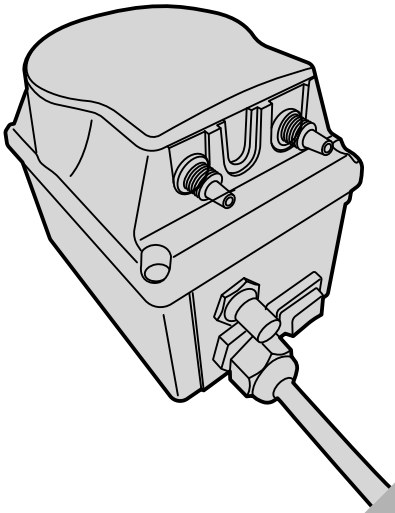
PENTAIR REG pH

EN - Automatic pH REGULATION



REG-PH-1

EN- Automatic pH regulator for swimming pools

Pentair would like to thank you for purchasing a REG-PH-1®, the automatic pH regulator for your pool. REG-PH-1 will automatically regulate your pH by finely dosing the acid (or base depending on your water).
Please carefully read this user manual to fully benefit from all of the functions of REG-PH-1®. Store it carefully so that it can be consulted at any time.

PENTAIR

Declaration of conformity

Guidelines – Harmonised standards

Pentair International Sarl - Avenue de Sévelin 20 - 1004 Lausanne -Switzerland
We hereby declare under our sole responsibility that this product complies with the relevant guidelines

RED	**2014/35/EU**
SAFETY	**EN 60335-2-41:2005 / A1:2009 / A2:2010**
	EN 61326-1:2013
	EN 50581:2013
EMC	**2014/30/UE**

REG-PH (+ PARTS)
REG-PH-1

Other standards documents

2002/95/EC (RoHS)
2002/96/EC (WEEE)

Authorised person for technical documentation
Pentair International S.a.r.l
Avenue de Sévelin 20
1004 Lausanne - Switzerland

Lausanne, 2021 Feb 01st

Jacques Van Bouwel
Engineering Mgr

CE

Product specifications: REG-PH-1 model
Operating temperature: 0° to 40° C
Operating humidity: 40% at 75° C
Power supply: 230V ~, 50 Hz
Maximum operating altitude: 2000m
Weight (excluding probes): 1.2 kg
Consumption: 10 W
Main housing (for interior use): IP 65

Processing by individuals of electronic appliances reaching the end of their lifespan:
The symbol depicting a barred waste bin that features on the main parts constituting the product indicates that it must not be discarded alongside household waste. It must be returned to an appropriate collection point for electronic device recycling (information available from the local household waste collection service). This product contains potentially dangerous substances which may have adverse effects on the environment and human health.

Customer support / After-sales service: +33(0)1 84 28 09 40
Website: www.pentairpooleurope.com

- Warranty excluding probes and consumables: 2 years

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- The document is subject to change without notice

Trade names and waivers: REG-PH and Pentair® are trade names and/or registered trade names of Pentair and/or companies affiliated to Pentair. Unless indicated otherwise, names and brands of others that may be used in this document are not used to indicate an affiliation or endorsement between the owners of these names and brands and Pentair. Those names and brands may be the trademarks or the registered trademarks of these parties, or others.

WARNING AND IMPORTANT SAFETY INSTRUCTIONS

This symbol indicates that a maintenance technician must handle this equipment according to the operating manual.

This symbol indicates that the operating manual should be read attentively prior to use.

IMPORTANT SAFETY GUIDELINES, READ AND FOLLOW ALL OF THE INSTRUCTIONS, KEEP THESE INSTRUCTIONS

GENERAL

DANGER - INSTALLERS, POOL SPECIALISTS AND OWNERS MUST CAREFULLY READ THESE WARNINGS AND ALL INSTRUCTIONS BEFORE USING THIS PRODUCT.

- WARNING - Most countries regulate the construction, installation and operation of public swimming pools and spas, and the construction of residential pools and spas. It is important to comply with these regulations, many of which directly regulate the installation and use of this product. Consult your local building and health codes for more information.

- PLEASE NOTE: This installation and user guide contains important information on the installation, operation and safety of this product. This guide must be provided to the owner and/or user of this product.

