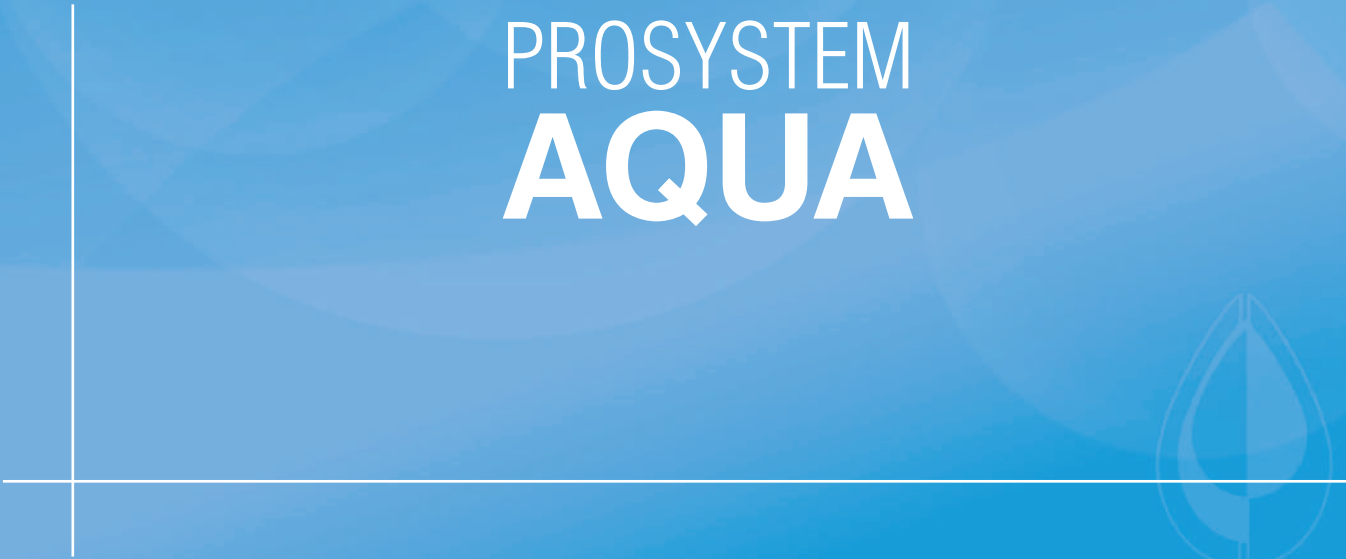




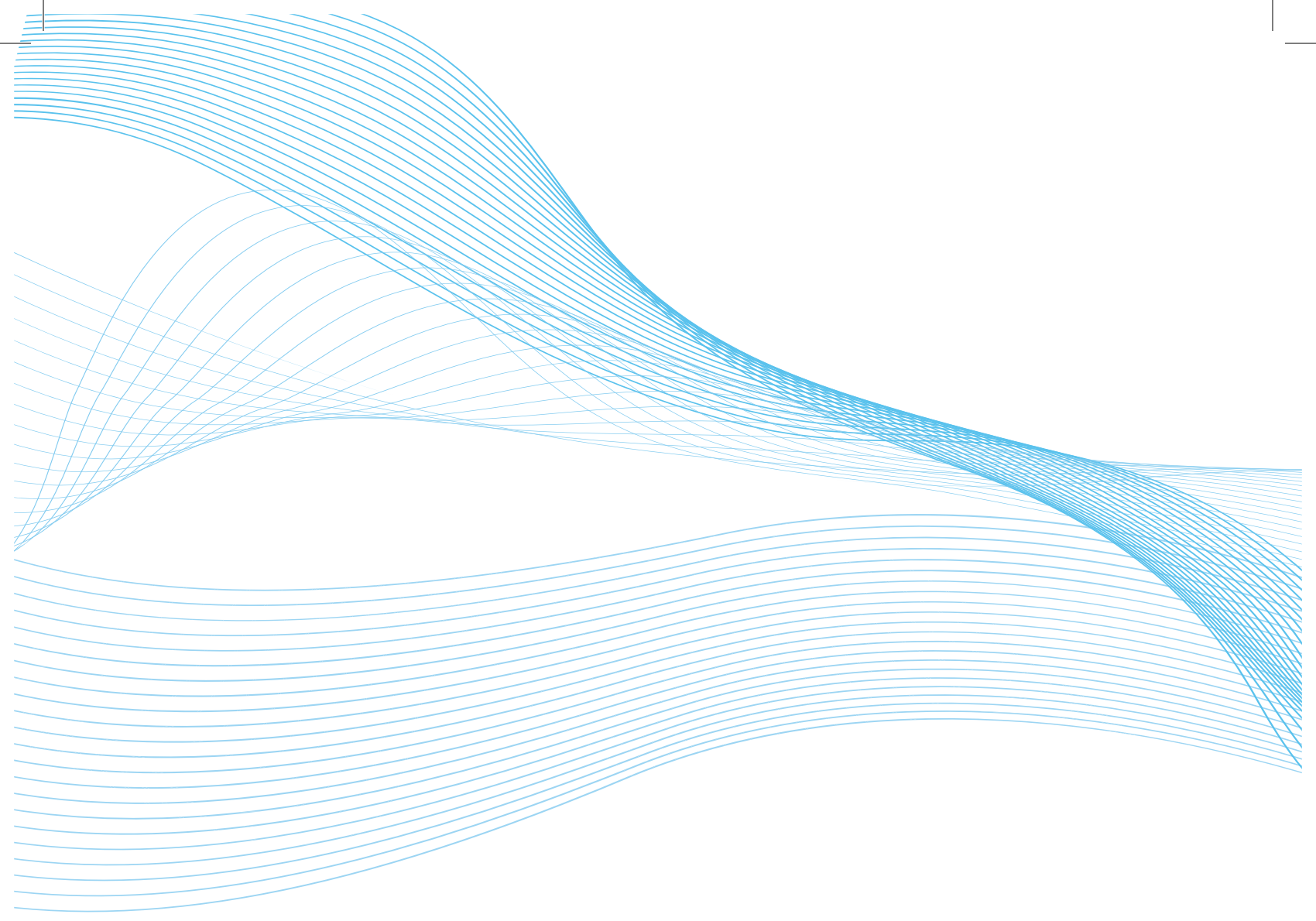
PROSYSTEM
AQUA





| | |
|-----|-------------------------------|
| 10. | Automatic pH Controller |
| 14. | Automatic Ec Controller |
| 18. | pH&Ec Basic Control |
| 22. | pH&Ec Controller |
| 26. | pH&Ec Plus Controller |
| 30. | Hydroponic System |
| 34. | Hydroponic System by Computer |
| 38. | Optional |
| 40. | Replacement |

INDEX

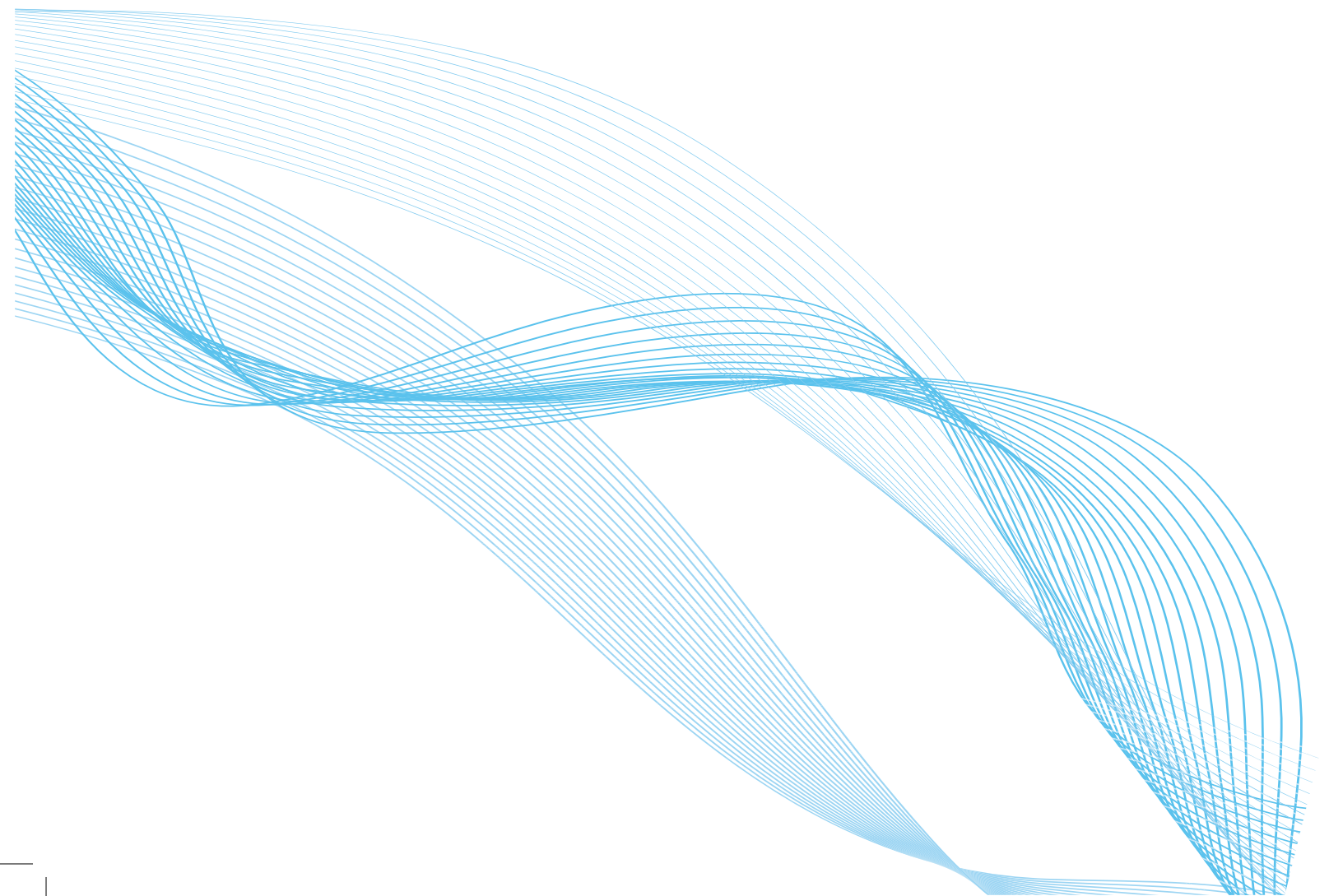
The top half of the page features a large, abstract graphic composed of numerous thin, light blue lines. These lines are arranged in a series of overlapping, wavy patterns that create a sense of movement and depth, resembling water ripples or a stylized wave. The lines are most dense on the left side and gradually become more sparse towards the right.

