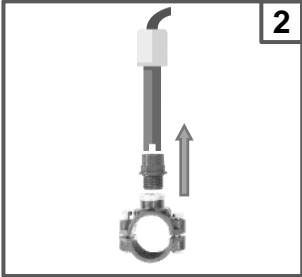
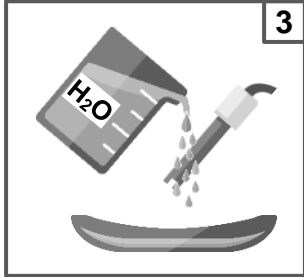
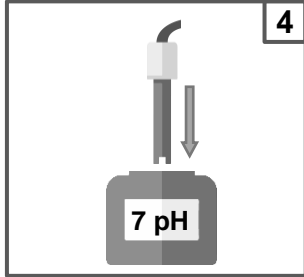
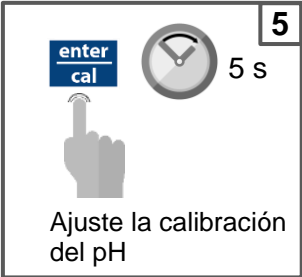
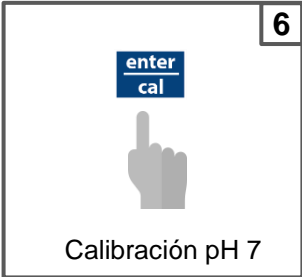
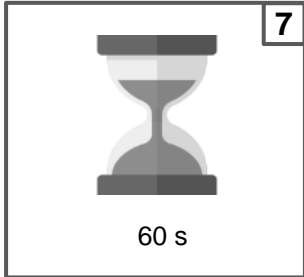
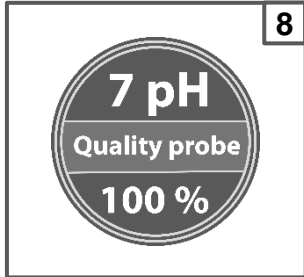
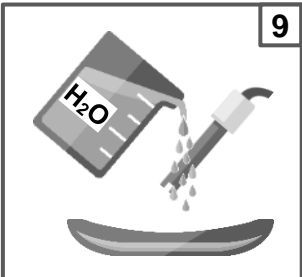
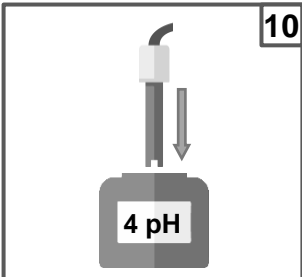
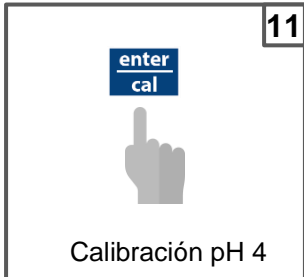
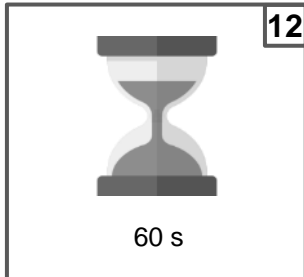
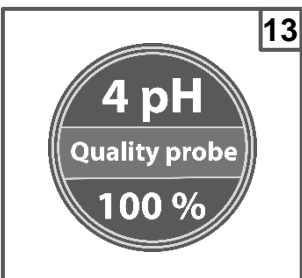
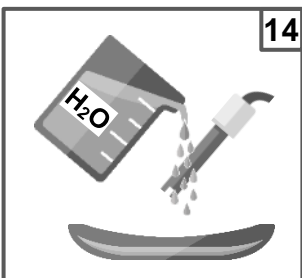
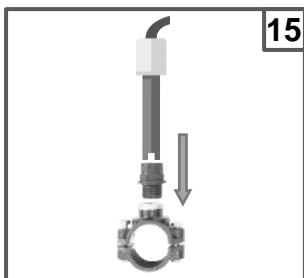
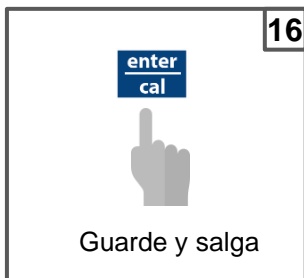
Ejemplo de pantalla



Menú de calibración:


Presione  (3 segundos) para calibrar la sonda de pH, Cloro, Temperatura, ORP

6. CALIBRACIÓN DEL pH

| | | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>1</p> |  <p>2</p> |  <p>3</p> |  <p>4</p> |
|  <p>5</p> <p>enter cal</p> <p>5 s</p> <p>Ajuste la calibración del pH</p> |  <p>6</p> <p>enter cal</p> <p>Calibración pH 7</p> |  <p>7</p> <p>60 s</p> |  <p>8</p> <p>7 pH Quality probe 100%</p> |
|  <p>9</p> |  <p>10</p> <p>4 pH</p> |  <p>11</p> <p>enter cal</p> <p>Calibración pH 4</p> |  <p>12</p> <p>60 s</p> |
|  <p>13</p> <p>4 pH Quality probe 100%</p> |  <p>14</p> |  <p>15</p> |  <p>16</p> <p>enter cal</p> <p>Guarde y salga</p> |

Nota: Si ha seleccionado la función “1 punto cal.”, la calibración se hará solamente en 1 punto usando la solución tampón de pH 7.

Calibración de referencia

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>CAL Referencia 7.2 pH</p> <p>La unidad parpadeará un valor de temperatura</p> <p>Establecer el valor de temperatura medido con el instrumento</p> <p>Ex. 7.4 pH</p> | <p>CAL Referencia 7.4 pH</p> <p>enter cal</p>  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|

7. CALIBRACIÓN REDOX

1

2

3

4

5

6

7

8

9

10

11

Calibración de referencia

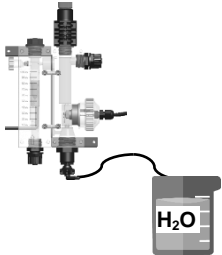
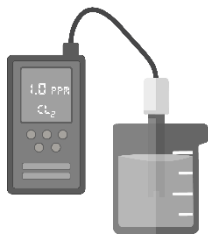
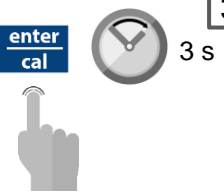





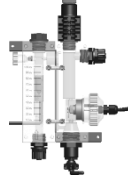





CAL Referencia
720 mV

La unidad parpadeará un valor de temperatura
Establecer el valor de temperatura medido con el instrumento
Ex. 750 mV

CAL Referencia
750 mV


enter cal

8. CALIBRACIÓN DEL CLORO

| | | | |
|----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
|  <p>1</p> |  <p>2</p> |  <p>3 3 s</p> <p>Seleccione la calibración Cl</p> |  <p>4</p> |
|  <p>5</p> <p>10 s</p> |  <p>6</p> <p>En la unidad parpadeará un valor Cl</p> <p>Ajuste el valor Cl medido con el instrumento</p> <p>Ej. 1,0 ppm Cl libre</p> |  <p>7</p> |  <p>8</p> <p>10 s</p> |
| <p>Cierre el flujo</p>  <p>10</p> | <p>Confirme que el flujo es cerrado moviendo la opción a Sí y confirmando con CAL</p>  <p>11</p> |  <p>12</p> <p>100 s</p> |  <p>13</p> |
|  <p>14</p> <p>10 s</p> | <p>¡Calibración OK!</p>  <p>15</p> | | |

* Presione ESC para salir del menú de calibración.

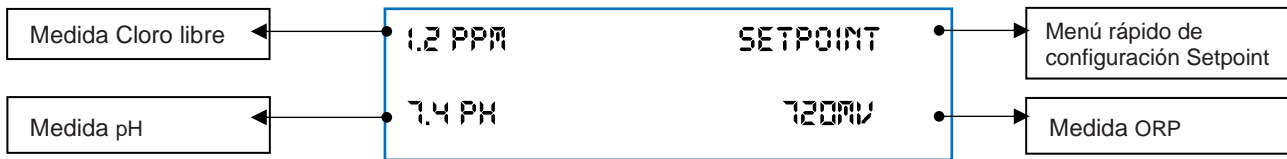
9. CALIBRACION DE LA TEMPERATURA

| | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| <p>CAL Referencia 26°C</p> <p>La unidad parpadeará un valor de temperatura</p> <p>Establecer el valor de temperatura medido con el instrumento</p> <p>Ex. 27°C</p> | <p>CAL Referencia 27°C</p>  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|

KemiDose | pH · ORP · Cloro

Menú de configuración:

Pulsar **set** (3 segundos) para ajustar el valor del Setpoint y pulsar **set** para confirmar.



Menú de calibración:

Pulsar **enter cal** (3 segundos) para calibrar la sonda de pH, Cloro, Temperatura, ORP

Modo StandBy

Pulsar **▼ ▲** (5 segundos) el sistema entra en modo StandBy; todas las funciones están desactivadas.

Reset Temporizador OFA

Presione **menu esc** (3 segundos) para restablecer la alarma OFA o presione **▲ ▼** (5 segundos) para restablecer la alarma OFA.

Cebado de las bombas

Solo con la bomba en "modo stand-by" pulsar **▲** para restablecer el totalizador de flujo, pulsar **▼** para hacer funcionar la bomba de pH, pulsar **menu esc** para hacer funcionar la bomba de ORP/Cloro, pulsar **enter cal** para hacer funcionar el Relé Aux1, pulsar **set** para hacer funcionar el Relé Aux2.

Para restaurar los parámetros por defecto, siga los siguientes pasos:

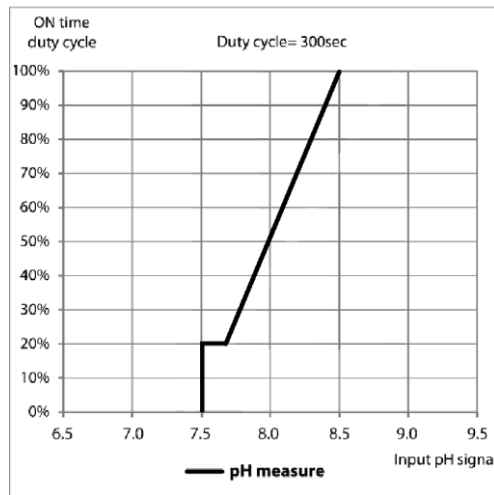
- Apague la unidad KemiDose
- Mantenga **▲** y **▼** pulsados y encienda la unidad
- La unidad parpadeará **INIT.DEFAULT__NO**
- Seleccionar la unidad a resetear si es módulo WiFi o sistema de dosificación.
- Pulse **▲** **INIT.DEFAULT__YES**
- Pulse **enter cal** para restablecer los parámetros por defecto

Parámetros por defecto:

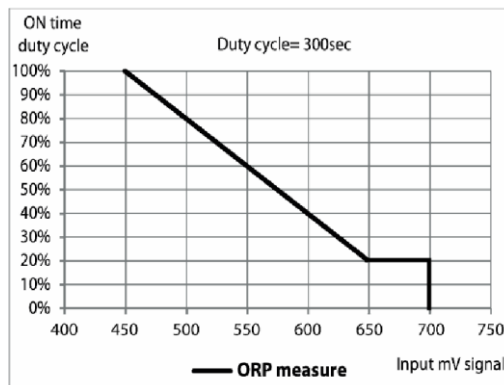
- Idioma = **EN**
- Valor del Setpoint = **7,5 pH; 700 mV; 1,2 ppm**
- Modo de dosificación = **Acido (pH); Bajo (Redox); Bajo (Cl)**
- Tiempo OFA = **OFF**
- Calibración = **Full**
- Entrada de flujo = **OFF (bomba de recirculación)**
- Método de dosificación = **PROP; ON/OFF Relé Aux1 y Aux2**
- IN Freq. = **OFF**
- Reed = **NC (normalmente cerrado)**
- P.ON (retardo a la activación) = **OFF**
- Retardo de flujo = **OFF**

10. MÉTODO DE DOSIFICACIÓN

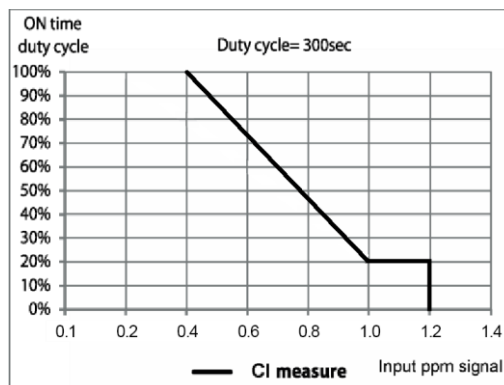
Punto de ajuste = 7,5 pH
Modo de dosificación = Acido
Banda proporcional = 1,0 pH)



Punto de ajuste = 700 mV
Modo de dosificación = Bajo
Banda proporcional = 250mV

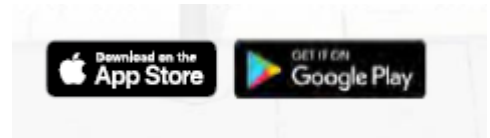


Punto de ajuste = 1,2ppm Cloro libre
Modo de dosificación = Bajo
Banda proporcional = 0,8ppm

