Niva VP

Connected level regulator for infinity pools

Notice Technique

Réf : PF10L100

Table des matières

Avertissement

Read these instructions carefully before installing, commissioning and using this product.

1. Technical specifications

Supply voltage	230V AC - 50Hz
Weight	Only Niva VP : 100g
Installation	Wall Support
Protection rating	IP-40: Coffret IP-68: pressure sensor
Pressure sensor	Differential pressure sensor. **Maximum Height of Buffer Tank= 2m**
Output	**230V AC power supply input (pre-wired)** **1 x 230V AC output** - for filling solenoid valve **1 x 230V AC output** - for drain solenoid valve **1 Meter output :** Connecting the smart water meter **1 output "Probe"**: Connecting the water pressure sensor

2. Package contents

1 Niva VP 1 brass 1/2" filling solenoid valve, 230V AC 1 Pulse water meter: **To be installed facing upwards** 1 pair of 1/2" connectors compatible with 50 for the water meter 1 pressure sensor: 4-20mA / 12V DC / 0-20 KPA / 2 meters of cable	1 brass screen filter for 1/2" solenoid valve (max. pressure 4 bar) 1 Technical notice (this document)

3. Description

In an infinity pool, the water from the main pool flows into a buffer tank. The pump draws water from this tank and through the bottom drain. To function properly, the water level in the buffer tank must be maintained at an optimal level—not too low, so as not to risk disengaging the filter pump, and not too high, to prevent the buffer tank from overflowing.

The Niva VP is a level regulator for infinity pools connected to Vigipool and operating by pressure measurement. It controls solenoid valves (filling and draining) and controls the pump shut-off and forced operation of the filtration pump.

To adapt to different buffer tank configurations, the Niva VP uses two pressure sensors: one measures the pressure at the bottom of the buffer tank and the other measures atmospheric pressure as a reference pressure.

The atmospheric pressure is measured at the sensor connection. This is why this connection must not be completely sealed.

Important

For the Niva VP to function properly, a Tild VP must be installed in the system to manage the forced operation and pump lockout of the filtration pump..

4. Compatible with the Vigipool universe

The Niva VP is compatible with many devices integrated into the Vigipool universe. The Vigipool universe brings together many interconnected water maintenance and treatment devices that can be controlled by a single Vigipool application.

The devices exchange the various measured information and their actions with each other wirelessly via a proprietary connection between the devices. Various devices are available (electrical filtration box, LED control, pH regulation, connected pH/ORP analyzer, remote touchscreen display, etc.).

4.1. Bluetooth® and Wi-Fi control

The Niva VP features a Bluetooth® and Wi-Fi transmitter, allowing you to control your device via smartphone or tablet. To control the Niva VP, you need an iOS (Apple®) or Android smartphone or tablet equipped with Bluetooth® Low Energy (v4.x) or Wi-Fi 802.11 b/n/g. Other operating systems (Windows Phone®, etc.) or devices that do not meet the above requirements are not supported.

In the case of a Wi-Fi connection, you will need to enter the local Wi-Fi details (SSID and password) and create a Vigipool account in order to connect your Niva Vp to the Wi-Fi router and thus control your Vigipool device via the local Wi-Fi and remotely. (see dedicated leaflet "Univers Vigipool" attached)

Astuce

With Bluetooth, only one phone/tablet can be connected to the box at a time. To connect with another device, you must first disconnect from **the previous one.**

It is possible to automatically update the software embedded in the device. To do this, it must be connected to WiFi or to another Vigipool device that is itself connected to WiFi. If you only use the device via Bluetooth, you can create an access point from your phone in order to temporarily connect the device and update its software if necessary.

4.1.1. Bluetooth® pairing

When connecting for the first time (via Bluetooth), after selecting your device from the list, in order to pair your smartphone with the Niva VP, you must bring the smartphone close to the device until it makes contact, or press button **A** on the device once when prompted by the app and when the **A** indicator light flashes blue rapidly.

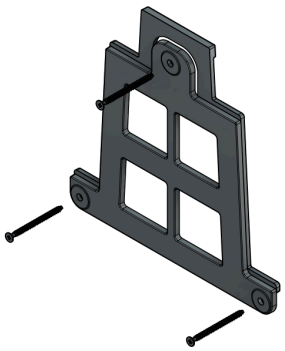
Astuce

Pairing can only be done via the Vigipool app. Do not attempt to pair via your smartphone's Bluetooth settings.