PROSYSTEM AQUA is a widely experienced company in the field of water treatment. We continuously work to respect the environment, solving any difficulties in depuration and water control.

We manufacture pH pumps, Ec pumps
and nutrient controllers.

We design automatic irrigation
systems for all kinds of crops.

We develop home-automatic systems
for the entire control of rooms.

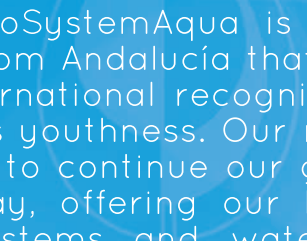




PROSYSTEM
AQUA



Is a recognised and
awarded company for
its innovation



ProSystemAqua is an enterprise from Andalucía that counts on international recognitions although its youthness. Our main objective is to continue our growth day by day, offering our best irrigation systems and water treatments, affordable for every user.

ProsystemAqua is constantly presenting exhibitions of its products, in the most important fairs of agriculture and water treatment in the world. By this way, we can offer to our clients and users the opportunity to know our products and enterprise personally.


This demonstration of values of our team, along with our ongoing



work, has allowed us to achieve several awards in our short but intense career. These awards are just the beginning of our cultural expansion.

It is our duty to optimize our resources, be environmentally friendly and respectful of the environment and interact with us to achieve this objective. A company with extensive experience in the field of water treatment.

We work constantly to respect the environment, solving any difficulties in depuration and control of water.





YOUNG ENTREPRENEURS XXI LA CAIXA'S AWARD, EMBARK CATEGORY

We are specialists on installations of irrigation systems and water quality improvement. We have participated in numerous international projects from different ranges and categories. We count on a wide group of professionals specialized in different kinds of irrigation systems and water treatment. We adapt our controllers to all types of irrigation systems available in the sector and in all its applications.



**PREMIO
EMPRENDEDOR
XXI**



Córdoba
Jóvenes Empresarios

AJE FROM CÓRDOBA AWARD

The Young Entrepreneurs Association from Córdoba let us be the finalists of another contest. This supposes another honor and another experience that made us improve much more.

AN AWARD, FROM ANDALUSIA EM- BARKS, 'CRECES' CATEGORY

The Regional Government of Andalusia and its public organization created for the impulse of young entrepreneurs' projects granted ProSystemAqua with the winner prize from 'Grow Category', proving with it our enterprise consolidation over the years.



AUTOMATIC pH CONTROLLER

PROSYSTEM
AQUA®

Cod. 01001 Automatic pH controller by ProsystemAqua

The automatic pH Controller by ProsystemAqua, has been specially designed for continuous measurement and control of pH in water tanks. Its flow rate is 40 ml/h.

Functionalities: Hydroponics, aquaponics, seed beds, vertical gardens, backyard gardens, garden centres, aquariums, and grow shop. Meantly in any installation where regulation of pH of the water is required.

Included in the Box: pH probe, suction and discharge fittings, suction and discharge pipes, pH7 calibration bottle of 50 ml, clamping brackets, fixing screws, and float for pH probe.

AUTOMATIC pH CONTROLLER



* All the parts displayed are included in the package

AUTOMATIC pH CONTROLLER

1

IGNITION OF THE PUMP

Once installed the pH pump and connected to the circuit, proceed to program:

A- Enter the desired value of pH in the water tank (set point)

B- Program the mode of pH, down (acid) or pH up (alkaline).

C- Proceed to calibration.

2

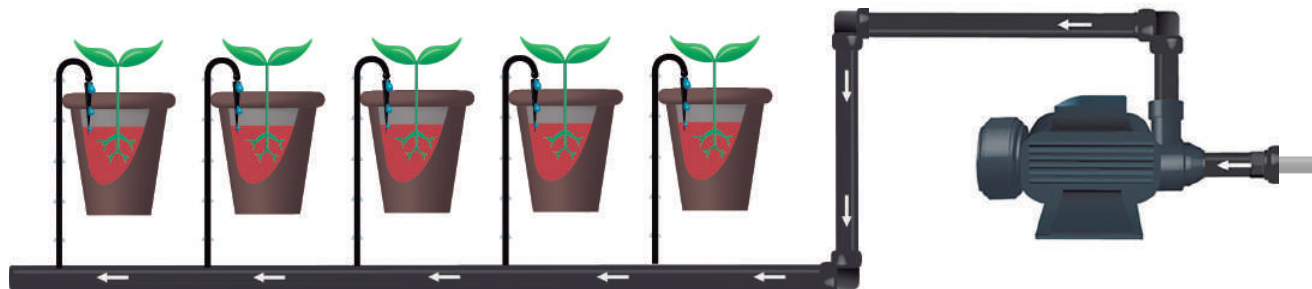
MEASUREMENT OF pH

The probe detects automatically the pH level in the water and the value is displayed on the pump.

3

SUCTION OF PH DOWN OR PH UP

The pump sucks from pH Down or pH Up container, through the suction filter.



4

INJECTION OF THE PRODUCT

The Controller injects the pH Down or pH Up product through the injection valve



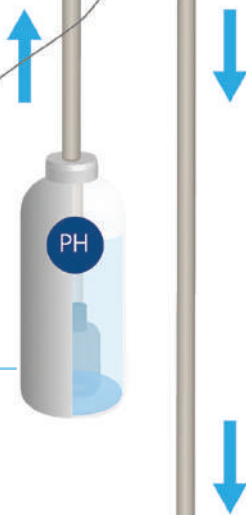
Automatic pH Controller

5

ADJUSTED pH

Important: The recirculation Water Pump has to be working at the same time as the pH Controller for the adjustment to be accurate. The moment the pH Controller detects the programmed value of pH, it will stop the dosing.

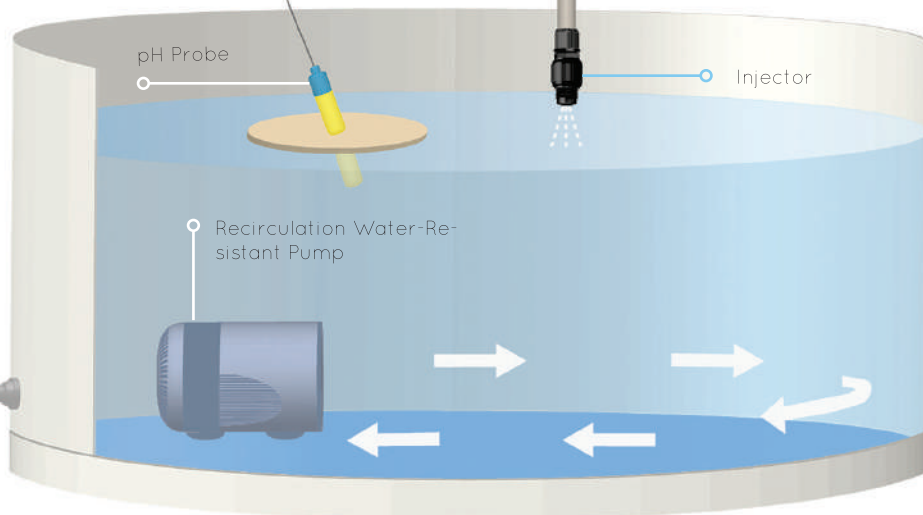
Suction Filter



pH Probe

Injector

Recirculation Water-Resistant Pump



AUTOMATIC EC CONTROLLER

PROSYSTEM
AQUA®

Cod. 02002 Automatic Ec Controller by ProsystemAqua

The **Automatic Ec Controller** by ProsystemAqua is designed for continuous measurement and control of Ec and dispenses fertilizers, in water tanks. The flow of the Automatic Ec Controller is 0.5 L/h.

Functionalities: Hydroponics, aquaponics, seed beds, vertical gardens, backyard gardens, garden centres, aquariums, and grow shop. Meanly, in any installation where regulation of Ec of the water is required.

Included in the Box: Ec probe, cable connector for Ec probe, suction and discharge fittings, suction and discharge pipes, clamping brackets, calibration sack 1.413ms, fixing screws and P.P.R manifold for recirculating water.

AUTOMATIC EC CONTROLLER



* All the parts displayed are included in the package

AUTOMATIC EC CONTROLLER

1

SWITCHING ON THE EC CONTROLLER

Once the Controller is installed and connected to the circuit, we can proceed programming it.

- A-** Set the Ec value we want to achieve in the water.
- B-** Check the compensation of the temperature, time alarm, air alarm.
- C-** Proceed to the probe calibration.