INSTALLATION

- DANGER - RISK OF ELECTRIC SHOCK or electrocution:

- BEFORE WORKING ON THIS DEVICE - Always switch off the power supply of the device to the circuit breaker before servicing. Failure to do this may lead to death or serious injury to service staff, pool users or others, due to an electric shock.

- DANGER - SERIOUS BODILY INJURY OR DEATH CAN RESULT IF THIS PRODUCT IS NOT INSTALLED AND USED CORRECTLY.

- WARNING - Before installing this product, read and follow the warnings and instructions of this guide. Failing to follow these warnings and instructions may lead to serious injuries, death or material damage. Refer to www.pentairpooleurope.com for more information linked to this product.

- WARNING - Connect the device to a residual current circuit breaker. If this system is used to control underwater lighting devices, a residual current circuit breaker must be installed upstream of these devices. Conductors downstream of the residual current circuit breaker must not occupy conduits, junction boxes, or enclosures containing other conductors unless these conductors are also protected by a residual current circuit breaker. Refer to the local standards in force for more details.

- WARNING - This product must be installed by an authorised or certified electrician or a qualified swimming pool professional. All of the applicable installation codes and local regulations must also be respected. Poor installation will create an electrical hazard which could result in serious injury or the death of pool users, installers or others due to electric shocks, and may also cause damage to property.

- DANGER - DISCONNECT THE SUPPLY CONNECTIONS BEFORE WORKING ON THIS DEVICE; ELECTRICAL POWER MAY BE SUPPLIED TO THE RELAY TERMINALS FROM OTHER SOURCES.

- WARNING – CHEMICAL BURN HAZARD: Make sure all pumps are switched off at the main circuit breakers at the domestic distribution board before drilling into any pipes. Set rules for all handling related to electrical aspects, water and chemical products. Group the supply pumps and chemical product tanks in a safe and secured area.

- WARNING – devices which are not intended for use in single-family dwellings may require additional safety equipment to comply with local regulations.

- DANGER – Except for remote controls, install components at a minimum of at least 1.5 m (5 feet) from the inside wall of the pool or spa.

- DANGER - This product is intended for use in swimming pool applications only.

- WARNING - If the device is installed and/or used contrary to specifications and recommendations, the protections will be compromised.

USE

- DANGER - DO NOT LET CHILDREN OPERATE THIS EQUIPMENT.

- WARNING – Strictly respect the safety and handling procedures from the acid manufacturers, including protective measures for hands, body and eyes during transferring and using acid. Follow the prescribed safety precautions for handling muriatic acid intended for checking the water pH. Muriatic acid may cause serious physical harm and may damage the swimming pool equipment. Extra care must be taken when installing, maintaining and operating the acid pump feed systems. Acid is dangerous to handle and should be properly contained, transported, poured, stored and dispensed.

- WARNING – Check the pH and sanitizer levels of the water before using the pool and make sure the filtration device is not obstructed.

- WARNING – Periodically use an independent pH and chlorine testing kit to ensure that the pH and chlorine is at a safe level. If the pH and Oxidation Reduction Potential (ORP) or conductivity probes are broken, depleted or dirty with oils, lotions, or other contaminants, they can report inaccurate results to the system causing incorrect chemical treatment of the water, which could harm people or equipment.

- WARNING – Consult the device display daily to ensure there are no alarm messages.