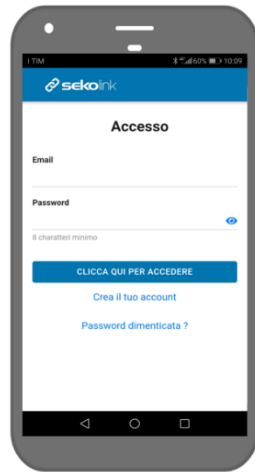


11.WEB SERVER INTERNO

Descargar la aplicación **SekoLink**



Registre su cuenta



Con el QrCode, acceder en las páginas web internas
Establecer:

User name= ADMIN
Password= 0000



Configurar su conexión Wi-Fi LAN Nombre y Contraseña y confirmar



Complete el registro del su dispositivo

KemiDose | pH · ORP · Cloro

Gracias a su registro, es posible utilizar **sekolink** y **sekoweb** de forma gratuita.



sekolink

Gracias a **sekolink** es posible gestionar su piscina:

- Seguimiento con gestión limitada
- Aplicación para smartphone compatible con iPhone o Android
- Para usuarios finales
















sekoweb

Utilice la dirección de **sekoweb** www.sekoweb.com o la aplicación para gestionar sus piscinas con un portal web profesional:

- Seguimiento con gestión completa
- Portal de Internet accesible mediante inicio de sesión en línea o escaneando el código QR de un producto
- Para instaladores, técnicos e ingenieros de piscinas y spa



12. ALARMAS

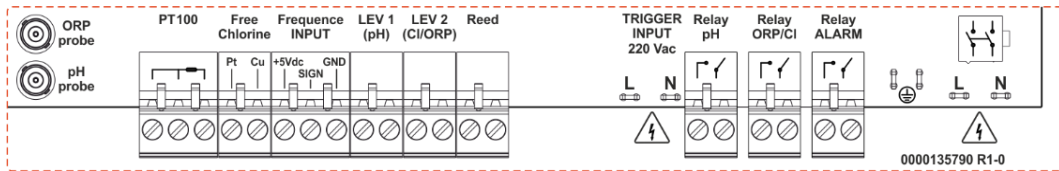
| Alarma | Pantalla | Acciones para realizar |
|---------------------------------------------|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Nivel *solo medidas activas | NIVEL_BAJO | <ul style="list-style-type: none"> - Presione  durante 3 segundos para reiniciar o presione   durante 5 segundos para reiniciar - Restablezca el tanque de producto. |
| Medida fuera de rango | ALR_BAND | <ul style="list-style-type: none"> - Sustituya o compruebe la sonda de medición. - Presione  durante 3 segundos para reiniciar o presione   durante 5 segundos para reiniciar - Restablezca la medida. |
| Primera alarma OFA (tiempo >70 %) | OFA_1 | <ul style="list-style-type: none"> - Presione  durante 3 segundos para reiniciar o presione   durante 5 segundos para reiniciar |
| Segunda alarma OFA (tiempo 100 %) | OFA_2 | <ul style="list-style-type: none"> - Presione  durante 3 segundos para reiniciar o presione   durante 5 segundos para reiniciar |
| Caudal | FLUJO | <ul style="list-style-type: none"> - Restablezca el caudal. |
| Función de calibración | ERROR | <ul style="list-style-type: none"> - Restaure la sonda o la solución tampón y repita el procedimiento de calibración. |
| Error del sistema | ERROR DEL PARAMETRO | <ul style="list-style-type: none"> - Pulse  para restablecer el parámetro por defecto. - Unidad rota. |
| Alarma de medida (*1) | MEDIDA ALTA MEDIDA BAJA | <ul style="list-style-type: none"> - Ajustar la concentración del producto químico |

(*1 Intervalos de medidas alarmas)

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

KemiDose | pH · ORP · Cloro

Etiqueta de conexiones:



Conexión de cables:






















| Abrazadera | Descripción | KemiDose pH · ORP | Detalles |
|------------|--------------------------------|---------------------------------------------------------------------------------------|-----------------------------------|
| 1 | Entrada de sonda | ORP | |
| 2 | Entrada de sonda | pH | |
| 3 | Entrada de sonda | TEMP (PT100) A= Sensor de tmp. con dos cables B= Sensor de tmp. con tres cables | |
| 4 | Entrada de sonda Cloro libre | Entrada de sonda Cloro libre: Pt: Sensor de platino Cu: Sensor de cobre | |
| 5 | Entrada de señal de frecuencia | Caudal (Entrada frecuencia) A= Mecánico Reed B= Padwheel con sensor Hall | |
| 6 | Nivel (tanque de producto) | Sonda de nivel pH | Sonda de nivel tanque de producto |
| 7 | Nivel (tanque de producto) | Sonda de nivel Cloro (ORP) | Sonda de nivel tanque de producto |
| 8 | Nivel (tanque de producto) | Caudal (Sensor REED) | Sensor de flujo |
| 9 | Porto Serial | No presente | No presente |
| 10 | Entrada de disparo | Bomba de recirculación (Entrada 220Vac) | Fili Fase/Neutro |
| 11 | Salida de relé | RL1 AUX1 pH | Contacto seco |
| 12 | Salida de relé | RL2 AUX2 OPR/Cloro | Contacto seco |
| 13 | Salida de relé | RL3 Alarma | Contacto seco |
| 14 | Conector de tierra | Tierra | --- |
| 15 | Fuente de alimentación | 220-240 Vac 50-60 Hz (F/N) | --- |



ATTENTION !

Avant de procéder à TOUTE intervention à l'intérieur du panneau de commande de l'appareil KemiDose, assurez-vous de le débrancher de l'alimentation électrique. Le non-respect des instructions contenues dans ce manuel peut entraîner des blessures aux personnes et/ou endommager l'appareil et le système.

1. CONTENU DE L'EMBALLAGE

| | | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
|  A: Tuyau d'aspiration PVC transparent 4x6 (4 m) |  B: Tuyau d'alimentation en polyéthylène (5 m) |  C: Valve à lèvres FPM (GAZ 3/8") |  D: Porte-sonde PSS3 (GAZ 1/2") |  E: Sellette de raccordement (φ=50mm) |
|  F: Réducteur pour soupape d'injection (1/2" M vers 3/8" F) |  G: Filtre au pied |  H: Kit support de montage (φ=vis de 6 mm) |  I: Filtre secondaire (5") |  J: Porte-sondes + sonde chlore |
|  K: sonde pH |  L: Sonde redox |  M: Brosse de nettoyage de la sonde de chlore |  N: Billes pour la sonde de chlore |  O: Eau |
|  P: Solution tampon pH 4 |  Q: Solution tampon pH 7 |  R: Solution d'étalonnage 465 mv |  S: Clé pour filtres |  T: Tuyau PVC Crystal 8x12 pour porte-sonde (4 m) |
|  U: Sonde de température | | | | |

| Article * | Système | Système de pompe double | |
|-----------|---------|-------------------------|------------------------|
| | | KemiDose pH - ORP | KemiDose pH - ORP - CL |
| A | | 2 | 2 |
| B | | 2 | 2 |
| C | | 2 | 2 |
| D | | 2 | 2 |
| E | | 4 ^(*) | 4 ^(*) |
| F | | 2 | 2 |
| G | | 2 | 2 |
| H | | 1 | 1 |
| I | | - | 1 |
| J | | - | 1 |
| K | | 1 | 1 |
| L | | 1 | 1 |
| M | | - | 1 |
| N | | - | 1 |
| O | | 1 | 1 |
| P | | 1 | 1 |
| Q | | 1 | 1 |
| R | | 1 | 1 |
| S | | - | 1 |
| T | | - | 1 |
| U | | 1 ^(*) | 1 ^(*) |

* Les valeurs du tableau représentent le nombre d'éléments contenus à l'intérieur du paquet.

(*) Une pièce de plus pour le modèle WiFi uniquement), (** Une seule pièce pour le modèle WiFi uniquement)

AVERTISSEMENT !

Ces produits sont **DANGEREUX (I✳A)** et requièrent des précautions particulières lors de leur utilisation, leur manipulation et leur stockage.

- **NE JAMAIS mélanger les produits chimiques.**
- **NE JAMAIS** laisser des enfants ou des personnes qui n'ont pas lu ce manuel, utiliser ou manipuler KemiDose ou l'un de ses composants périphériques (y compris les produits chimiques).

Produits chimiques concernant le pH :

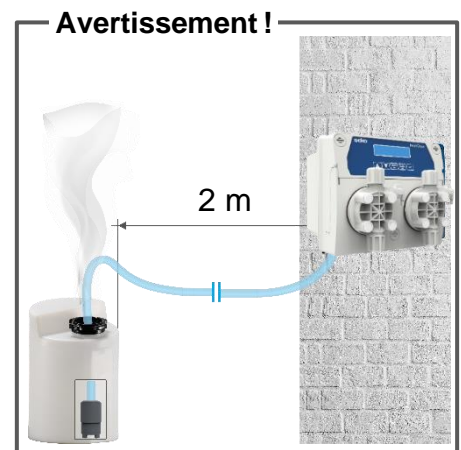
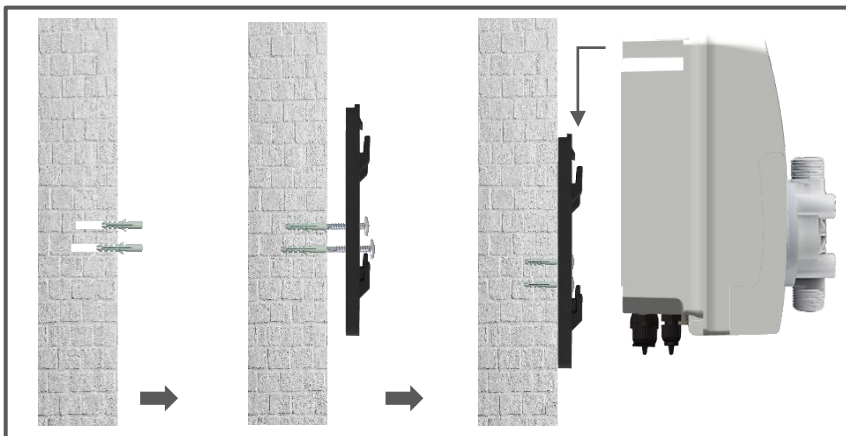
- **ABSOLUMENT** non recommandé => acide sulfurique pur
- Recommandé pour abaisser le pH => pH négatif (avec une base d'acide sulfurique)
- Recommandé pour élever le pH => pH positif (carbonate ou bicarbonate de sodium)

Produits chimiques concernant l'oxydoréduction :

- **ABSOLUMENT** non recommandé => tous les types de chlore organique
- Du chlore liquide ou de l'eau de Javel à 12% peuvent être utilisés à l'état pur. Si le produit a une concentration de 48%, il est nécessaire de le diluer dans l'eau dans un rapport 1:3.

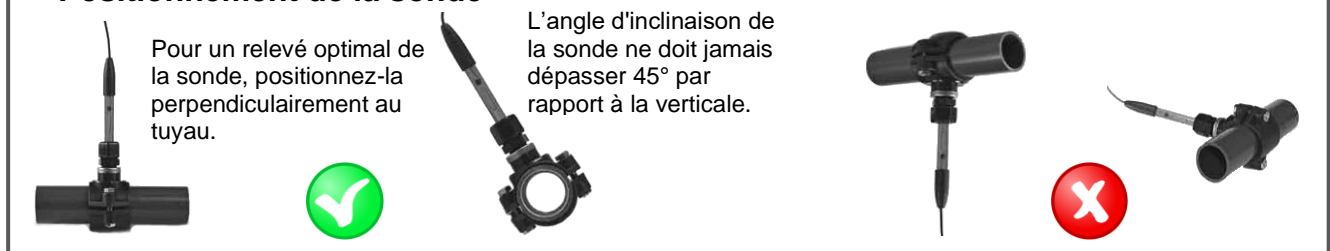
Les sondes pH/Redox sont sujettes à l'usure et ne sont donc pas couvertes par la garantie.