3

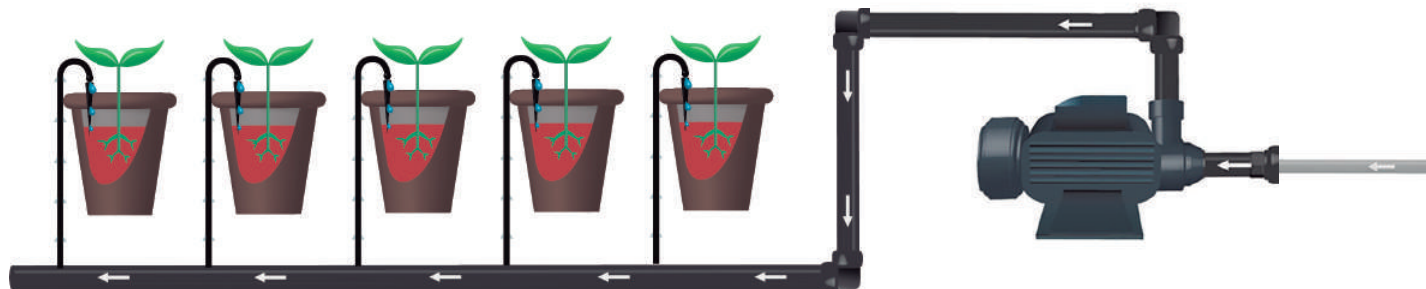
CONDUCTIVITY MEASUREMENT

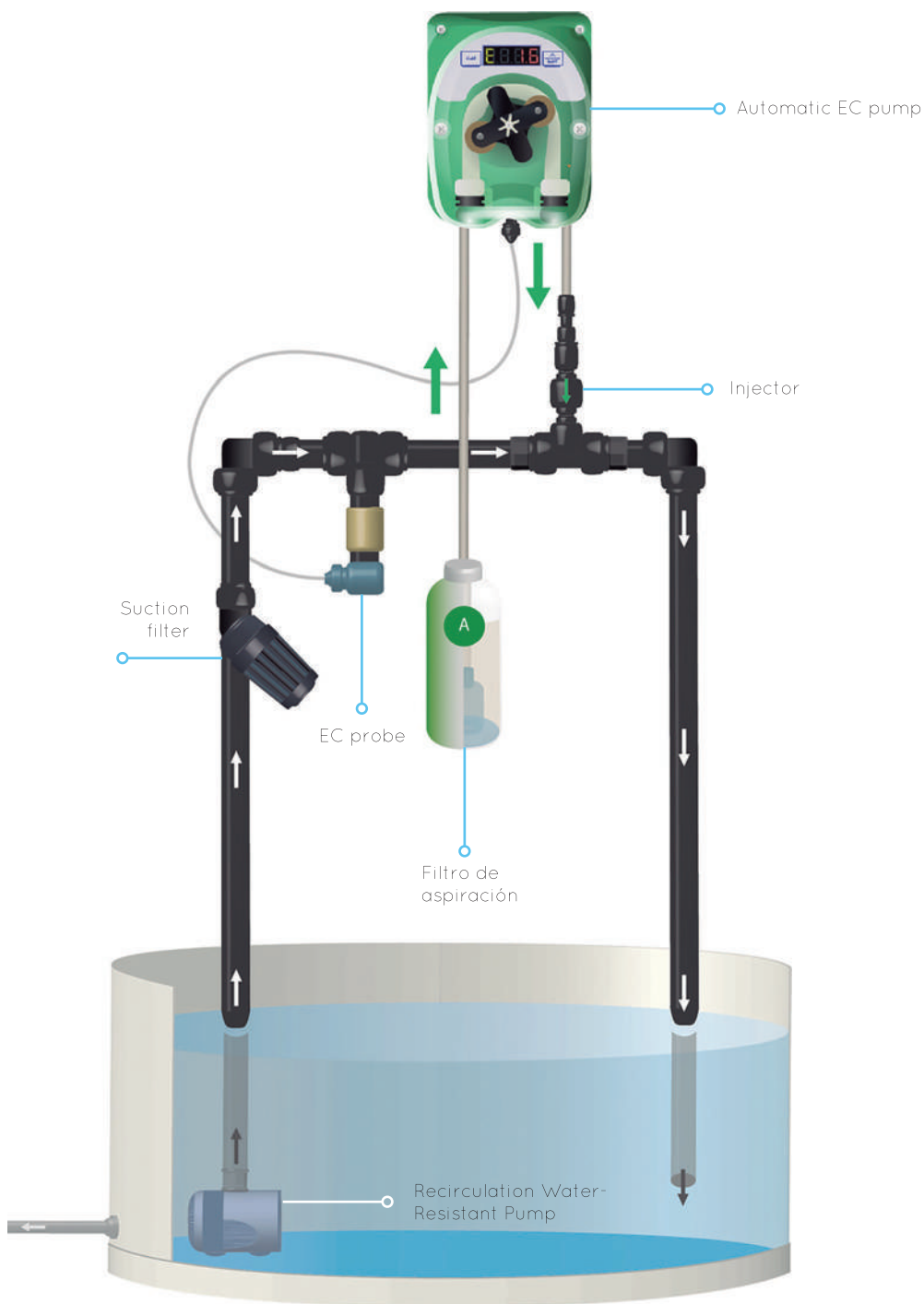
The Ec Probe detects the conductivity in the water and the value is indicated on the display of the Controller.

2

WATER RECIRCULATION

The water recirculation pump should be running at the same time that Ec Controller.de Ec.





4

SUCTION OF FERTILIZERS

The Controller sucks through the suction filter and pipe, from the container with the mixing of fertilizers that we have prepared.

5

INJECTION OF FERTILIZER

The Ec pump dispenses fertilizer in continuous flow through the injection valve of the manifold until achieving the value of Ec in the water tank that was set on the Controller.

pH&EC

BASIC CONTROL

PROSYSTEM
AQUA®

Cod. 03001 | pH&Ec Basic Control ProsystemAqua

pH & Ec Basic Control by ProsystemAqua allows accurate and precisely control of pH and Ec in continuous flow. Providing the necessary nutrients, and regulating the pH, until reaching the desired values in the water tank.

The constant flow rate is 40 ml/h in the pH controller and 0.5 L/h in the Ec Controller.

Functionalities: Hydroponics, aquaponics, seed beds, vertical gardens, backyard gardens, garden centres, aquariums, and grow shop. Meanly, in any installation where regulation of Ec and pH of the water is required.

Included in the Box: The controller is delivered fully installed on a methacrylate panel, where you only have to connect the water inlet, and outlet hose of the recirculation pump, by means of simple quick connections. It has installed an impurities filter for the pH and Ec probes.

Includes canister 50ml calibration pH 7, sack 20ml calibration 1,430 ms. Filters and suction tubes for the bottles of nutrients and pH.

pH&Ec BASIC CONTROL



x 2



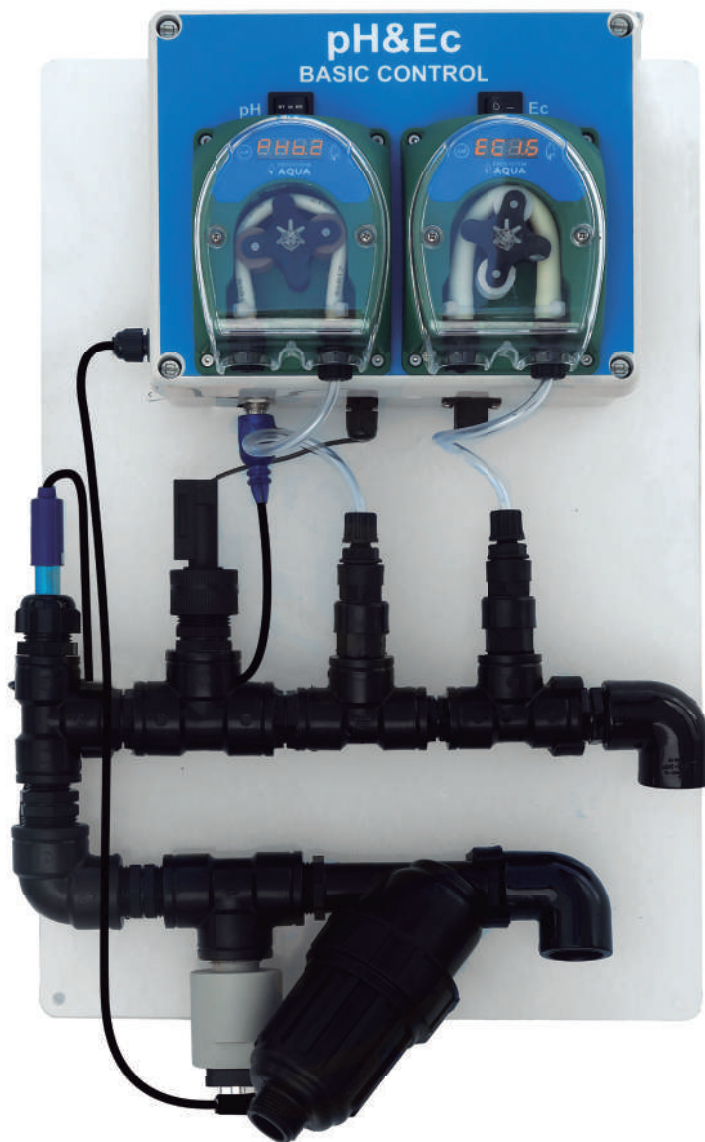
x 2



x 2



x 2



pH&Ec BASIC CONTROL

1

SWITCHING ON THE CONTROLLER

Once the controller is installed on the panel, and connected to the circuit. We will proceed to program the pumps.

1-Setup the pH control:

- A- Enter the desired value of pH in the water tank (set point).
- B- Program the mode of pH, down (acid) or pH up (alkaline).
- C- Proceed to calibration.