5. Wall mounting of the Niva VP box

The Niva VP

- can be installed outdoors, but must be protected from rain, cleaning jets or sprinklers, and UV rays (sun).
- Resistant to water splashes but must not be placed in a location that could be flooded.
- must be placed on a flat, stable surface and secured to the wall using the wall bracket and the dowels and screws provided:

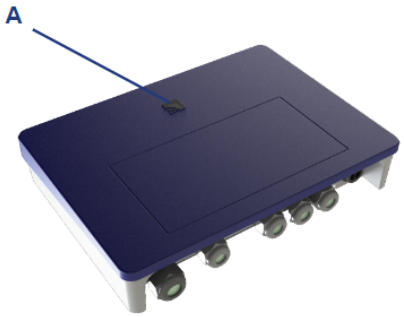


6. Start Up

6.1. Powering up

The Niva VP is started by connecting it to a permanent 220V AC power supply.

When starting up, the multicolored indicator light A on the front panel flashes while the device is starting up.

	**A**: Multicolor indicator light and selection button

6.2. Choice of Vigipool “central” unit

Attention

For the Niva VP to function properly, a Tild VP must be installed in the system to manage the forced operation and pump lockout of the filtration pump.

Astuce

Please refer to the attached “Vigipool Universe” leaflet for further information.

At the end of the initialization phase (Blue - White - Red sequence). The multicolored indicator light A flashes white. This corresponds to the selection of the device that will perform the Vigipool “control center” function (see the attached “Vigipool Universe” leaflet)::

- If the installation has several Univers Vigipool-compatible devices
  - If a device is already configured as the Vigipool “control unit,” press the button on the Vigipool “control unit” device if it has been powered up for more than one minute. (If it has been powered up for less than a minute, there is no need to press the button). Your Niva Vp will then connect to the Vigipool “Control Center”: It will stop flashing white and switch to normal operating mode.
  - And if no other device is already configured as the Vigipool “control center,” turn on all devices and press the button on the device you want to use as the Vigipool “control center.” The other products will then connect to the device you have va-

lidated as the Vigipool “control center,” stop flashing white, and switch to normal operating mode.

Astuce

If you wish to change the Vigipool “control center” selection, you must reset the system (see “Resetting”).

6.3. iOs / Android Applications

To download the Vigipool app, scan the QR code below. You can also search for Vigipool in the App Store or Play Store search engine:

7. Hydraulic system

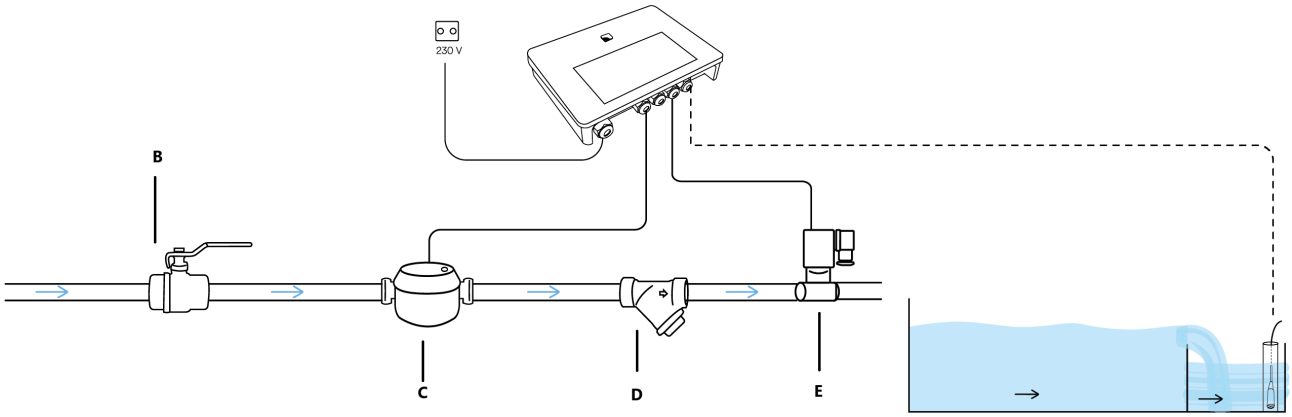
7.1. Installation on piping

B: Water inlet valve

C: Connected water meter

D: Screen filter

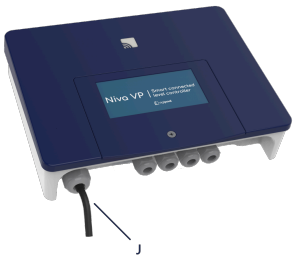
E: Fill solenoid valve



8. Installation électrique

F: EVR	230V AC power supply for the filling solenoid valve N: Blue Wire L: Brown Wire Earth : Green / Yellow Wire
G: EVV	Power supply to the drain solenoid valve
H: Meter	Connection of the pulse water meter
I: Probe	Pressure sensor connection +: Red Wire S: Blue Wire

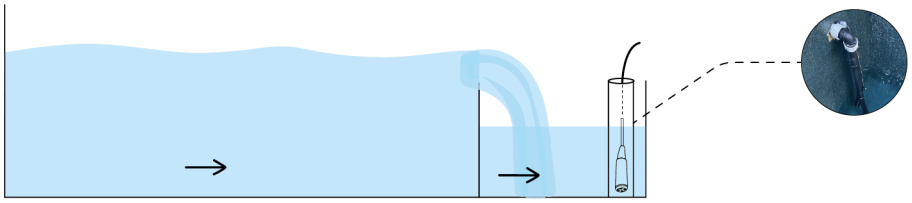
8.1. Niva VP power supply

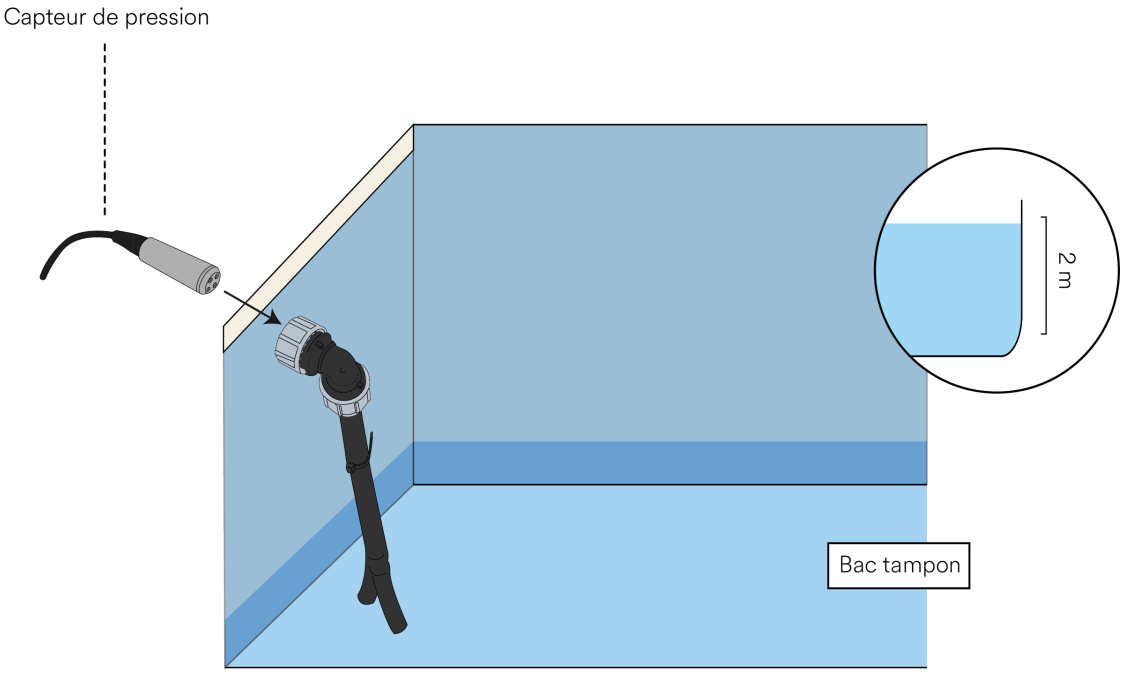
	230V AC power supply input (pre-wired)

8.2. Pressure Probe

The pressure sensor measures the water pressure at the bottom of the buffer tank. It must be immersed in the buffer tank and positioned as close as possible to the bottom without touching it.

It is recommended to install it in a 50 mm PVC pipe with a hole drilled in it.