2. INSTRUCTIONS D'INSTALLATION

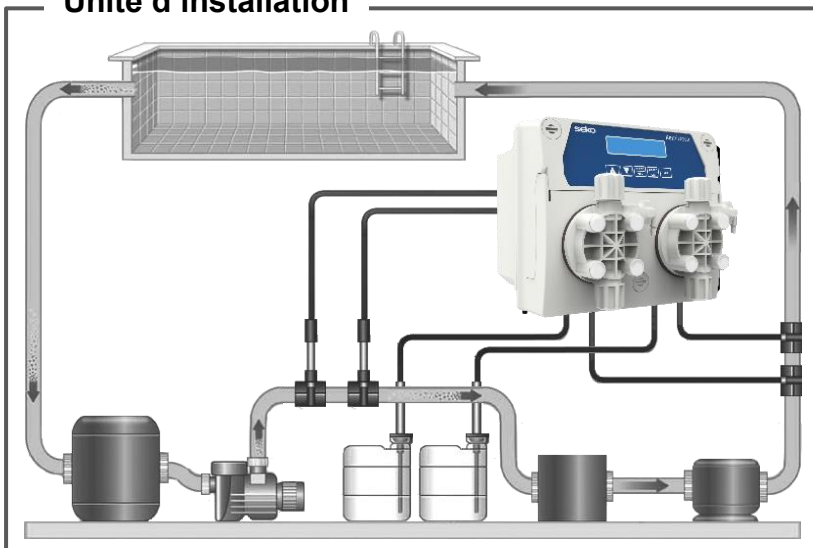


Assurez-vous que la pression d'injection est inférieure à 1,5 bar

Positionnement de la sonde



Unité d'installation



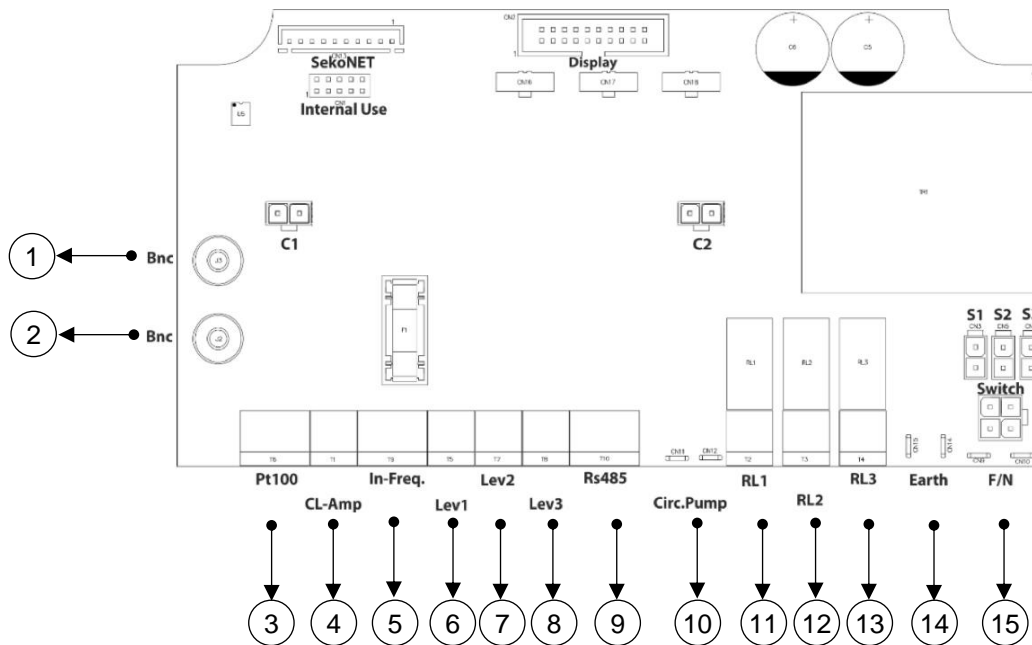
Avertissement !

Utilisation avec l'électrolyseur au sel :

Pour les systèmes de pH, pour éviter le risque de dysfonctionnement ou d'endommagement, respectez les instructions suivantes :

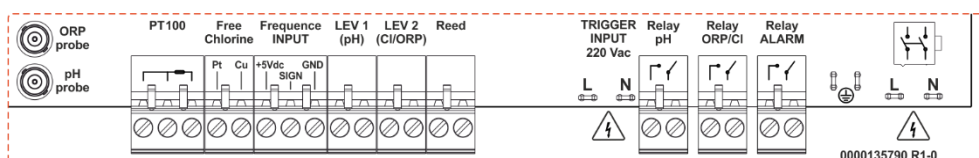
1. Placez la sonde de mesure du pH en amont de la cellule de l'électrolyseur.
2. Pour éliminer les courants de Foucault, branchez l'eau de la piscine sur un point de masse électrique
3. Placez le point d'injection du produit en aval de la cellule de l'électrolyseur.

3. RACCORDEMENTS ELECTRIQUES



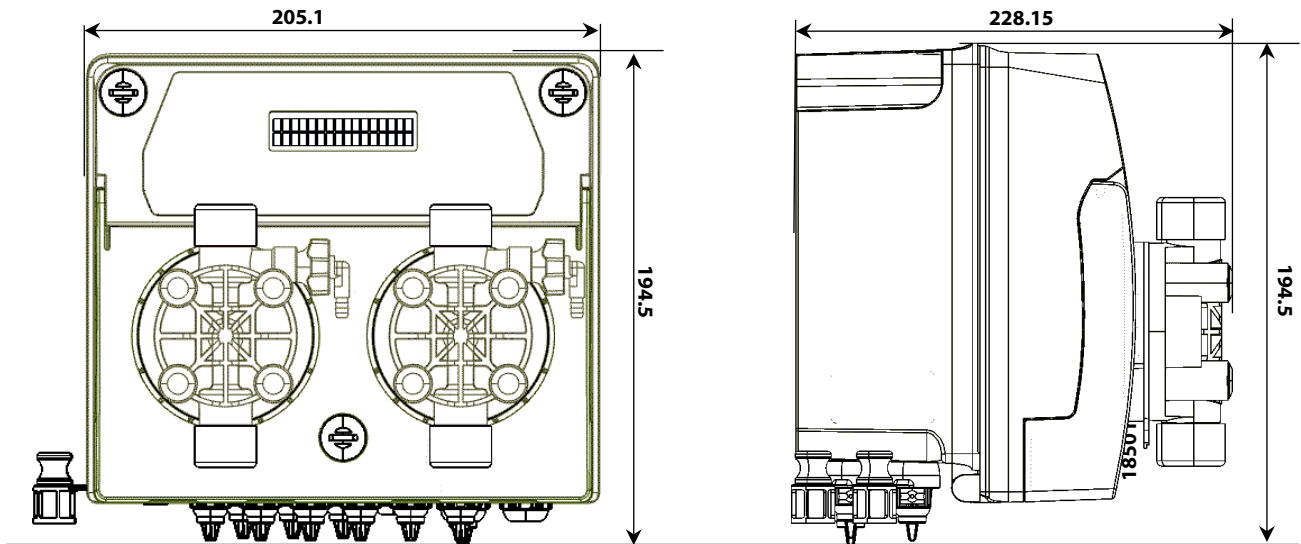
| Serrage | Description | Système de pompe double | |
|---------|------------------------------------------------|--------------------------------------|--------------------------------------|
| | | KemiDose pH · ORP | KemiDose pH · ORP · CL |
| 1 | Sonde d'entrée | ORP | ORP |
| 2 | Sonde d'entrée | pH | pH |
| 3 | Entrée température | TEMP (PT100) | TEMP (PT100) |
| 4 | Sonde d'entrée | Non utilisé | Chlore Libre |
| 5 | Entrée signal fréq. | Débit (entrée fréq.) | Débit (entrée fréq.) |
| 6 | Niveau (réservoir de produit) | Sonde de niveau pH | Sonde de niveau pH |
| 7 | Niveau (réservoir de produit) | Sonde de niveau Chlore (ORP) | Sonde de niveau Chlore |
| 8 | Niveau (réservoir de produit) | Débit (capteur REED) | Débit (capteur REED) |
| 9 | Port série | Pas présent | Pas présent |
| 10 | Entrée de déclenchement 220Vac (haute tension) | Pompe de circulation (Entrée 220Vac) | Pompe de circulation (Entrée 220Vac) |
| 11 | Relais de sortie R1 | RL1 AUX1 pH | RL1 AUX1 pH |
| 12 | Relais de sortie R2 | RL2 AUX2 OPR/Chlore | RL2 AUX2 OPR/Chlore |
| 13 | Relais de sortie R3 | Alarme RL3 | Alarme RL3 |
| 14 | Connecteur de terre | Terre | Terre |
| 15 | Alimentation électrique | 220-240 Vac 50-60 Hz (F/N) | 220-240 Vac 50-60 Hz (F/N) |
| C1 | Raccordement de la pompe | pH | pH |
| C2 | Raccordement de la pompe | Chlore (ORP) | Chlore |
| SekoNet | Module WiFi | Carte WiFi (code produit dédié) | Carte WiFi (code produit dédié) |

Étiquette de connexions

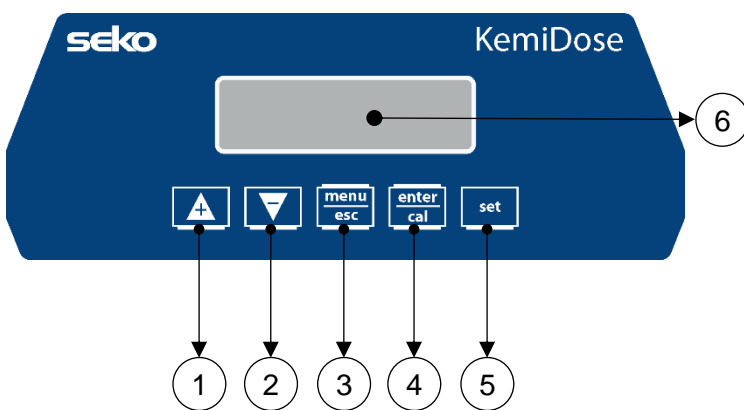


4. SPECIFICATIONS TECHNIQUES

| Spécifications | KemiDose Double pH/ORP | KemiDose Double pH/ORP/Chlore |
|---------------------------|---------------------------------|------------------------------------------|
| Dimensions (H-L-P) | H:196 x L205 x P:171 mm | H:196 x L205 x P:171 mm |
| Poids | 6 Kg | 6 Kg |
| État de la pompe | Pause - Alimentation | Pause - Alimentation |
| Étalonnage de sonde | Automatique | Automatique |
| Alimentation électrique | 220-240 VAC 50-60 Hz | 220-240 VAC 50-60 Hz |
| Consommation | 32 Watt | 32 Watt |
| Précision de l'appareil | ± 0,1 pH; ±10mV; ±1°C | ± 0,1 pH; ±10mV; 0,1 ppm; ±1°C |
| Précision | ±0,02pH, ±3mV;±0,5°C | ±0,02pH, ±3mV; 0,05 ppm;±0,5°C |
| Plage | 0-14 pH; -99 -1000mV; 0...+55°C | 0-14 pH; -99 -1000mV; 0-5 ppm; 0...+55°C |
| Débit de la pompe | 5 l/h | 5 l/h |
| Contre-pression maxi | 5 bar | 5 bar |
| Contact relais (numéro 3) | 250 Vac 10A (charge résistive) | 250 Vac 10A (charge résistive) |
| Fusible | 500 mA (vite) | 500 mA (vite) |
| Fréquence dosage pompe | 160 coups/minute | 160 coups/minute |



5. INSTRUCTIONS DE CONFIGURATION SYSTEME



- 1) Bouton pour augmenter la valeur
- 2) Bouton pour diminuer la valeur
- 3) Bouton Menu/Échap
- 4) Bouton Étal/OK
- 5) Bouton pour configurer le point de consigne
- 6) Écran numérique

Configuration du programme – Appuyer sur **menu esc** pendant 5 secondes

À l'entrée de chaque élément de menu, le paramètre peut être modifié directement à l'aide des touches fléchées (**▲** et **▼**).

Appuyer sur le bouton **enter cal** pour confirmer le réglage actuel et passer au prochain élément.

Le menu a une structure circulaire : une fois arrivé au dernier élément, la confirmation du jeu de paramètres, en appuyant sur **enter cal**, détermine le retour au premier élément de menu.