2- Setup the Ec control:

- A-Enter the Ec value we want to achieve in the water.
- B- Check the compensation of the temperature, time alarm, air alarm.
- C- Proceed to the Ec probe calibration.

3

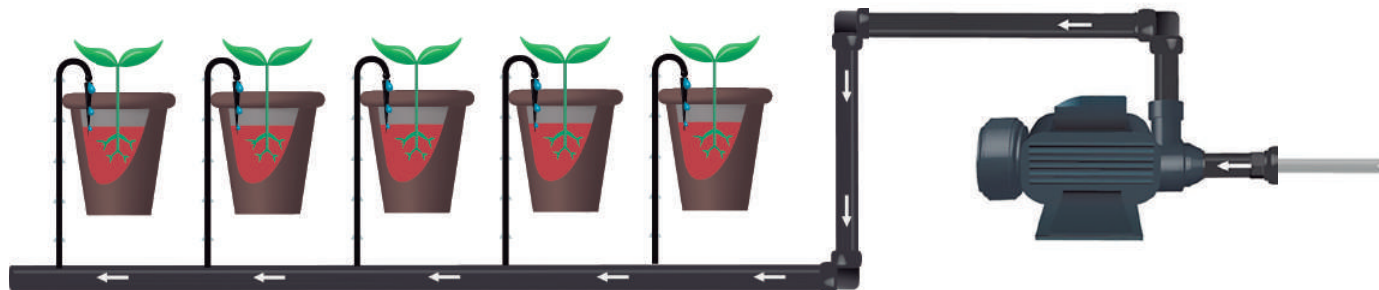
PH AND CONDUCTIVITY MEASUREMENT

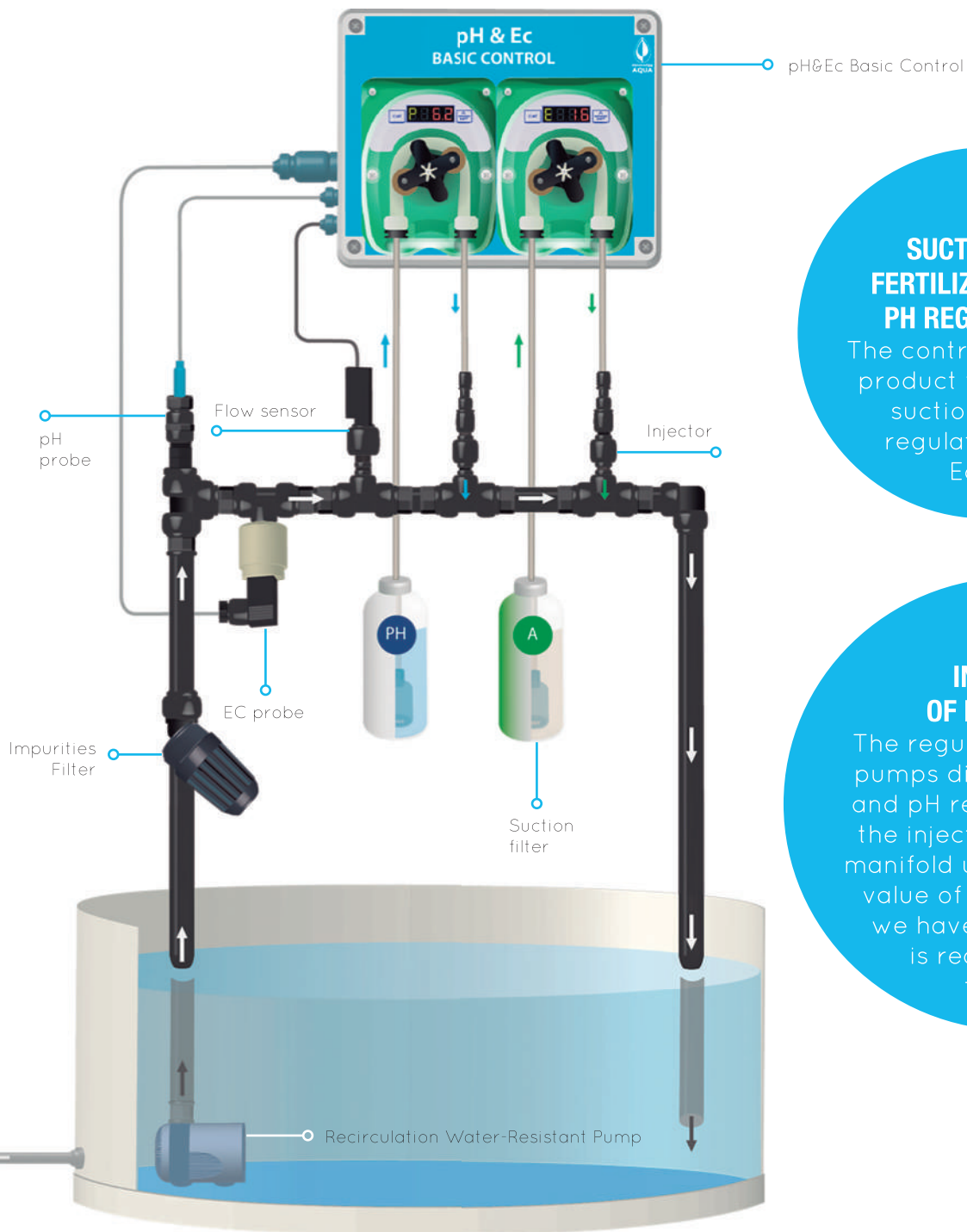
pH and Ec probes detect the conductivity and pH value in the water tank and is indicated on the display of each pump.

2

WATER RECIRCULATION

The water recirculation pump should be running at the same time with pH&Ec Basic Control panel and, recirculating water through the manifold.





4
SUCTION OF FERTILIZERS AND PH REGULATOR
 The controllers extract product through the suction filter to regulate pH and Ec.

5
INJECTION OF FERTILIZER
 The regulatory pH and Ec pumps dispense fertilizer and pH regulator through the injection valve of the manifold until the set point value of EC and pH, that we have programmed, is reached in the tank.

pH&EC CONTROLLER

PROSYSTEM
AQUA®

Cod. 04001 pH&Ec Controller by ProsystemAqua

pH & Ec controller “is a continuous control and measurement system for Ec and pH in water tanks. The “pH & Ec controller” through two pumps A and B for nutrients and a third pH pump, regulates automatically and very precisely the fertilizers and pH of the water tank, adjusting the value of Ec and pH programmed in the controller.

Each pump is adjustable independently and proportionally, with a proportional flow rate of 0-4 l/ hour.

Functionalities: Hydroponics, aquaponics, seed beds, vertical gardens, backyard gardens, garden centres, aquariums, and grow shop. Mainly in any installation where regulation of Ec and pH of the water is required.

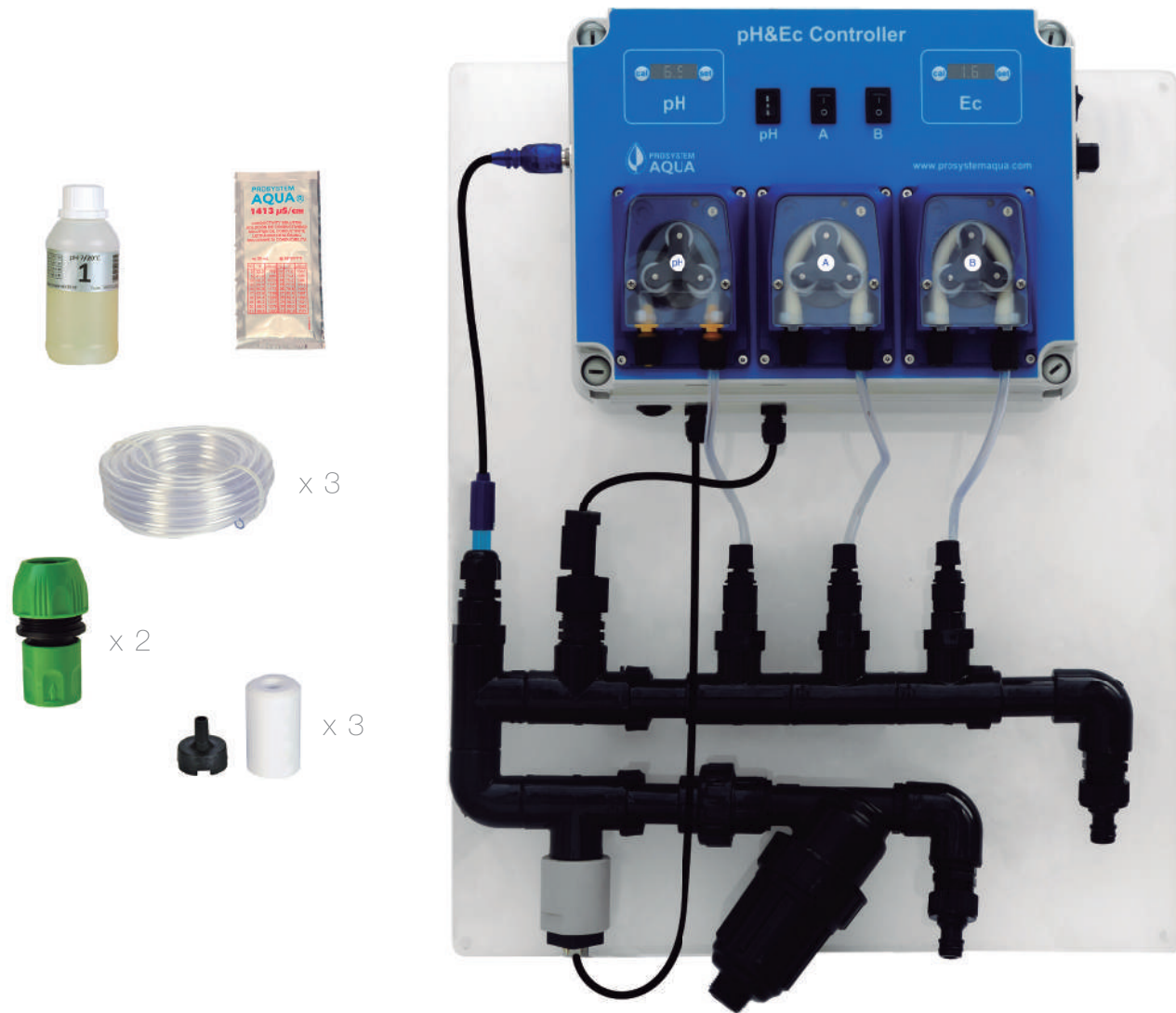
Included in the box: The controller is delivered fully installed on a methacrylate panel, where you only have to connect the water inlet and outlet hose of the recirculation pump, through simple quick connections.