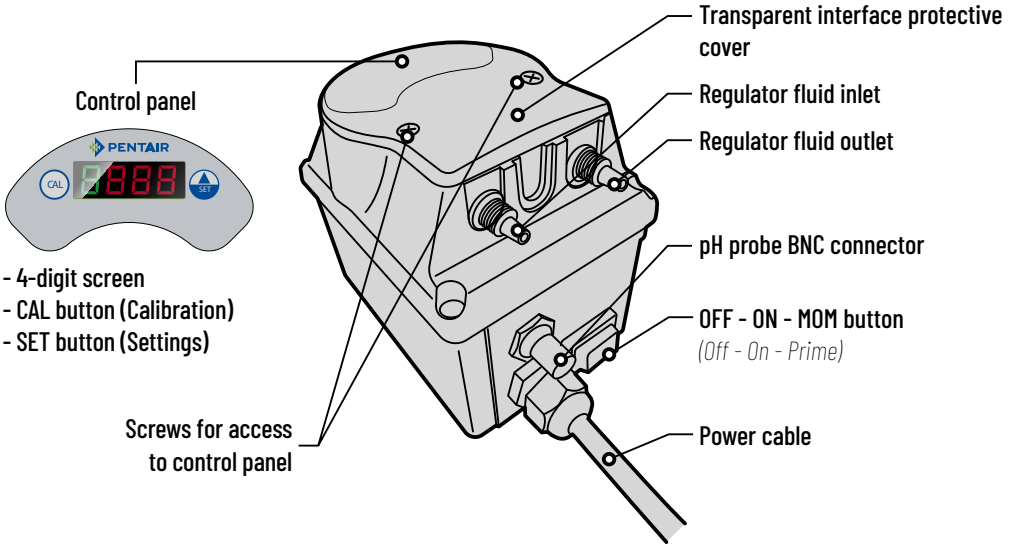
- DANGER – Water temperatures greater than 37.7° C (100° F) are a health hazard. Prolonged immersion in hot water may induce hyperthermia. Hyperthermia occurs when the internal body temperature exceeds the normal temperature of 37° C (98.6 °F) by several degrees. Hyperthermia may produce the following effects: (1) Unawareness of impending danger. (2) Failure to perceive heat. (3) Failure to recognise the need to leave the spa. (4) Physical inability to leave the spa. (5) Harm to the foetus in pregnant women. (6) Unconsciousness leading to the risk of drowning. The use of alcohol, drugs or medicine is a factor which increases the risk of hyperthermia in hot tubs and spas.

- WARNING - When mixing acid with water, ALWAYS ADD THE ACID TO THE WATER. Never add water to the acid. When adding a chemical product to the swimming pool, carefully follow the manufacturer instructions.

- DANGER - DO NOT MIX SODIUM HYPOCHLORITE AND ACID.

- DANGER - Standard solutions must be kept away from children, ensure that bottles are properly closed, stored in a dry and ventilated place and not exposed to frost. The pH 4 calibration solution is acidic.

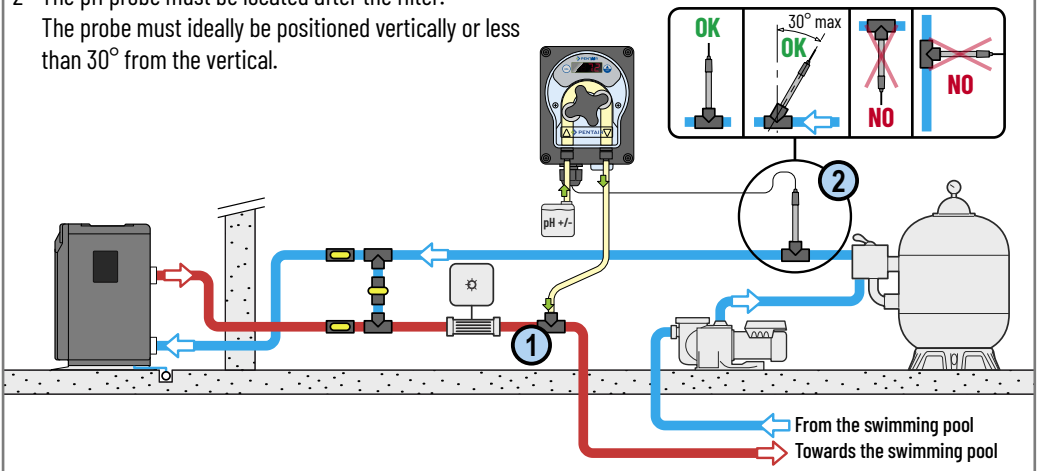
GENERAL DESCRIPTION



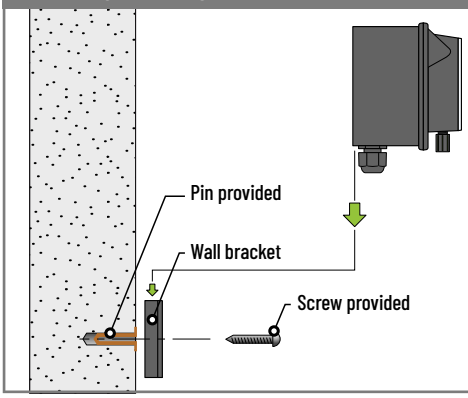
HYDRAULIC INSTALLATION

1 - The injector must be located after the heating and electrolyzer cell and the pressure must be less than 1.5 bar. If liquid chlorine is injected, place the acid injection upstream (before) the chlorine injection.