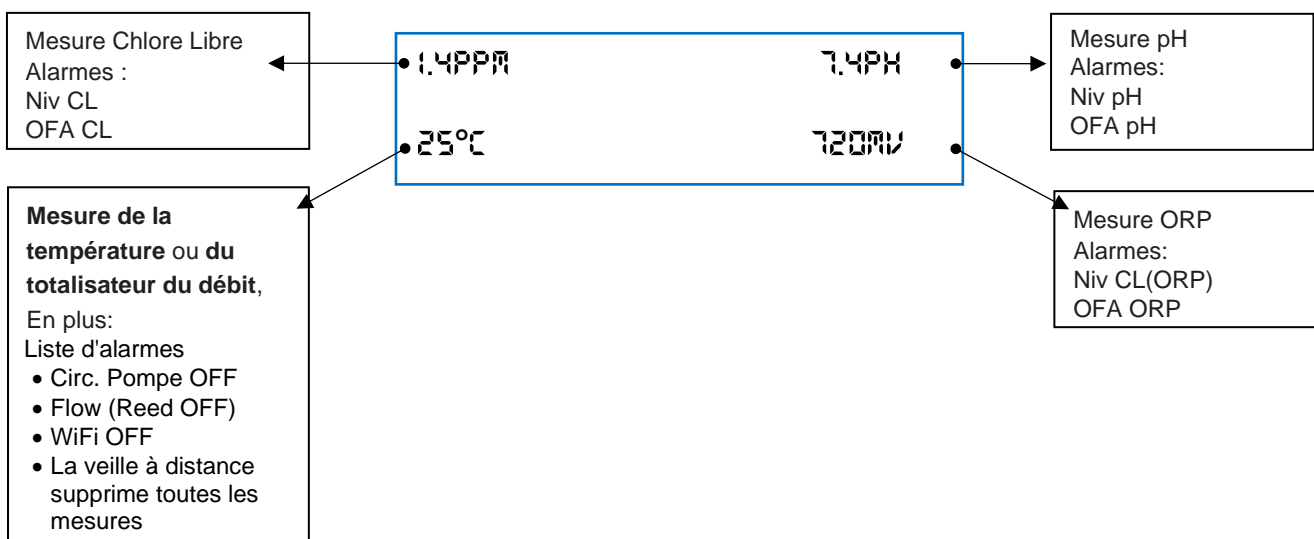
- 1 LANGUE – Il est possible de choisir parmi 5 langues disponibles : **EN**, FR, IT, DE, ES
- 2 PH
 - POINT DE CONSIGNE – **7,5 pH** (5-9 pH)
 - TYPE DOSAGE – **Acide** (Acid/Alka)
 - TEMPERATURE : 25°C; régler °C / °F et la valeur manuelle
 - ALARME OFA : Désactivé, 1-60' (minutes)
 - BANDE PROP. = 1,0pH (défaut: 1,0pH, plage: 0,4-2,5 pH)
- 3 ORP
 - POINT DE CONSIGNE – **700 mV** (400-850 mV)
 - TYPE DOSAGE – **Bas** (Bas/Haut)
 - ALARME OFA : Désactivé, 1-60' (minutes)
 - BANDE PROP. = 250mV (défaut: 250mV, plage: 100-350 mV)
 - **Remarque:** Le dosage ORP, en présence de chlore, n'a aucun effet sur la pompe doseuse, mais peut gérer le relais Aux2 avec activation ON / OFF par rapport au point de consigne.
- 4 CHLORE
 - POINT DE CONSIGNE – **1,2 ppm** (0,3-3,0 ppm)
 - TYPE DOSAGE – **Bas** (Bas/Haut)
 - ALARME OFA : Désactivé, 1-60' (minutes)
 - BANDE PROP. = 0,8 ppm (défaut: 0,8ppm, plage: 0,3-1,2 ppm)
- 5 MENU AVANCE
 - POMPE DE RECIRCULATION – (Activée/Désactivée)
 - D'ENTREE DEBIT
 - OFF/ON
 - Impulsion/litre: 1 ou litre/impulsion: 1 - Définissez la valeur
 - Unité : L ou m³
 - ETALONNAGE PH: 2 points, 1 point, Référence, Désactiver
 - ETALONNAGE ORP: 1 point, Référence, Désactiver
 - ETALONNAGE CL: 2 points, Désactiver
 - ETALONNAGE TEMP: Référence, Désactiver

- TYPE DOSAGE PH: Prop, Désactivé, On/OFF
- TYPE DOSAGE ORP: Prop, Désactivé, On/OFF
 - **Remarque:** Le dosage ORP est désactivé si TYPE DOSAGE CHLORE est différent de Désactivé
- TYPE DOSAGE CHLORE: Prop, Désactivé, On/OFF
- DEBIT MAX POMPES:
 - PH 100% (défaut: 100% [160 coups/min], plage:10-100%)
 - RH/CHLORE 100% (défaut: 100% [160 coups/min], plage:10-100%)
- AUX RELAY
 - RELAIS AUX1 : pH, Désactivé
 - RELAIS AUX2 : Chlore, ORP, Désactivé
 - **Remarque:** Dosage des relais Aux1 et Aux2 avec méthode ON / OFF
- PASSWORD: 0000 (**Remarque:** mot de passe désactivé, définissez une valeur autre que: 0000)
- REINITIALISER ETALONNAGE : (**Remarque:** sélectionnez la mesure à réinitialiser: pH; Chlore; ORP)
- REINITIALISER TOUS LES PARAMETRES
- PANNEAU DE COMMANDE: affiche les signaux électriques
- CONFIGURATION WI-FI
 - Nom du réseau Wi-Fi
 - Mot de passe WiFi
 - Adresse IP du réseau WiFi.


Remarque : ce menu est uniquement disponible dans les produits avec WiFi
- REED (erreur d'affichage, lorsqu'il est rouge): NO/NC
- DELAI P ON: Les pompes doseuses sont désactivées pendant la durée définie
- DELAI DEBIT: Les pompes doseuses sont désactivées pendant la durée définie

Remarque: Menu de réglage du délai d'attente, après 120 secondes sans action, le contrôleur s'échappe sans enregistrer les paramètres.

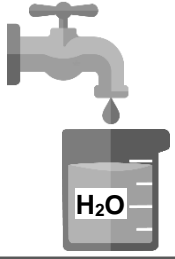

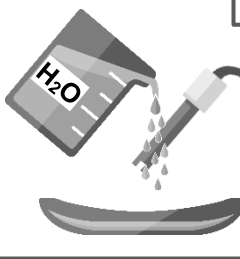
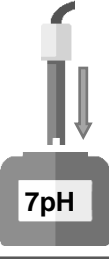




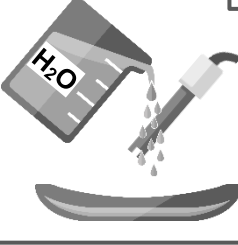
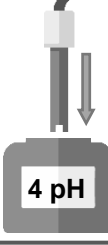



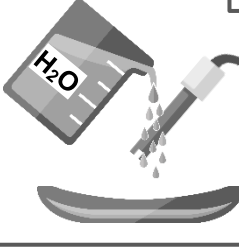


Exemple d'affichage



Menu d'étalonnage:


Appuyez sur  (3 secondes) et calibrer la sonde pH, Chlore, Température, ORP.

6. ÉTALONNAGE pH

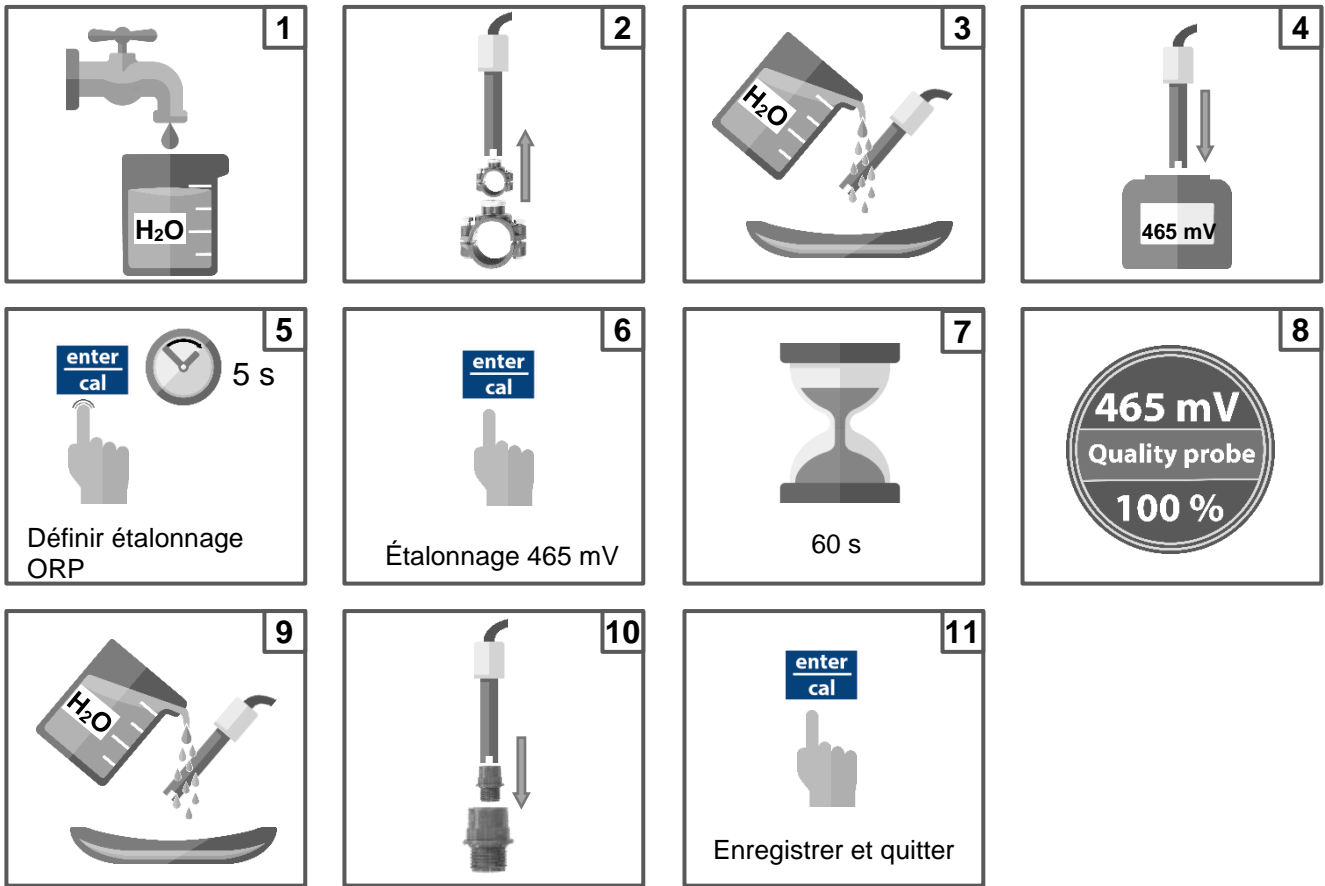
| | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
|  <p>1</p> |  <p>2</p> |  <p>3</p> |  <p>4</p> |
|  <p>5 s</p> <p>enter cal</p> <p>Définir étalonnage du pH</p> |  <p>enter cal</p> <p>Étalonnage 7 pH</p> |  <p>60 s</p> |  <p>8</p> |
|  <p>9</p> |  <p>10</p> <p>4 pH</p> |  <p>enter cal</p> <p>Étalonnage 4 pH</p> |  <p>60 s</p> <p>12</p> |
|  <p>13</p> |  <p>14</p> |  <p>15</p> |  <p>enter cal</p> <p>Enregistrer et quitter</p> <p>16</p> |

Note: Si vous avez sélectionné «1 point cal.», L'étalonnage sera effectué uniquement en 1 point en utilisant la solution tampon 7 pH.

Étalonnage de référence

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>CAL Reference 7.2 pH</p> <p>L'unité fera clignoter une valeur de température Réglez la valeur de température mesurée avec l'instrument Ex. 7.4 pH</p> | <p>CAL Reference 7.4 pH</p> <p>enter cal</p>  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|

7. ÉTALONNAGE ORP



Étalonnage de référence

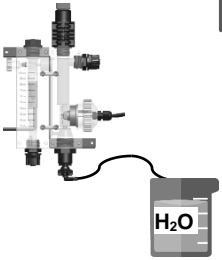
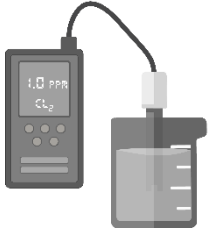




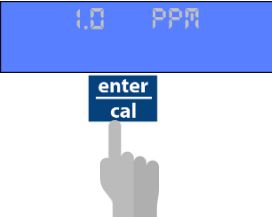




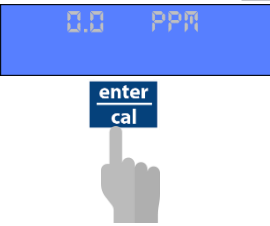

CAL Reference
720 mV

L'unité fera clignoter une valeur de température
Réglez la valeur de température mesurée avec l'instrument
Ex. 750 mV

CAL Reference
750 mV


enter cal

8. ÉTALONNAGE CHLORE

| | | | |
|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
|  <p>1</p> |  <p>2</p> |  <p>3</p> <p>Sélectionner étalonnage Cl</p> |  <p>4</p> |
|  <p>5</p> <p>10 s</p> |  <p>6</p> <p>Une valeur Cl clignote sur l'unité Définir la valeur Cl mesurée avec l'instrument Ex. 1,0 ppm de Cl libre</p> |  <p>7</p> |  <p>8</p> <p>10 s</p> |
| <p>9</p> <p>L'unité enregistre les paramètres.</p> | <p>10</p> <p>Fermer le débit</p>  | <p>11</p> <p>Si le débit est fermé</p>  | <p>12</p>  <p>100 s</p> |
| <p>13</p>  | <p>14</p>  <p>10 s</p> | <p>15</p> <p>Enregistrer et quitter</p> | |

*Appuyez sur ESC pour quitter le menu d'étalonnage.

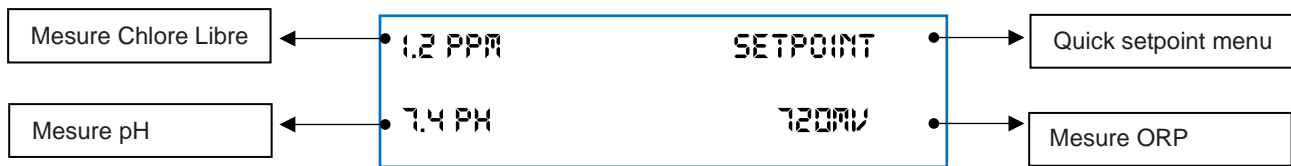
9. ÉTALONNAGE DE LA TEMPÉRATURE

| | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <p>CAL Reference 26°C</p> <p>L'unité fera clignoter une valeur de température Réglez la valeur de température mesurée avec l'instrument Ex. 27°C</p> | <p>CAL Reference 27°C</p>  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|

KemiDose | pH · ORP · Chlore

Menu de réglage:

Appuyez sur **set** (3 secondes) et ajustez la valeur du point de consigne et appuyez sur **set** pour confirmer.