It has installed an impurity filter for the pH and Ec probes.

Air alarm sensor in Ec probe and flow sensor that deactivates the dosage in case of lack of water.

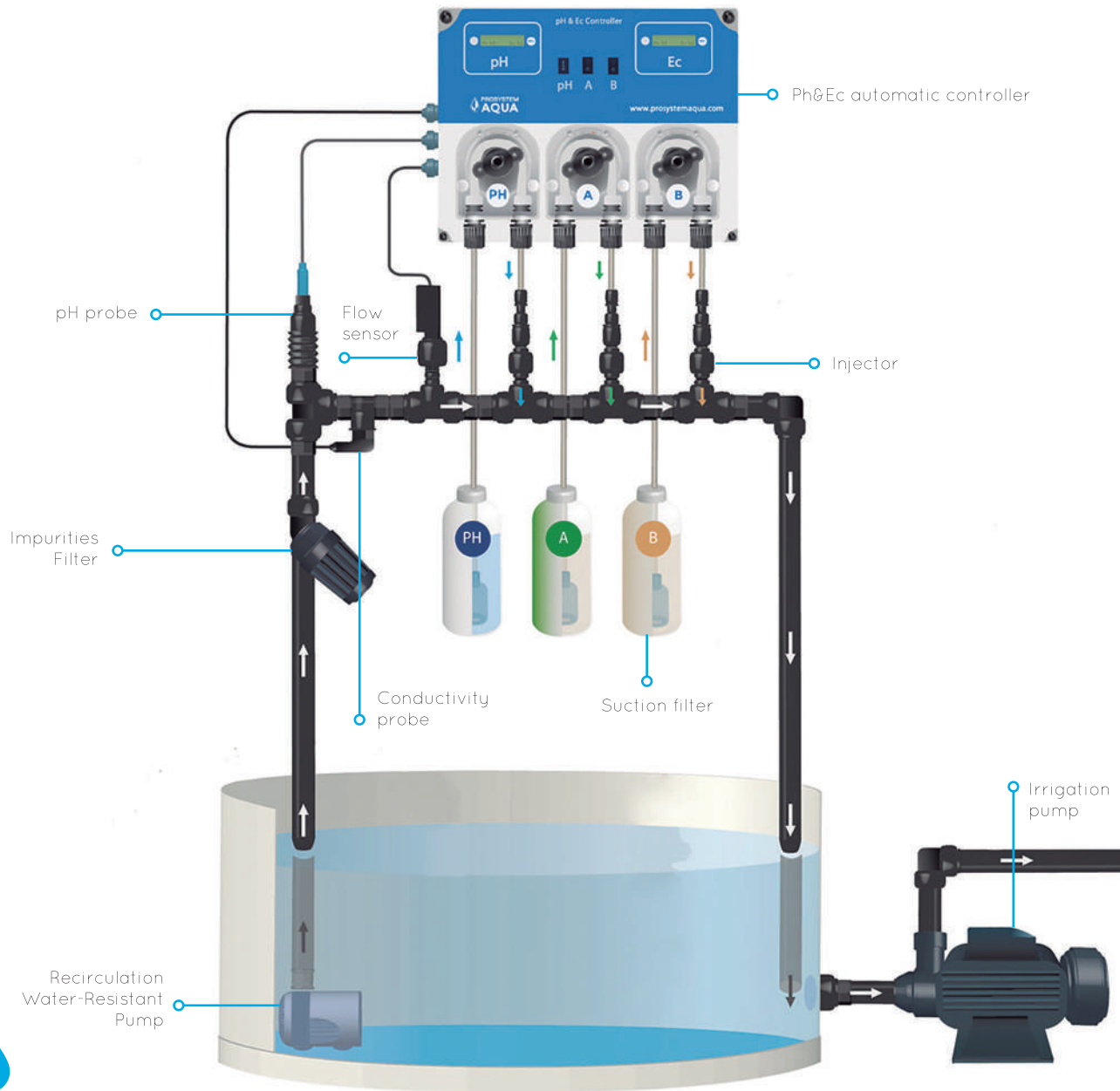
Includes canister 50ml calibration pH 7, about 20ml calibration 1,430 ms. Filters and suction tubes for the bottle of nutrients and pH.

pH&Ec CONTROLLER



*All the parts displayed are included in the package

pH&Ec CONTROLLER



1 SWITCHING ON THE PH&EC CONTROLLER

Once the panel is installed and connected to power, we will proceed to programming:

1. Programming the pH regulator:

A- Establish the value that we want to obtain in the water.

B- Set the working mode: pH down (acid) or pH Up mode (alkaline).

C- Proceed to calibration.

D- Adjust the proportional flow of the pH pump.

2. Ec controller programming:

A- Set in the controller the value of Ec that we want to obtain in the water.

B- Program temperature compensation, time alarm and air alarm.

C- Proceed to calibration.

D- Adjust the flow rates of pumps A and B.

2 WATER RECIRCULATION

Connect the water recirculation pump, working at the same time as the “pH & Ec controller” panel, making the water recirculate through the collector.

3 MEASUREMENT OF CONDUCTIVITY AND PH

The Ec and pH probes detect the conductivity and pH values in the water tank and displays them in the screen of each programmer.

4 ASPIRATION OF FERTILIZER AND PH REGULATOR

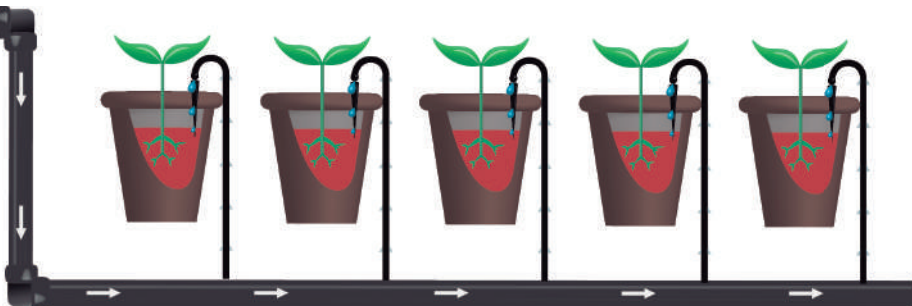
The controllers suck product through the suction filters, for pH regulation and Ec regulation.

5 INJECTION OF FERTILIZER

The controller doses fertilizer, through the manifold injection valve, until reaching in the water tank the value of Ec that we have programmed in the controller.

6 INJECTION OF PH REGULATOR

Once the Ec is stabilized, the controller doses the pH regulator, through the manifold injection valve, until reaching the pH value in the water tank that we have programmed in the controller.





pH&EC PLUS CONTROLLER

PROSYSTEM
AQUA®

Cod. 04002 pH&Ec Plus Controller by ProSystemAqua

pH & Ec Plus controller is a continuous control and measurement system for the Ec and pH in water tanks, in addition to control the recirculation pump, irrigation pump and water temperature and automatic filling of the tanks.

Each pump is adjustable independently and proportionally, with a flow rate of 0-4 L/hour.