2 - The pH probe must be located after the filter.
The probe must ideally be positioned vertically or less than 30° from the vertical.



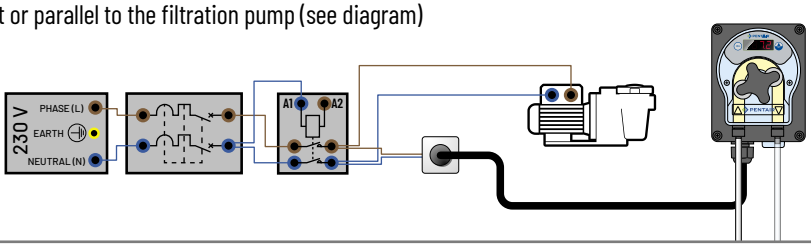
WALL INSTALLATION



Screw or bond the wall bracket provided and then slide the bracket into the slot provided on the back of the device.

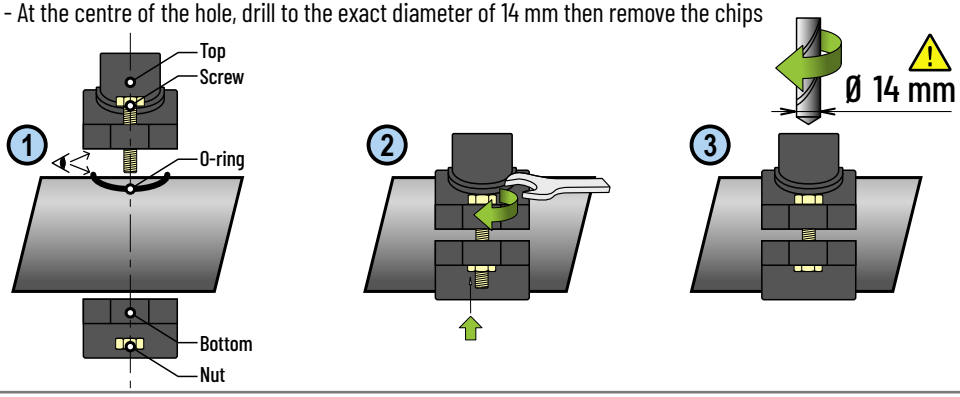
ELECTRIC INSTALLATION

Connect the pre-wired electrical power supply cable (via a female connector) to the auxiliary contact of the filtration unit or parallel to the filtration pump (see diagram)



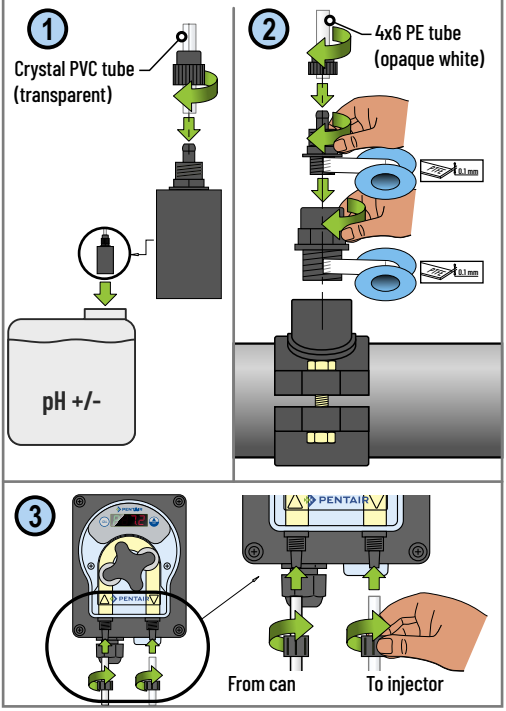
INSTALLING THE PADDLE CLAMPS

1 - Arrange the parts as described, make sure that the O-ring is in the groove.
2 - Tighten the screws and nuts on each side of the paddle clamp
3 - At the centre of the hole, drill to the exact diameter of 14 mm then remove the chips