Menu d'étalonnage

Appuyez sur **enter cal** (3 secondes) et calibrer la sonde pH, Chlore, Température, ORP.

Veille

Appuyer simultanément sur les touches **▲** et **▼** pendant 5 secondes pour éteindre le rétroéclairage de l'appareil. Le dosage et l'étalonnage sont désactivés.

Réinitialisation OFA

Appuyez sur **menu esc** (3 secondes) pour réinitialiser l'alarme OFA ou appuyez sur **▲ ▼** (5 secondes) pour réinitialiser l'alarme OFA.

Amorçage

Seulement lorsque la pompe est en «mode veille», appuyez **▲** pour réinitialiser le totalisateur de débit, appuyez **▼** pour faire fonctionner la pompe de pH, appuyez sur **menu esc** pour faire fonctionner la pompe ORP / chlore, appuyez **enter cal** pour faire fonctionner le Relais Aux1, appuyez **set** pour faire fonctionner le Relais Aux2

Pour restaurer les paramètres par défaut, suivre les étapes ci-dessous :

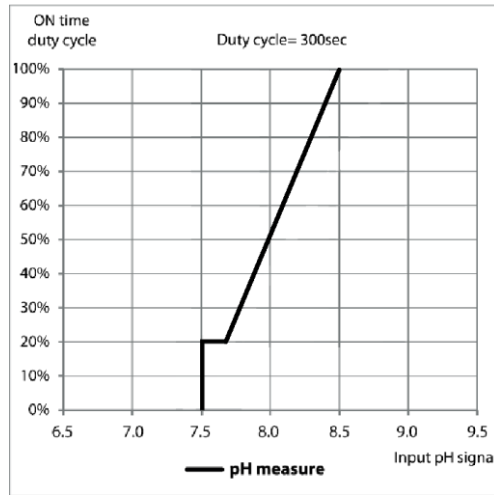
- Éteindre l'unité KemiDose
- Maintenir **▲** et **▼** enfoncés et allumer l'unité
- Le message `INIT.DEFAULT__NO` clignote à l'écran
- Sélectionnez l'unité à réinitialiser - le module WiFi ou le système de dosage
- Appuyer sur **▲** `INIT.DEFAULT__YES`
- Appuyer sur **enter cal** pour restaurer les paramètres par défaut.

Paramètres par défaut :

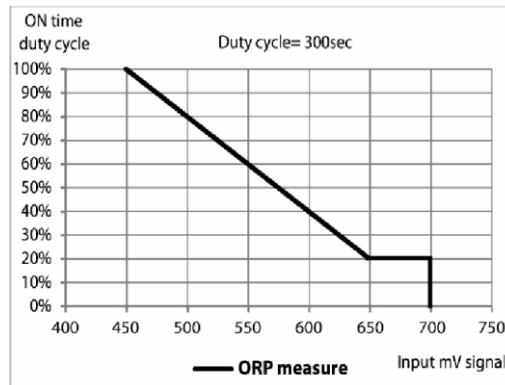
- Langue = **EN**
- Valeur de consigne = **7,5 pH ; 700 mV ; 1,2 ppm**
- Méthode de dosage = **Acide (pH); Bas (Redox) ; Bas (Cl)**
- Durée OFA = **Désactivé**
- Étalonnage = **Complet**
- Admission de débit = **Désactivé (pompe de recirculation)**
- Type de dosage = **PROP ; ON/OFF Relai Aux1 et Aux2**
- EN Fréq. = **Désactivé**
- Reed = **NC (normalement fermé)**
- P.ON (Délai d'activation) = **Désactivé**
- Retard de débit = **Désactivé**

10. MÉTHODE DE DOSAGE

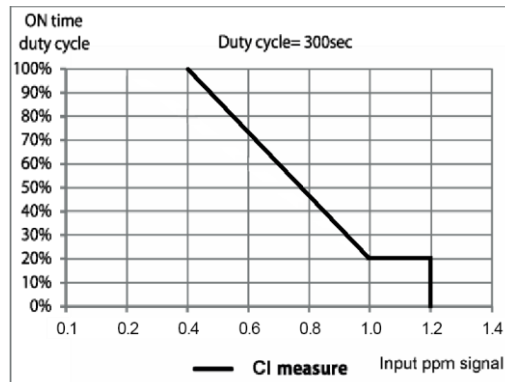
Point de consigne = 7,5 pH
Mode de dosage = Acide
Bande proportionnelle = 1,0 pH



Point de consigne = 700 mV
Mode de dosage = Bas
Bande proportionnelle = 250 mV

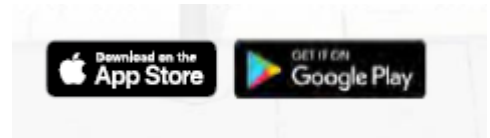


Point de consigne = 1,2ppm Chlore libre
Mode de dosage = Bas
Bande proportionnelle = 0,8ppm

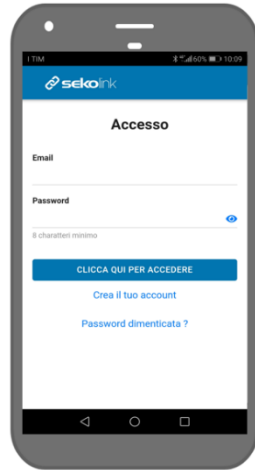


11. SERVEUR WEB INTERNE

Téléchargez l'application **SekoLink**



Enregistrer votre compte



À l'aide du QR Code, connectez-vous aux pages Web internes
Définir :

Utilisateur= ADMIN
Password= 0000



Définissez le nom et le mot de passe de votre LAN WiFi et confirmez.



Terminez l'enregistrement de l'appareil

Grâce à votre inscription, il est possible d'utiliser gratuitement **sekolink** et **sekoweb**.



sekolink

Grâce à **sekolink**, il est possible de gérer votre piscine::

- Suivi et gestion limitée
- Application pour smartphone compatible avec iPhone ou Android
- Pour les utilisateurs finaux
















sekoweb

Utilisez l'adresse **sekoweb** www.sekoweb.com ou APP pour gérer vos piscines avec un portail web professionnel::

- Suivi et gestion complète
- Portail Internet accessible via une connexion en ligne ou en scannant le code QR d'un produit
- Pour les installateurs, techniciens et ingénieurs de piscines et de spas



12. ALARMES

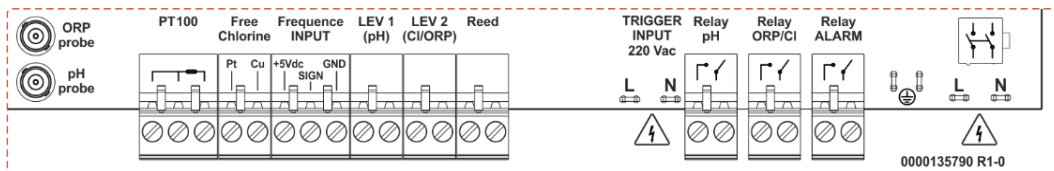
| Alarme | Affichage | Actions à réaliser |
|--------------------------------------------------|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Niveau *uniquement des mesures actives | NIVEAU_BAS | <ul style="list-style-type: none"> - Appuyez  pendant 3 secondes pour réinitialiser ou appuyez   pendant 5 secondes pour réinitialiser - Restaurer le réservoir de produit |
| Mesure hors plage | BANDE_ALR | <ul style="list-style-type: none"> - Remplacer ou vérifier la sonde de mesure - Appuyez  pendant 3 secondes pour réinitialiser ou appuyez   pendant 5 secondes pour réinitialiser - Restaurer la mesure |
| Première alarme OFA (durée >70 %) | OFA_1 | <ul style="list-style-type: none"> - Appuyez  pendant 3 secondes pour réinitialiser ou appuyez   pendant 5 secondes pour réinitialiser |
| Seconde alarme OFA (durée 100 %) | OFA_2 | <ul style="list-style-type: none"> - Appuyez  pendant 3 secondes pour réinitialiser ou appuyez   pendant 5 secondes pour réinitialiser |
| Débit | DEBIT | <ul style="list-style-type: none"> - Restaurer le débit |
| Fonction d'étalonnage | ERREUR | <ul style="list-style-type: none"> - Restaurez la sonde ou la solution tampon et répétez la procédure d'étalonnage |
| Erreur système | ERREUR PARAMETRE | <ul style="list-style-type: none"> - Appuyez sur  pour restaurer le paramètre par défaut - Unité cassée |
| Alarme mesure (*1) | MESURE ELEVEE MESURE BASSE | <ul style="list-style-type: none"> - Ajustez la concentration chimique |

(*1 Plages pour alarmes du mesures)

| n | Article | Limites |
|---|------------------|----------|
| 1 | Temp. Mesure min | +10°C |
| 2 | Temp. Mesure Max | +38°C |
| 3 | pH Mesure min | 6 pH |
| 4 | pH Mesure Max | 8 pH |
| 5 | ORP Mesure min | +600 mV |
| 6 | ORP Mesure Max | +800 mV |
| 7 | CL Mesure min | 0,50 ppm |
| 8 | CL Mesure Max | 2 ppm |

KemiDose | pH · ORP · Chlore

Étiquette de connexions :



Connexions de fils :

| Serrage | Description | KemiDose pH · ORP | Détails |
|---------|-------------------------------|----------------------------------------------------------------------------------|-----------------------------------------------|
| 1 | Sonde d'entrée | ORP | |
| 2 | Sonde d'entrée | pH | |
| 3 | Sonde d'entrée | TEMP (PT100) A= capteur à deux fils B= capteur à trois fils | |
| 4 | Entrée sonde de chlore libre | Entrée sonde de chlore libre: Pt: Capteur en platine Cu: Capteur en cuivre | |
| 5 | Entrée signal fréq. | Débit (entrée fréq.) A= Reed mécanique B= Capteur Hall Padwheel | |
| 6 | Niveau (réservoir de produit) | Sonde de niveau pH | Sonde de niveau réservoir de produit chimique |
| 7 | Niveau (réservoir de produit) | Sonde de niveau Chlore (ORP) | Sonde de niveau réservoir de produit chimique |
| 8 | Niveau (réservoir de produit) | Débit (capteur REED) | Capteur débit |
| 9 | Port série | Pas présent | Aucun |
| 10 | Entrée de déclenchement | Pompe de circulation (Entrée 220Vac) | Fils Phase / Neutre |
| 11 | Relais de sortie | RL1 AUX1 pH | Contact sec |
| 12 | Relais de sortie | RL2 AUX2 OPR/Chlore | Contact sec |
| 13 | Relais de sortie | RL3 Alarme | Contact sec |
| 14 | Connecteur de terre | Terre | --- |
| 15 | Alimentation électrique | 220-240 Vac 50-60 Hz (F/N) | --- |



AVVERTENZA!

Prima di effettuare QUALSIASI operazione all'interno del pannello di controllo del dispositivo KemiDose, assicurarsi di averlo scollegato dalla rete di alimentazione.

Il mancato rispetto delle istruzioni contenute nel presente manuale può causare lesioni a persone e/o danni al dispositivo e al sistema.

1. CONTENUTO DELLA CONFEZIONE

| | | | | |
|----------------------------------------------------------------|------------------------------------------------|----------------------------------------------------|---------------------------------------|------------------------------------------------------------------|
| | | | | |
| A: Tubo di aspirazione PVC Crystal 4x6 (4 m) | B: Tubo di mandata in polietilene (5 m) | C: Valvola a sfera FPM (3/8" GAS) | D: Porta sonda PSS3 (1/2" GAS) | E: Staffa per fissaggio del PSS3 sul tubo da 2" (φ=50 mm) |
| | | | | |
| F: Riduttore per valvola di iniezione (1/2" M - 3/8" F) | G: Filtro di fondo | H: Kit staffe di montaggio (4 viti da 6 mm) | I: Filtro Minor (5") | J: Porta sonda + sonda del cloro |
| | | | | |
| K: sonda pH | L: Sonda Redox | M: Spazzola per sonda del cloro | N: Sfere per sonda del cloro | O: Acqua |
| | | | | |
| P: Soluzione tampone pH 4 | Q: Soluzione tampone pH 7 | R: Soluzione di calibrazione 465 mV | S: Chiave per filtri | T: Tubo PVC Crystal 8x12 per porta sonda (4 m) |
| | | | | |
| U: Sonda di temperatura | | | | |

| Componente * | | Sistema a doppia pompa | |
|--------------|--|------------------------|------------------------|
| | | KemiDose pH - ORP | KemiDose pH - ORP - CL |
| A | | 2 | 2 |
| B | | 2 | 2 |
| C | | 2 | 2 |
| D | | 2 | 2 |
| E | | 4 ^(*1) | 4 ^(*1) |
| F | | 2 | 2 |
| G | | 2 | 2 |
| H | | 1 | 1 |
| I | | - | 1 |
| J | | - | 1 |
| K | | 1 | 1 |
| L | | 1 | 1 |
| M | | - | 1 |
| N | | - | 1 |
| O | | 1 | 1 |
| P | | 1 | 1 |
| Q | | 1 | 1 |
| R | | 1 | 1 |
| S | | - | 1 |
| T | | - | 1 |
| U | | 1 ^(*2) | 1 ^(*2) |

* I valori riportati nella tabella rappresentano il numero di componenti contenuti nella confezione.