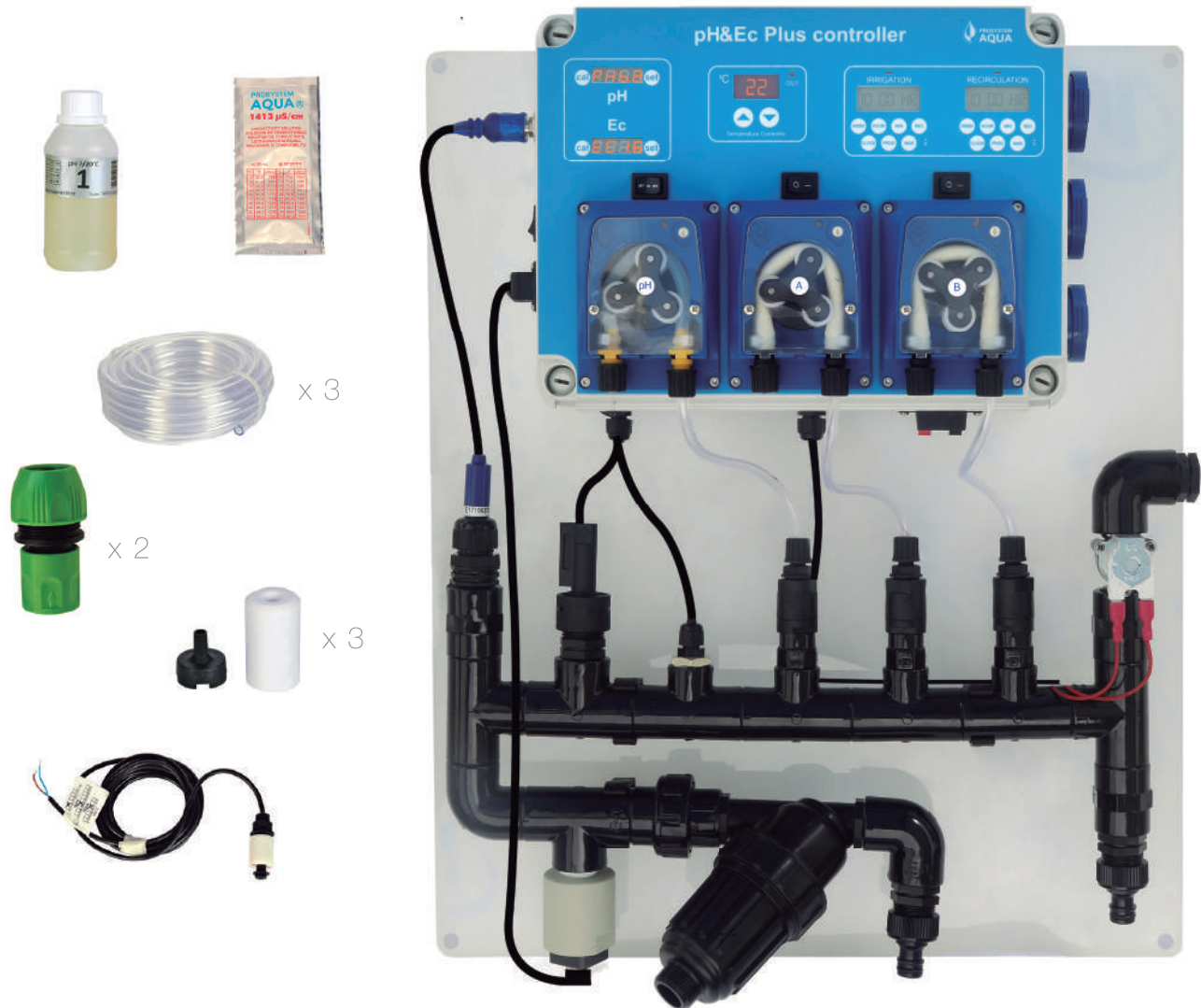
It has installed two independent irrigation programmers, one for the recirculation pump and the other for the irrigation pump.

It incorporates temperature control to connect the cooling system or water heating, checked on a display of the water temperature.

It also performs the automatic filling of water through a probe and level that activates the filling Electro valve that is installed in the panel.

Functionalities: Hydroponics, aquaponics, seed beds, vertical gardens, backyard gardens, garden centres, aquariums, and grow shop. Mainly, in any installation where regulation of Ec and pH of the water is required.

pH&Ec PLUS CONTROLLER



*All the parts displayed are included in the package

pH&Ec PLUS CONTROLLER



1 SWITCHING ON THE PH&EC PLUS CONTROLLER

Once the panel is installed and connected to power, we will proceed with programming:

1 Programming of the pH regulator:

A- Establish the value that we want to obtain in the water.

B- Set the working mode: pH down (acid) or pH Up mode (alkaline).

C- Proceed to calibration.

D- Adjust the proportional flow of the pH pump.

2. Ec controller programming:

A- Set in the controller the value of Ec that we want to achieve in the water.

B- Program temperature compensation, time alarm and air alarm.

C- Proceed to calibration.

D- Adjust the proportional flows of pumps A and B.

2 WATER RECIRCULATION

Connect the water recirculation pump to the controller, and program the times and sequences that we want.

3 IRRIGATION SYSTEM

Connect the irrigation pump to the controller, and program the times and sequences that we want.

4 AUTOMATIC WATER FILLING SYSTEM

Install the level probe in the water tank to indicate the maximum and minimum water level in the tank.

5 TEMPERATURE CONTROL

Connect the cooling or heating system to the controller and set the desired temperature in the water.

6 MEASUREMENT OF CONDUCTIVITY AND PH

The Ec and pH probes detect the conductivity and pH value in the water tank that are shown on the display of each programmer.

7 FERTILIZER ASPIRATION AND PH REGULATOR

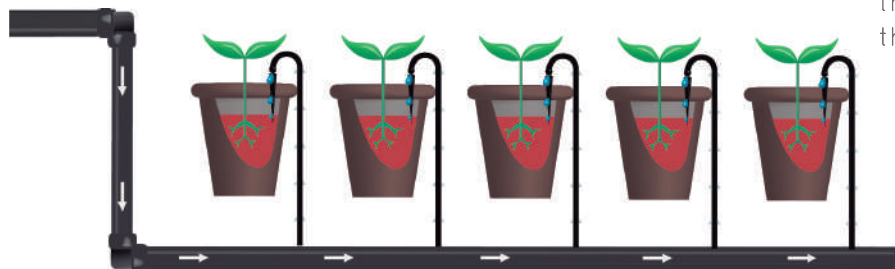
The controllers suck product through the suction filter, for pH regulation and regulation of Ec.

8 FERTILIZER INJECTION.

The controller doses fertilizer, through the manifold injection valve, until reaching in the water tank the value of Ec that we have programmed in the controller.

9 INJECTION OF PH REGULATOR

Once the Ec is stabilized, the controller doses the pH regulator, through the manifold injection valve, until reaching the pH value that we have programmed in the controller in the water tank.



HYDROPONIC SYSTEM

PROSYSTEM
AQUA®

Cod. 06002 Hydroponic System ProsystemAqua

The nutrient controller **Hydroponics System** is an automatic fertirrigation system, ideal for types of crops. It is capable of applying various types of fertilizers jointly through three pumps A, B and C, and a fourth pump to regulate the pH of the water in the tank. Each pump is adjustable independently and proportionally, with a flow rate of 0-7 L/ hour.

It incorporates a temperature reading that is indicated on the display.

Optional: Automatic filling of water through a level probe, which activates a filling electro valve.

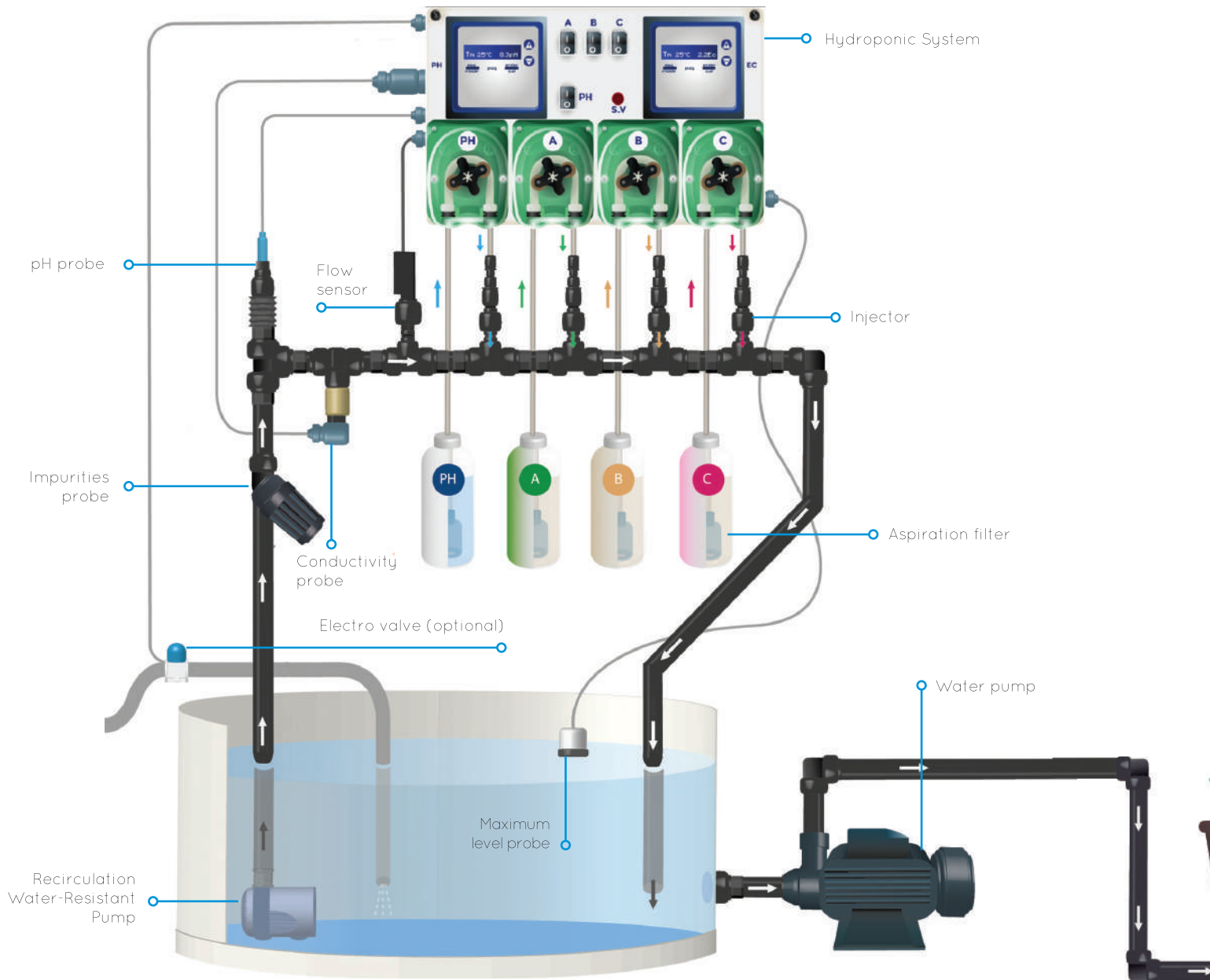
Functionalities: Hydroponics, aquaponics, seed beds, vertical gardens, backyard gardens, garden centres, aquariums, and grow shop. In any kind of installation where regulation of Ec and pH of the water is required.