Important

The pressure sensor must be secured so that it cannot be moved by turbulence in the tank.

Attention

Do not completely seal the level sensor cable connection.

8.3. Filling solenoid valve

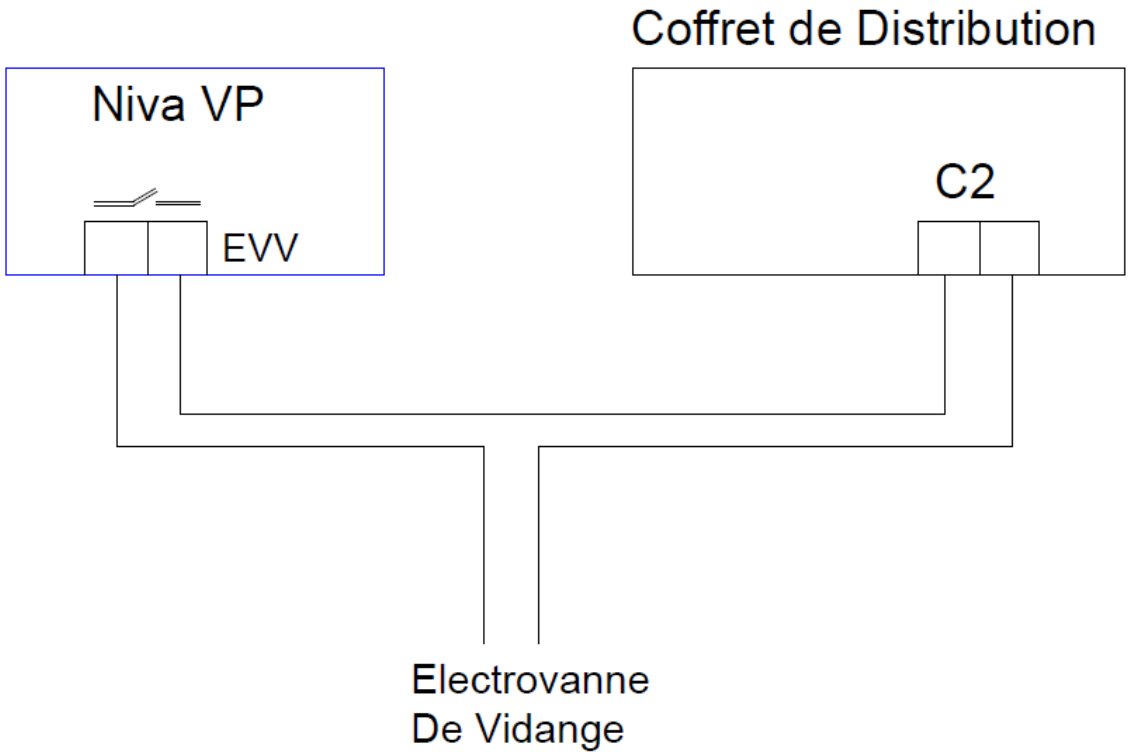
The fill solenoid valve is installed after the water meter and the screen filter. It is connected directly to the Niva VP on the N/L/Ground terminal block.

Important

The arrow indicated on the solenoid valve body must follow the direction of water flow.

8.4. Drain Solenoid Valve

The Niva VP provides a dry contact free of any potential.



Important

The drain solenoid valve is not included in the package. It is an optional extra.

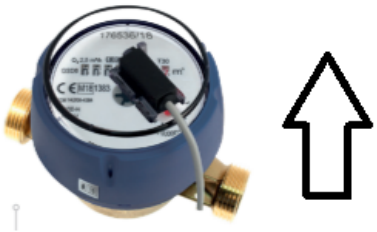
8.5. Water meter

This pulse meter allows you to monitor your pool's water consumption online. It also detects leaks in the water system in the equipment room, on the screen filter, and on the solenoid valve.

If the solenoid valve is supposed to be closed and there is a leak in the solenoid valve or screen filter, the water meter will continue to run, alerting the user via the Vigipool app.