(*1 Un pezzo in più solo per il modello WiFi), (*2 Un pezzo solo per il modello WiFi)

KemiDose | pH · ORP · Cloro

AVVERTENZA!

Questi prodotti sono **PERICOLOSI (I✳A)** e richiedono precauzioni speciali durante l'uso, la manipolazione e lo stoccaggio.

- **Non miscelare MAI i prodotti chimici.**
- Non permettere MAI a bambini o a persone che non abbiano letto il presente manuale di utilizzare o manomettere KemiDose o i suoi componenti periferici (inclusi i prodotti chimici).

Prodotti chimici pH:

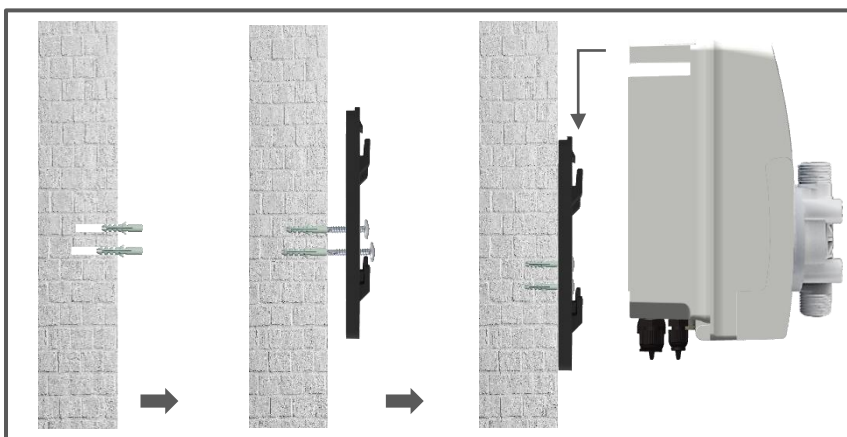
- **ASSOLUTAMENTE** sconsigliato => acido solforico puro
- Consigliato per abbassare il pH => pH negativo (con una base di acido solforico)
- Consigliato per aumentare il pH => pH positivo (carbonato o bicarbonato di sodio)

Prodotti chimici Redox:

- **ASSOLUTAMENTE** sconsigliato => tutti i tipi di cloro organico
- È possibile utilizzare cloro liquido o candeggina a 12% puri. Se la concentrazione del prodotto è di 48%, sarà necessario diluirlo in acqua con un rapporto di 1:3.

Le sonde pH / Redox sono soggette a usura e pertanto non sono coperte dalla garanzia.

2. ISTRUZIONI PER L'INSTALLAZIONE



Verificare che la pressione di iniezione sia inferiore a 1,5 bar

Posizionamento della sonda



Per una lettura ottimale della sonda, posizionarla perpendicolarmente al tubo.



L'angolo di inclinazione della sonda non deve mai essere superiore a 45° dalla verticale.



Impianto di installazione



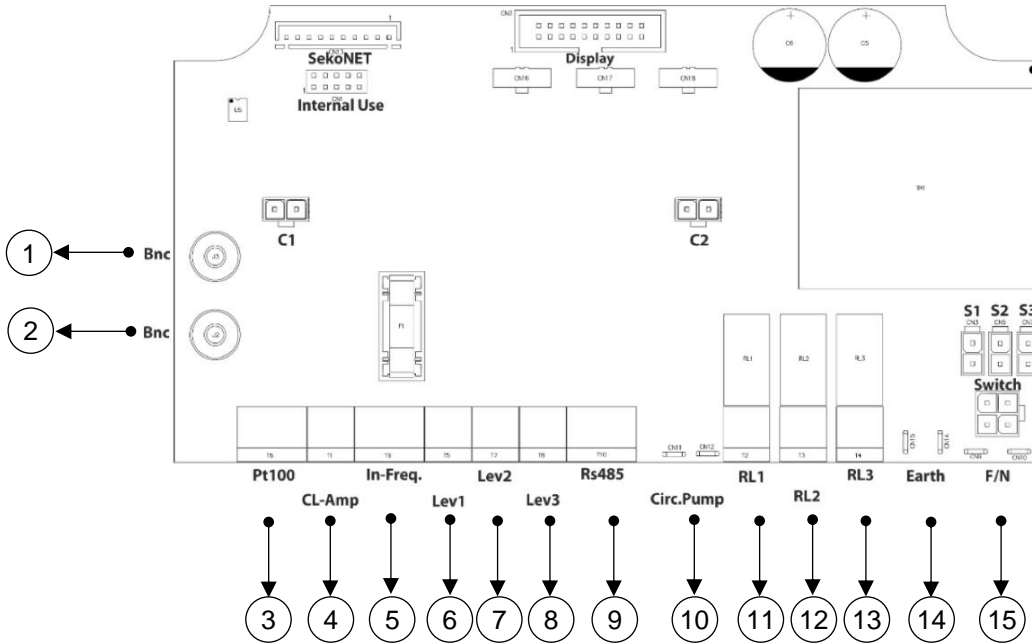
Avvertenza!

Usare con generatore di cloro a sale:

Per evitare rischi di malfunzionamento o danneggiamento dei sistemi pH, rispettare le istruzioni riportate di seguito:

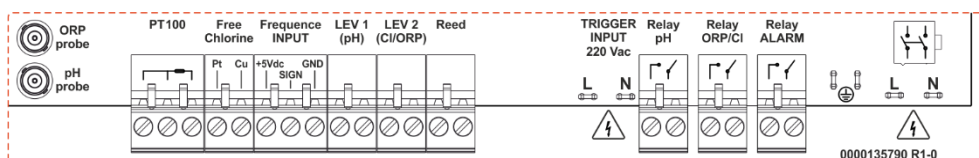
1. Posizionare la sonda di misurazione del pH prima della cella del generatore di cloro.
2. Per eliminare le eventuali correnti parassite, collegare l'acqua della piscina a una massa elettrica.
3. Collocare il punto di iniezione del prodotto dopo la cella del generatore di cloro.

3. COLLEGAMENTI ELETTRICI



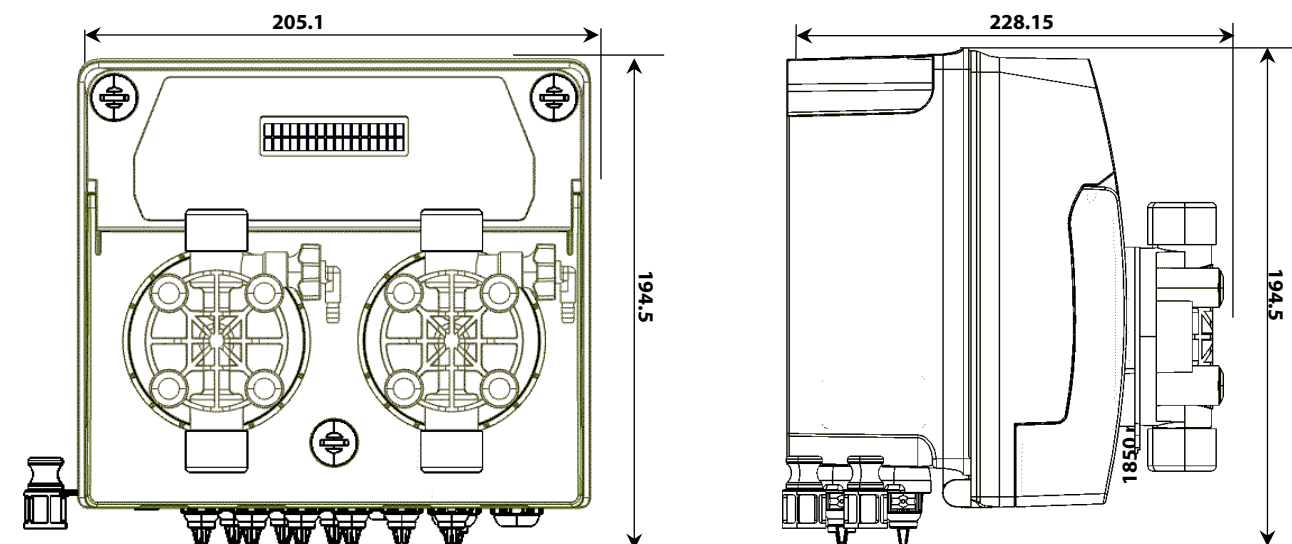
| Sistema a doppia pompa | | | |
|------------------------|------------------------------|--------------------------------------|--------------------------------------|
| Morsetto | Descrizione | KemiDose pH · ORP | KemiDose pH · ORP · CL |
| 1 | Ingresso sonda | ORP | ORP |
| 2 | Ingresso sonda | pH | pH |
| 3 | Ingresso temperatura | TEMP (PT100) | TEMP (PT100) |
| 4 | Ingresso sonda | Non usato | Cloro libero |
| 5 | Ingresso segnale freq. | Portata (Ingresso freq.) | Portata (Ingresso freq.) |
| 6 | Livello (serbatoio prodotto) | Sonda livello pH | Sonda livello pH |
| 7 | Livello (serbatoio prodotto) | Sonda livello Cloro (ORP) | Sonda livello Cloro |
| 8 | Livello (serbatoio prodotto) | Flusso (sensore REED) | Flusso (sensore REED) |
| 9 | Porta seriale | Non presente | Non presente |
| 10 | Ingresso trigger | Pompa di ricircolo (Ingresso 220Vac) | Pompa di ricircolo (Ingresso 220Vac) |
| 11 | Relè di uscita R1 | RL1 AUX1 pH | RL1 AUX1 pH |
| 12 | Relè di uscita R2 | RL2 AUX2 OPR/ Cloro | RL2 AUX2 OPR/ Cloro |
| 13 | Relè di uscita R3 | RL3 Allarme | RL3 Allarme |
| 14 | Connettore di terra | Terra | Terra |
| 15 | Alimentazione | 220-240 Vac 50-60 Hz (F/N) | 220-240 Vac 50-60 Hz (F/N) |
| C1 | Collegamento pompa | pH | pH |
| C2 | Collegamento pompa | Cloro (ORP) | Cloro |
| SekoNet | Modulo WiFi | Scheda WiFi (codice dedicato) | Scheda WiFi (codice dedicato) |

Etichetta connessioni

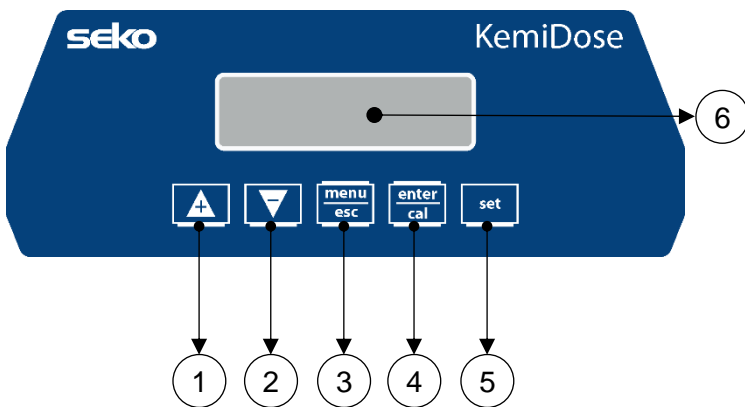


4. SPECIFICHE TECNICHE

| Specifiche | KemiDose Double PH/ORP | KemiDose Double PH/ORP/Cloro |
|----------------------------|--------------------------------|-----------------------------------------|
| Dimensioni (A-L-P) | A:196 x L:205 x P:171 mm | A:196 x L:205 x P:171 mm |
| Peso | 6 Kg | 6 Kg |
| Stato pompa | Pausa - Alimentazione | Pausa - Alimentazione |
| Calibrazione della sonda | Automatica | Automatica |
| Alimentazione | 220-240 VAC 50-60 Hz | 220-240 VAC 50-60 Hz |
| Consumo (W) | 32 Watt | 32 Watt |
| Precisione del dispositivo | ± 0,1 pH; ±10mV; ±1°C | ± 0,1 pH; ±10mV; 0.1 ppm; ±1°C |
| Accuratezza | ±0,02pH, ±3mV; ±0,5°C | ±0,02pH, ±3mV; 0,05 ppm; ±0,5°C |
| Intervallo | 0-14pH; -99 -1000mV; 0...+55°C | 0-14pH; -99 -1000mV; 0-5 ppm; 0...+55°C |
| Portata della pompa (l/h) | 5 l/h | 5 l/h |
| Contropressione max. | 5 bar | 5 bar |
| Contatto relè (numero 3) | 250 Vac 10A (carico resistivo) | 250 Vac 10A (carico resistivo) |
| Fusibile | 500 mA (veloce) | 500 mA (veloce) |
| Frequenza pompa dosatrice | 160 colpi/minuto | 160 colpi/minuto |



5. ISTRUZIONI DI CONFIGURAZIONE DEL SISTEMA



- 1) Pulsante per aumentare il valore
- 2) Pulsante per ridurre il valore
- 3) Pulsante Menu/Esc
- 4) Pulsante Cal/OK
- 5) Pulsante di impostazione del Setpoint
- 6) Display digitale

Configurazione del programma – Premere **menu esc** per 5 secondi

Accedendo ad ogni voce del menu, è possibile modificare direttamente il parametro con i tasti freccia (**▲** e **▼**). Per confermare l'impostazione attuale e passare alla voce successiva, premere il tasto **enter cal**.