Included in box: Plastic collector for water recirculation, pH probe, Ec probe with temperature sensor, Ec probe connection cable, impurities filter, hose quick connectors, canister 50ml calibration pH 7, canister 50 ml calibration pH 4, sack 20ml calibration 1,430 ms. Injectors, filters and suction and discharge tubes for the bottles of nutrients and pH.

HYDROPONIC SYSTEM



HYDROPONIC SYSTEM



1 SWITCHING ON HYDROPONIC SYSTEM

Once the panel is installed and connected to power, we will proceed with programming:

1. Programming the pH regulator:

A- Establish the value that we want to obtain in the water.

B- Set the working mode: pH down (acid) or pH Up mode (alkaline).

C- Proceed to calibration.

D- Adjust the proportional flow of the pH pump.

2. Ec controller programming:

A- Set in the controller the value of Ec that we want to obtain in the water.

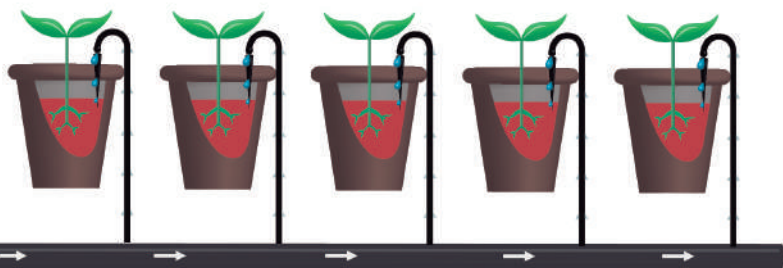
B- Proceed to calibration.

C- Adjust the proportional flow rates of pumps A, B, C.

D- Optional: Schedule the time for automatic water filling.

2 WATER RECIRCULATION

Connect the water recirculation pump to the controller manifold, and electrically work both at the same time.



3 MEASUREMENT OF CONDUCTIVITY, TEMPERATURE AND PH

The probes of Ec, temperature and pH detect the conductivity, the temperature and the pH value that is in the water tank and is indicated on the display of each programmer.

4 ASPIRATION OF FERTILIZER AND PH REGULATOR

The controllers suck product through the suction filter, for pH regulation and regulation of Ec.

5 INJECTION OF FERTILIZER

The controller doses fertilizer, through the manifold injection valve, until reaching in the water tank the value of Ec that we have programmed in the controller.

6 INJECTION OF PH REGULATOR

Once the Ec is stabilized, the controller doses the pH regulator, through the manifold injection valve, until reaching the pH value that we have programmed in the controller in the water tank.

7 LEVEL PROBE (OPTIONAL)

Level probe for regulating the water level in the tank.

8 FILLING ELECTRO VALVE (OPTIONAL)

It will be activated by the "hydroponic system" through the level probe.

HYDROPONIC SYSTEM BY COMPUTER

PROSYSTEM
AQUA®

Cod. 07003 Hydroponic System by Computer

The pH and nutrient controller, **Hydroponic System by Computer** is the most advanced automatic fertigation system on the market. With the software “by computer” we can control by computer, all water values, as well as the irrigation system.

It is able to apply various types of fertilizers and booster jointly, and in turn regulate the pH of the water in the tank.

The dosing flow of each of the regulators, with capacity from 0 to 7 L / h, is adjustable independently.

It automatically regulates the maximum-minimum level of water in the tank, as well as the temperature.

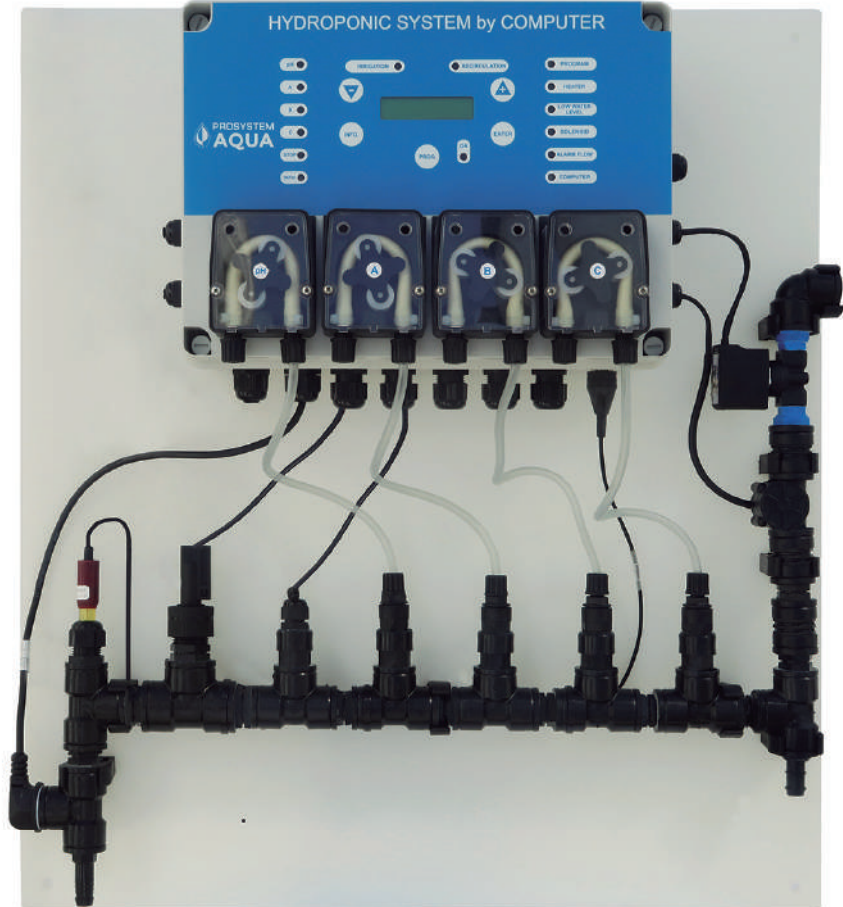
Activates the irrigation system of both the recirculation pump and the irrigation pump.

Functionalities: Hydroponics, aquaponics, seed beds, vertical gardens, backyard gardens, garden centres, aquariums, and grow shop. In any kind of installation where regulation of Ec and pH of the water is required.

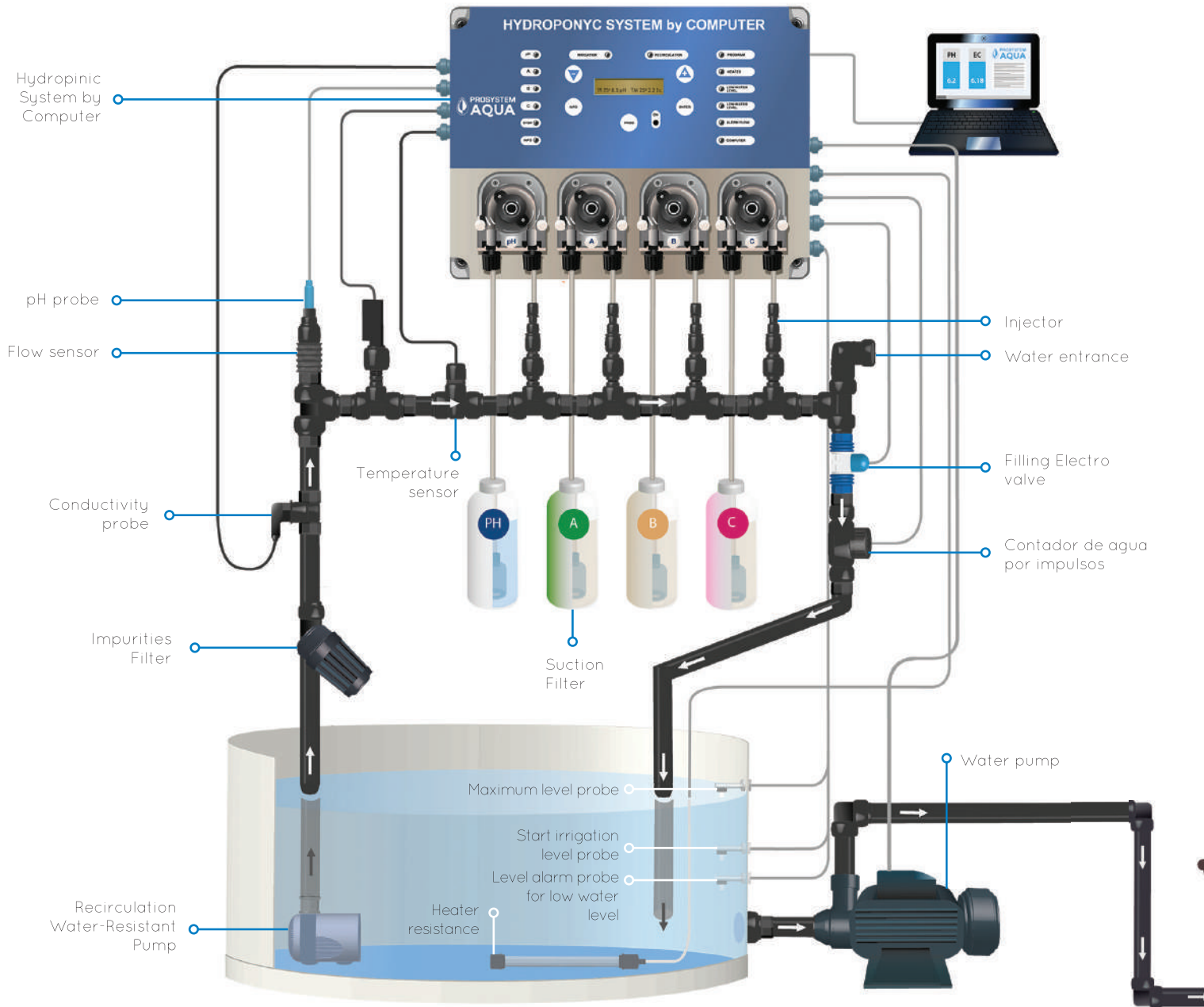
Included in the box: The controller is delivered fully equipped and installed on a methacrylate panel, in which it is only necessary to connect the water inlet and outlet hose of the recirculation pump by means of simple quick connections.