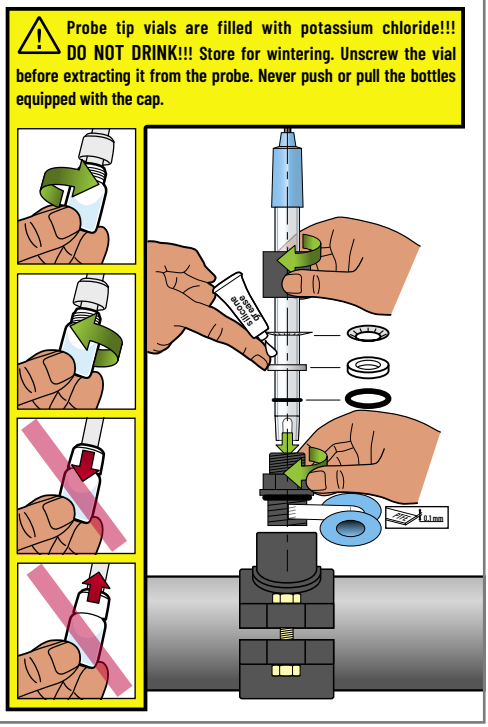
INSTALLING THE VALVES

1 - Suction valve foot: Screw the elements together as described. Screw the other end of the hose onto the device on the left-hand end-fitting (3).
2 - Injection valve: Screw the elements together as described. Screw the other end of the hose onto the device on the right-hand end-fitting (3).

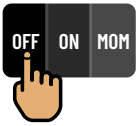


INSTALLING THE PROBE

1 - Unscrew the vial and then remove the probe. Remove the plug from the probe body.
2 - Install the probe as described, making sure that the probe touches the bottom of the pipe and screw the BNC connector onto the device.



BASE OR ACID SETTINGS

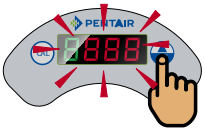
1 

Switch the device to OFF and unscrew the transparent cover.

2

Press CAL for 3 seconds to enter the Setup menu and then release.
Press again to choose the Acid or Alkaline dosage.
Screw on the transparent cover. Note: automatic temperature compensation is set at 25°C. Do not change this value.

SETPOINT SETTINGS (7.4 IS THE FACTORY SETTING)

1 

Press SET until the display flashes and then release.

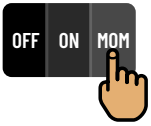
2

Press SET again to scroll the digits to the desired value then release.
The setpoint chosen can be between 6.2 and 7.8, ideally 7.2.

3

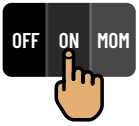
Wait for 3 seconds, the device will display MEM to confirm that the value has been taken into account. Screw on the transparent cover.

MOM MODE: PRIMING POSITION

1 

On the switch, keep pressing MOM as long as necessary for priming (prime the arrival of the selected correcting liquid (acid/base) up to the injector). Then release, the switch automatically switches back to the ON position.

ON MODE: PH VALUE READING AND AUTOMATIC CORRECTION BY THE DOSING PUMP

1 

Set switch to ON

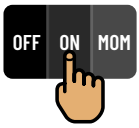
2

Set switch to ON

⚠

- If the pH value is less than 6.0, the value “6.0” will flash
- If the pH value is greater than 8.0, the "8.0" value will flash

PH PROBE CALIBRATION

1. 

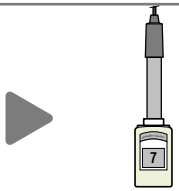
Set the switch to ON and unscrew the transparent cover.

2.

Press the CAL button for 5 seconds to enter the calibration procedure

3.

The device will read C7PH



Dip the probe into the pH7.0 standard solution

Press CAL, release and wait 60 seconds

4.

The display then indicates the quality of the probe (C100 = 100%). Press SET and screw on the transparent cover.

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