Il menu è dotato di una struttura circolare: una volta arrivati all'ultima voce, quando si conferma il parametro impostato, premendo **enter cal** si torna alla prima voce.

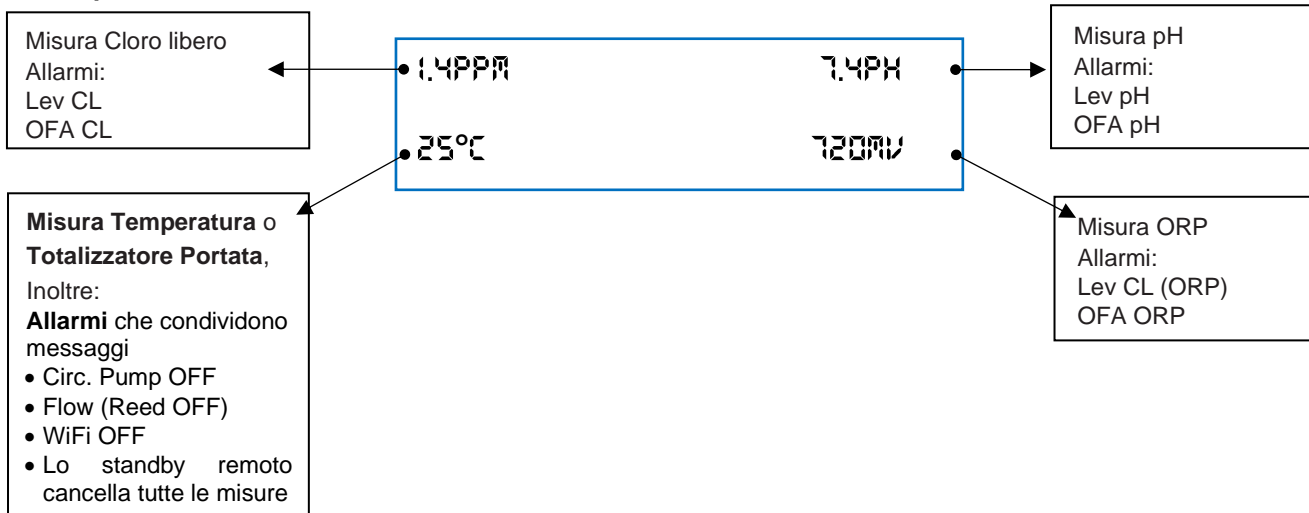
- 1 LINGUA – È possibile selezionare tra 5 lingue disponibili: **EN**, **FR**, **IT**, **DE**, **ES**
- 2 PH
 - SETPOINT – **7,5pH** (5-9pH)
 - TIPO SETPOINT: – **Acido** (Acido/Alcalino)
 - TEMPERATURA: 25°C; impostare °C/°F e valore manuale
 - ALLARME OFR: Off, 1-60' (minuti)
 - BANDA PROP. = 1,0pH (predefinito: 1,0pH, intervallo: 0,4-2,5 pH)
- 3 ORP
 - SETPOINT – **700 mV** (400-850mV)
 - TIPO SETPOINT: **Basso** (Basso/Alto)
 - ALLARME OFR: Off, 1-60' (minuti)
 - BANDA PROP. = 250mV (predefinito: 250mV, intervallo: 100-350 mV)
 - **Nota:** Il dosaggio ORP (redox) in presenza del cloro, non ha effetto sulla pompa dosatrice, ma può gestire il Relè Aux2 con attivazione ON/OFF rispetto al Setpoint.
- 4 CLORO
 - SETPOINT – **1,2 ppm** (0,3-3,0 ppm)
 - TIPO SETPOINT: **Basso** (Basso/Alto)
 - ALLARME OFR: Off, 1-60' (minuti)
 - BANDA PROP. = 0,8 ppm (predefinito: 0,8ppm, intervallo: 0,3-1,2 ppm)
- 5 MENU AVANZATO
 - POMPA DI RICIRCOLO – (Abilitato/ Disabilitato)
 - IN FREQ (Ingresso portata)
 - OFF/ON
 - Impulso/Litro:1 o Litro/Impulso:1 – Impostare valore
 - Unità di misura: L o m³
 - CALIBRAZIONE PH: 2 punti, 1 punto, Riferimento, Disabilitato
 - CALIBRAZIONE ORP: 1 punto, Riferimento, Disabilitato
 - CALIBRAZIONE CL: 2 punti, Disabilitato
 - CALIBRAZIONE TEMP: Riferimento, Disabilitato

- TIPO DOSAGGIO PH: Proporzionale, OFF, On/OFF
- TIPO DOSAGGIO ORP: Proporzionale, OFF, On/OFF
 - **Nota:** Il dosaggio ORP è disabilitato se TIPO DOSAGGIO CLORO diverso da OFF
- TIPO DOSAGGIO CLORO: Proporzionale, OFF, On/OFF
- PORTATA MAX POMPE:
 - PH 100% (default: 100% [160 colpi/min], intervallo:10-100%)
 - RX/CLORO 100% (default: 100% [160 colpi/min], intervallo:10-100%)
- RELE AUX
 - RELE AUX1: pH, Disabilitato
 - RELE AUX2: Cloro, ORP, Disabilitato
 - **Nota:** i rele Aux1 e Aux2 dosano con metodo ON/OFF
- PASSWORD: 0000 (**Nota:** password disabilitata, impostare un valore diverso da: 0000)
- RESET CALIBRAZIONE: (**Nota:** selezionare la misura da resettare: pH; Cloro; ORP)
- RESET TUTTI I PARAMETRI
- PROG CONTROL PANEL: visualizza i segnali elettrici
- WIFI CONFIGURAZIONE
 - Nome rete WiFi
 - Password WiFi
 - Indirizzo IP rete WiFi


Nota: questo menu è disponibile solo nei prodotti WiFi
- REED (errore di visualizzazione in rosso): NO/NC
- POWER ON DELAY: (Ritardo accensione) Disabilita le pompe dosatrici per il tempo impostato
- FLOW DELAY: (Ritardo flusso) Disabilita le pompe dosatrici per il tempo impostato

Nota: menu di impostazione del timeout, dopo 120 secondi senza azione il controller esce da solo senza salvare i parametri.

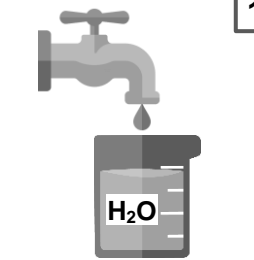
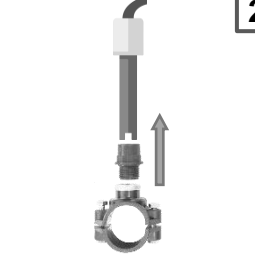
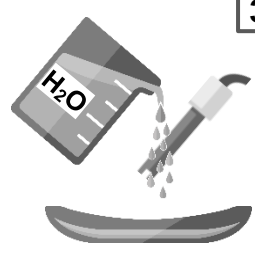
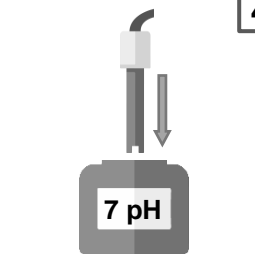
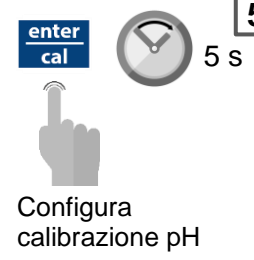
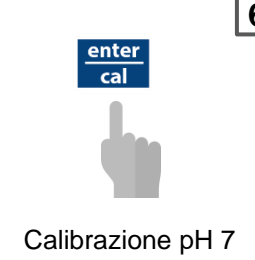
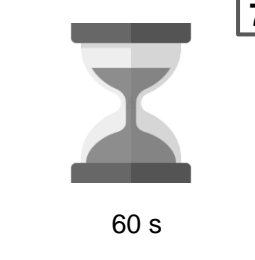

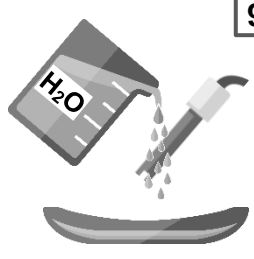
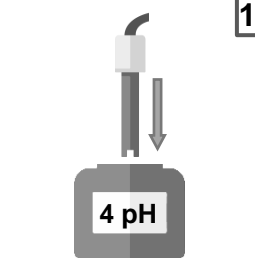

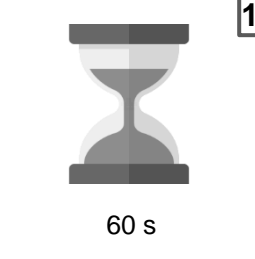

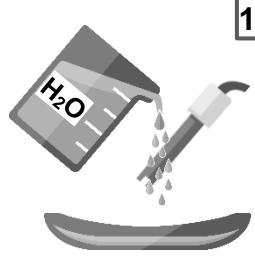
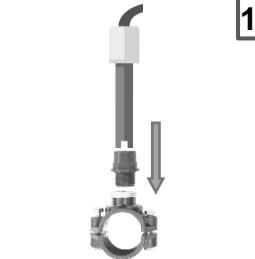

Esempio di visualizzazione



Menu di calibrazione:


Premere  (3 secondi) per calibrare la sonda di pH, Cloro, Temperatura, ORP

6. CALIBRAZIONE pH

| | | | |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
|  <p>1</p> |  <p>2</p> |  <p>3</p> |  <p>4</p> |
|  <p>5 s</p> <p>Configura calibrazione pH</p> |  <p>6</p> <p>Calibrazione pH 7</p> |  <p>7</p> <p>60 s</p> |  <p>8</p> |
|  <p>9</p> |  <p>10</p> <p>4 pH</p> |  <p>11</p> <p>Calibrazione pH 4</p> |  <p>12</p> <p>60 s</p> |
|  <p>13</p> |  <p>14</p> |  <p>15</p> |  <p>16</p> <p>Salva ed esci</p> |

Nota: Selezionando la funzione “1 punto cal.”, la calibrazione verrà effettuata solo in 1 punto utilizzando la soluzione tampone con pH 7.

Calibrazione di riferimento

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <p>CAL Riferimento 7.2 pH</p> <p>L'unità lampeggerà un valore di temperatura Impostare il valore di temperatura misurato con lo strumento Es. 7.4 pH</p> | <p>CAL Riferimento 7.4 pH</p>  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|

7. CALIBRAZIONE REDOX

1

2

3

4

5

6

7

8

9

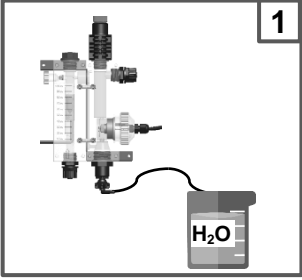
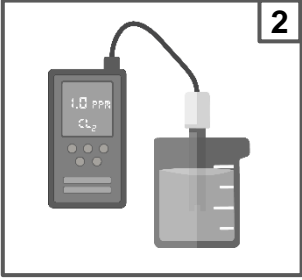

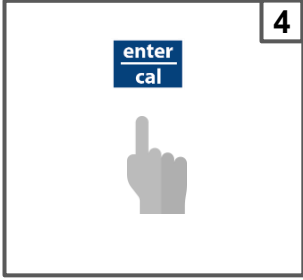
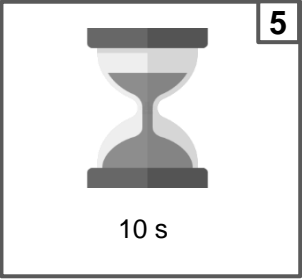

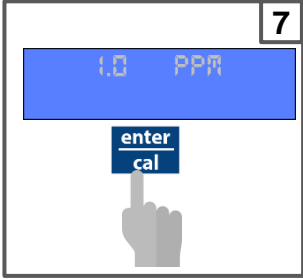
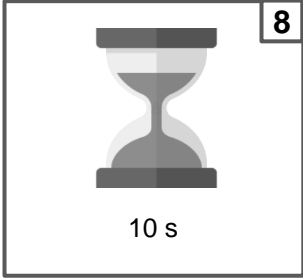
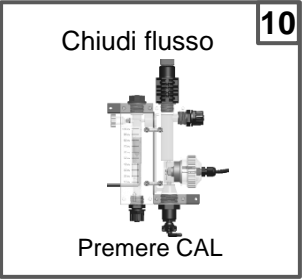