It is fully equipped, including: Programming and communication manual, calibration envelopes pH7, pH4 and 1.430 ms / cm, supply and suction pipes, wall plugs and screws.

○ HYDROPONIC SYSTEM BY COMPUTER



HYDROPONIC SYSTEM BY COMPUTER



1 IGNITION OF HYDROPONIC SYSTEM BY COMPUTER

Once the panel is installed and connected to power, we will proceed with programming:

1. Programming of the pH regulator:

- A- Establish the value that we want to obtain in the water.
- B- Set the working mode: pH down (acid) or pH Up mode (alkaline).
- C- Proceed to calibration.
- D- Adjust the proportional flow of the pH pump.
- E- Program maximum and minimum pH alarms.

2. Ec controller programming:

- A- Establish the value of Ec that we want to obtain in the water.
- B- Proceed to calibration.
- C- Adjust the proportional flow of the pumps of A, B and C.
- D- Program maximum and minimum alarms of Ec.

3. Schedule irrigation times and work mode.

4. Set the desired temperature in the water.

- A- Program maximum-minimum temperature alarm.

2 RECIRCULATION OF WATER IN THE COLLECTOR.

The controller will activate the water recirculation pump and will recirculate the water through the collector where the pH, Ec and temperature probe are installed. In case of lack of water, the flow sensor alarm will be activated and will deactivate the controller to avoid overdosing.

3 CONDUCTIVITY MEASUREMENT

The Ec probe detects the conductivity in the water and is reflected on the controller's display.

4 ASPIRATION AND DOSAGE OF FERTILIZERS

The regulators for the control of the conductivity A, B and C aspirate through the filter of the cans of fertilizers and dosed through the injection valves of the water recirculation collector.

5 PH MEASUREMENT

The pH probe continuously measures the value in the water that is indicated on the controller's display.

7 ASPIRATION AND DOSAGE OF THE PH REGULATOR

The pH regulator aspirates from the bottle pH down or pH up and doses through the injector until it reaches the programmed value.

8 ACTIVATION OF THE IRRIGATION PUMP

The irrigation pump will be activated by the controller once the pH and Ec values are adjusted and stable.

9 LEVEL PROBES

Level probes for automatic water filling in the tank.

10 FILLING ELECTRO VALVE

It will be activated by the controller through the level probes.

11 FLOW SENSOR

Deactivates the controller in case of lack of water in the collector.

12 SCALER

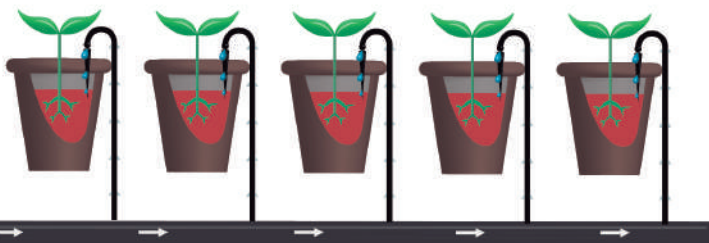
The C regulator will begin dosing according to the configured pulses.

13 WATER HEATER

It will be activated by the controller.

14 TEMPERATURE SENSOR

It measures the temperature of the water and activates the heater according to the temperature that we have programmed in the controller.



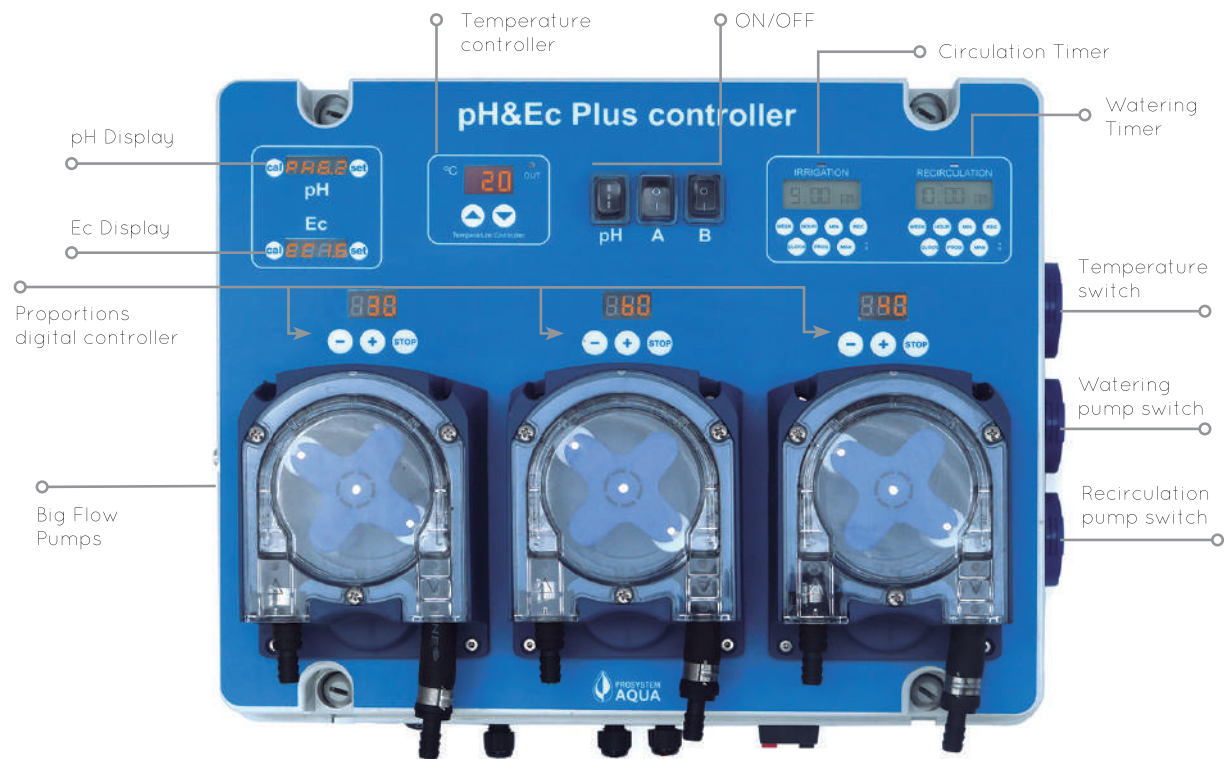
OPTIONAL

INCREASE THE PERFORMANCE OF YOUR CONTROLLER

With the fertilizer modules of ProsystemAqua, you can increase the performance of your controller. There is a possibility to add as many modules as you require, adjusting the dosage of several fertilizers according to your needs.



WE MAKE CONTROLLERS FOR LARGE INSTALLATIONS THAT NEED HIGH FLOW RATES



*Large digitally adjustable flow



pH probe, 2.5 m cable, BNC connector

Cod. 82301



Ec probe with temperature sensor R. M-3/4"
for: Hydroponic System and Automatic Ec
Controller

Cod. 81302



Ec probe with 2 m cable, R. M-1/2" for: pH&Ec
Controller and Hydroponic System by
Computer

Cod. 81303



4 pole connector cable Ec probe for:
Hydroponic System

Cod. 82011



2 pole connector cable Ec probe for:
Automatic Ec Controller

Cod. 82020



Flow sensor R. H-3/4"

Cod. 81401



10 m roll. Impulsion tube PE Ø 4x6 mm

Cod. 83513



Peristaltic tube for:
pH Controller
Ec Controller
pH&Ec Controller
Hydroponic System
Hydroponic Computer

Cod. 84505
Cod. 84507
Cod. 84507
Cod. 84507
Cod. 84507



Electrode holder for pH probe
R.M-1/2"

Cod. 84627



Injection record with valve R.M-3/8"

Cod. 85640



Suction filter for tube 4x6 mm

Cod. 84701



Filling electro valve 220V R.M-1/2"

Cod. 86322



Water level probe

Cod. 86410



Wall bracket, plugs, screws and washers for: pH Controller and Ec Controller

Cod. 87333



Wall bracket, plugs, screws and washers for: Hydroponic System

Cod. 87334



Cleaner solution bottle 50 ml
pH 7 calibration bottle 50 ml
pH 4 calibration bottle 50 ml

Cod. 89050
Cod. 89054



pH 7 calibration solution sack 20 ml
pH 4 calibration solution sack 20 ml
1413 $\mu\text{S}/\text{cm}$ solution sack 20 ml

Cod. 89157
Cod. 89154
Cod. 89153



Box of 20 pH 7 calibration solution sack 20 ml
Box of 20 pH 4 calibration solution sack 20 ml
Box of 20 1413 $\mu\text{S}/\text{cm}$ solution sack 20 ml

Cod. 89207
Cod. 89204
Cod. 89203



Outlet Hose 20/25
Quick connector Female 1/2"

Cod. 05010
Cod. 05011



Impurities Filter

Cod. 00400



90° Elbow R.H-1/2"
90° Elbow R.H-3/4"

Cod. 15015
Cod. 15016



Buttress PPR 1/2-1/2"
Buttress PPR 1/2-3/4"
Buttress PPR 3/4-3/4"

Cod. 15121
Cod. 15234
Cod. 15134



Reduction nut PPR for pump
injector R.M-1/2", R.H-3/8"

Cod. 15138



Te PPR R.H-1/2"
Te PPR R.H-3/4"

Cod. 5012
Cod. 15034



Teflon roll 10mmx12m

Cod. 16102



Buoy float for pH probe

Cod. 17001



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