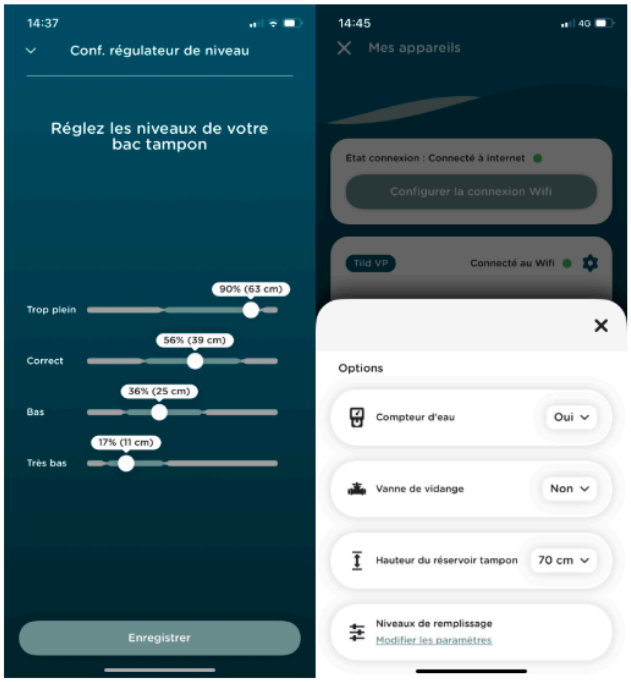
Important

For the meter to function properly, it must be installed with the face facing upwards.



9. Level management

Thanks to the Vigipool app, you can manage four levels in the buffer tank. To ensure that the pressure sensor is as accurate as possible, you must first set the height of the buffer tank or the pipe in which you will place your pressure sensor.



9.1. Very low level (Lack of water)

The water level in the buffer tank is insufficient and the filter pump is shut down, thanks to the wireless IP (pump prohibited) connection between the Niva VP and the Tild VP.

The filling solenoid valve starts up until the correct level is reached.

9.2. Low Level (Filling)

When the water rises to the low level, the pump shut-off is deactivated. The filter pump operates normally and the solenoid valve remains open until the **correct level is reached.**

9.3. Correct Level

When the water level returns to the correct level, the solenoid valve closes and filtration continues to operate normally.

9.4. Overflow level

Quand l'eau arrive à ce niveau, la pompe de filtration est mise en marche forcée (MF). Si la pompe de filtration est une pompe à vitesse variable, la vitesse 1 se met en route de façon à renvoyer l'eau du bac tampon dans la piscine et la marche forcée est activée 10 min par heure

9.5. Overflow level (Heavy rain)

When the water reaches this level, the filter pump is forced to start (MF). If the filter pump is a variable speed pump, speed 1 starts up in order to return the water from the buffer tank to the pool, and forced operation is activated for 10 minutes per hour.

	Pump forced operation	Stop pump operation	Refiling	Drain
Overflow level (Heavy rain)	V	X	X	V
Overflow level	V	X	X	X
Correct level	X	X	X	X
Low Level (Filling)	X	X	X	X
Very low level (Lack of water)	X	V	V	X

Tableau 1. Pour résumer

10. Operation

10.1. Multicolor indicator light

Depending on its status, the multicolored indicator light **A** may have different meanings.

Blue-White-Red Sequence	Device startup sequence: This sequence is performed when the device is powered on.
Flashing white	Waiting for selection of the Vigipool "Central" device. See section 6.2.
Fixed blue	A smartphone is connected to the Niva VP via Bluetooth.
Flashing blue (slow)	The Niva VP is configured in Vigipool "Central" mode and WiFi is not configured: Waiting for a Bluetooth connection.

Flashing blue (fast)	Bluetooth pairing in progress. See section 4.1.1.
Fixed green	The Niva VP is connected to WiFi or to its Vigipool “control center.”
Flashing green	The Niva VP is configured in Vigipool “Central” mode and accepts the connection of new Vigipool equipment. This status is normal during the first 5 minutes of power supply or 5 minutes after pressing button A.
Flashing purple	Firmware update in progress.
Red/Green flashing alternately	If the Niva VP is configured as a Vigipool “Central Unit”: Unable to connect to WiFi. Check the information entered and/or the WiFi network coverage. If not: Unable to connect to the Vigipool “Central.”

CCEI declares that the product Niva VP meets the safety and electro-magnetic compatibility requirements of European Directives 2014/35/EU and 2014/30/EU EU and the Radio Equipment Directive 2014/53/EU.

CE UKCA

Emmanuel Baret

Marseille, on 15/03/2025

Distributor's stamp

Date of sale: . . . . . Batch N°: . . . . . .