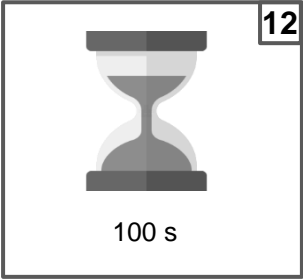
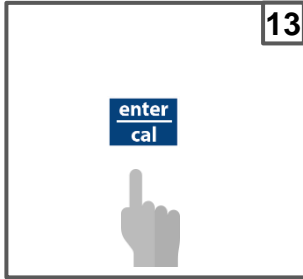
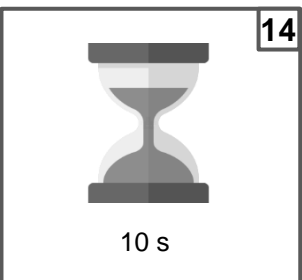

10

11

Calibrazione di riferimento

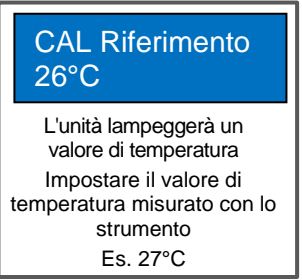

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| <p>CAL Riferimento 720 mV</p> <p>L'unità lampeggerà un valore di temperatura Impostare il valore di temperatura misurato con lo strumento Es. 750 mV</p> | <p>CAL Riferimento 750 mV</p> <p>enter cal</p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|

8. CALIBRAZIONE CLORO

| | | | |
|-----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|
|  <p>1</p> |  <p>2</p> |  <p>3</p> <p>Seleziona calibrazione Cl</p> |  <p>4</p> |
|  <p>5</p> <p>10 s</p> |  <p>6</p> <p>Sull'unità lampeggerà un valore Cl Impostare il valore Cl misurato con lo strumento Es. 1,0 ppm Cl libero</p> |  <p>7</p> |  <p>8</p> <p>10 s</p> |
|  <p>10</p> <p>Chiudi flusso Premere CAL</p> |  <p>11</p> <p>Confermare che il flusso è chiuso spostando su Si la scelta e confermando con CAL</p> |  <p>12</p> <p>100 s</p> |  <p>13</p> |
|  <p>14</p> <p>10 s</p> |  <p>15</p> <p>Calibrazione OK!</p> | | |

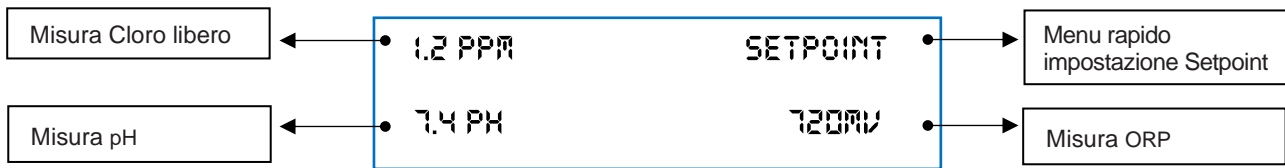
*Premere ESC per uscire dal menu di calibrazione.

9. CALIBRAZIONE TEMPERATURA

| | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
|  <p>CAL Riferimento 26°C</p> <p>L'unità lampeggerà un valore di temperatura Impostare il valore di temperatura misurato con lo strumento Es. 27°C</p> |  <p>CAL Riferimento 27°C</p> <p>enter cal</p> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|

Menu impostazioni:

Premere **set** (3 secondi) per regolare il valore del Setpoint e premere **set** per confermare.



Menu di calibrazione:

Premere **enter cal** (3 secondi) per calibrare la sonda pH, Cloro, Temperatura, ORP

Modalità StandBy

Premere **▼ ▲** (5 secondi) il sistema va in modalità StandBy, tutte le funzioni sono disabilitate.

Reset Timer OFA

Premere **menu esc** (3 secondi) per ripristinare l'allarme OFA o premere **▲ ▼** (5 secondi) per ripristinare l'allarme OFA.

Adescamento pompe

Solo con la pompa in "modalità stand-by" premere **▲** per azzerare il totalizzatore di flusso, premere **▼** per far funzionare la pompa pH, premere **menu esc** per far funzionare la pompa ORP/Cloro, premere **enter cal** per far funzionare il Relè Aux1, premere **set** per far funzionare il Relè Aux2.

Per ripristinare i parametri predefiniti, procedere come indicato di seguito:

- Spegnerne l'unità KemiDose
- Tenere **▲** e **▼** premuti e collegare l'unità
- L'unità inizierà a lampeggiare **INIT.DEFAULT__NO**
- Selezionare l'unità da resettare - modulo WiFi o sistema di dosaggio
- Premere **▲** **INIT.DEFAULT__YES**
- Premere **enter cal** per ripristinare i parametri predefiniti.

Parametri predefiniti:

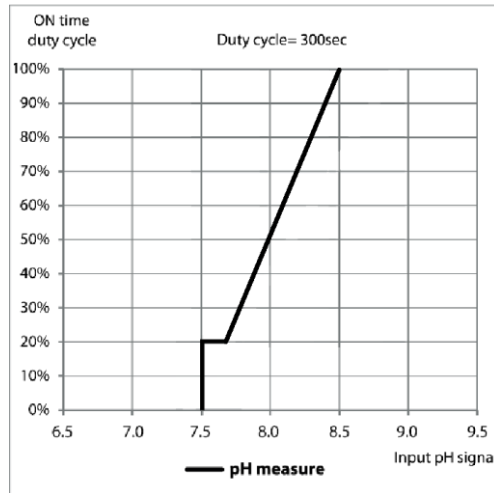
- Lingua = **EN**
- Valore di Setpoint = **7,5 pH; 700 mV; 1,2 ppm**
- Metodo di dosaggio = **Acido (pH); Basso (Redox); Basso (Cl)**
- Tempo OFA = **OFF**
- Calibrazione = **Full**
- Ingresso flusso = **OFF (pompa di ricircolo)**
- Tipo di dosaggio = **PROP; ON/OFF Relè Aux1 e Aux2**
- IN Freq. = **OFF**
- Reed = **NC (normalmente chiuso)**
- P.ON (Ritardo accensione) = **OFF**
- Ritardo flusso= **OFF**

10. METODO DI DOSAGGIO

Setpoint = 7,5 pH

Modalità di dosaggio = Acido

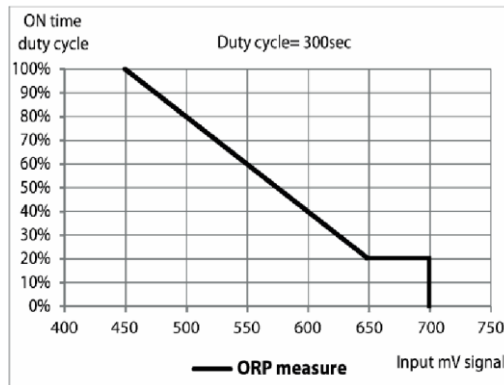
Banda Proporzionale = 1,0 pH)



Setpoint = 700 mV

Modalità di dosaggio = Bassa

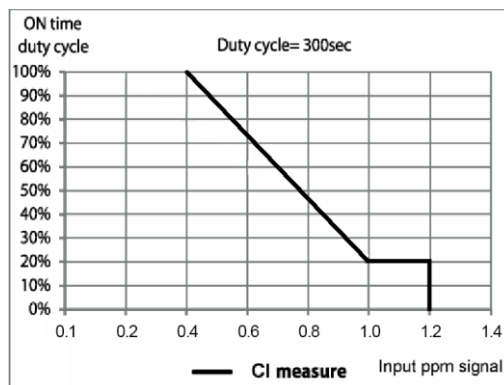
Banda Proporzionale = 250mV



Setpoint = 1,2ppm Cloro libero

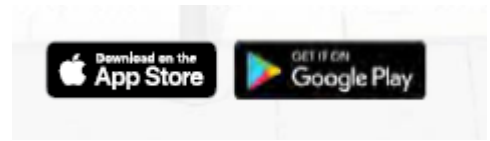
Modalità di dosaggio = Bassa

Banda Proporzionale = 0,8ppm

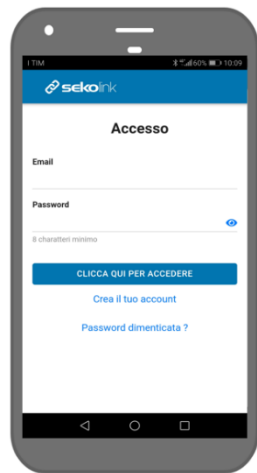


11. SERVER WEB INTERNO

Scaricare l'applicazione **SekoLink**



Registrare il tuo account



Grazie al Qr Code collegarsi alle pagine interne del prodotto
Impostare:

User name = ADMIN
Password= 0000



Impostare il nome della WiFi LAN e Password locale.



Completa la registrazione del prodotto in rete seguendo i passi della APP.

KemiDose | pH · ORP · Cloro

Grazie alla registrazione è possibile usare la APP **sekolink** e portale **sekoweb**.



sekolink

Grazie alla APP **sekolink** è possibile controllare la tua piscina:

- Monitoraggio con gestione limitata
- App per smartphone compatibile con iPhone o Android
- Per gli utenti finali
















sekoweb

Usa il link di **sekoweb** www.sekoweb.com o l'APP l'APP per gestire le tue piscine con un portale web professionale:

- Monitoraggio con gestione completa
- Portale Internet accessibile tramite login in linea o scansionando il codice QR di un prodotto
- Per installatori, tecnici e ingegneri di piscine e spa



12. ALLARMI

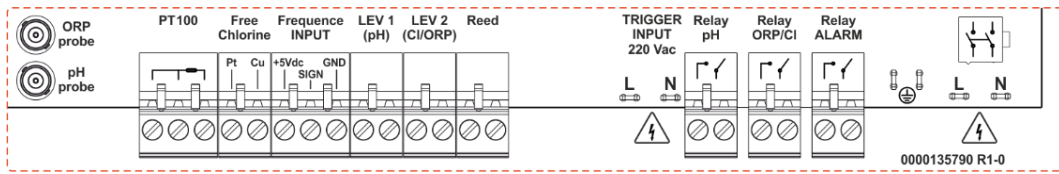
| Allarme | Display | Azioni da eseguire |
|---------------------------------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Livello *solo misure attive | LEVEL_LOW | - Premere  per 3 secondi per ripristinare o premere   per 5 secondi per ripristinare - Ripristinare il serbatoio prodotto |
| Misura fuori intervallo | ALR_BAND | - Sostituire o controllare la sonda di misura - Premere  per 3 secondi per ripristinare o premere   per 5 secondi per ripristinare - Ripristinare la misura |
| Primo allarme OFA (tempo >70%) | OFA_1 | - Premere  per 3 secondi per ripristinare o premere   per 5 secondi per ripristinare |
| Secondo allarme OFA (tempo >100%) | OFA_2 | - Premere  per 3 secondi per ripristinare o premere   per 5 secondi per ripristinare |
| Portata | FLUSSO | - Ripristinare la portata |
| Funzione di calibrazione | ERROR | - Ripristinare la soluzione Sonda o Tampone e ripetere la procedura di calibrazione |
| Errore del sistema | ERRORE PARAMETRI | - Premere  per ripristinare i parametri predefiniti - Unità danneggiata |
| Allarme misura (*1) | MISURA ALTA MISURA BASSA | - Regolare la concentrazione del prodotto chimico |

(*1 Intervalli misure allarme)

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

KemiDose | pH · ORP · Cloro

Etichetta connessioni:



Collegamento dei cavi:

| Morsetto | Descrizione | KemiDose pH · ORP | Dettagli |
|----------|------------------------------|---------------------------------------------------------------------------------|--------------------------------------|
| 1 | Ingresso sonda | ORP | |
| 2 | Ingresso sonda | pH | |
| 3 | Ingresso sonda | TEMP (PT100) A= Sensore temp. con due cavi B= Sensore temp. con tre cavi | |
| 4 | Ingresso sonda Cloro libero | Ingresso sonda Cloro libero: Pt: Sensore in platino Cu: Sensore in rame | |
| 5 | Ingresso segnale freq. | Portata (Ingresso frequenza) A= Meccanico Reed B= Padwheel a sensore Hall | |
| 6 | Livello (serbatoio prodotto) | Sonda livello pH | Sonda livello per serbatoio prodotto |
| 7 | Livello (serbatoio prodotto) | Sonda livello Cloro (ORP) | Sonda livello per serbatoio prodotto |
| 8 | Livello (serbatoio prodotto) | Portata (Sensore REED) | Sensore portata |
| 9 | Porta Seriale | Non Presente | Non Presente |
| 10 | Ingresso trigger | Pompa di ricircolo (Ingresso 220Vac) | Fili Fase/Neutro |
| 11 | Uscita Relè | RL1 AUX1 pH | Contatto secco |
| 12 | Uscita Relè | RL2 AUX2 OPR/Cloro | Contatto secco |
| 13 | Uscita Relè | RL3 Allarme | Contatto secco |
| 14 | Connettore di terra | Terra | --- |
| 15 | Alimentazione | 220-240 Vac 50-60 Hz (F/N) | --- |