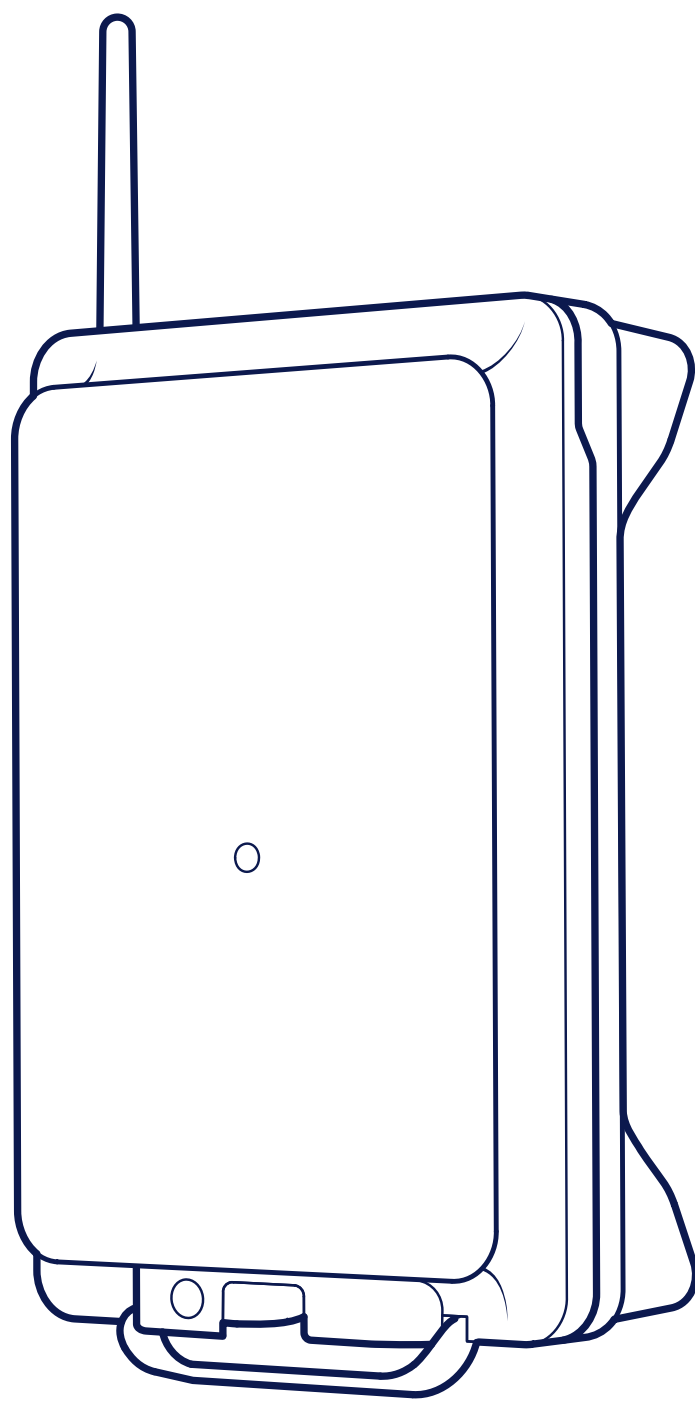




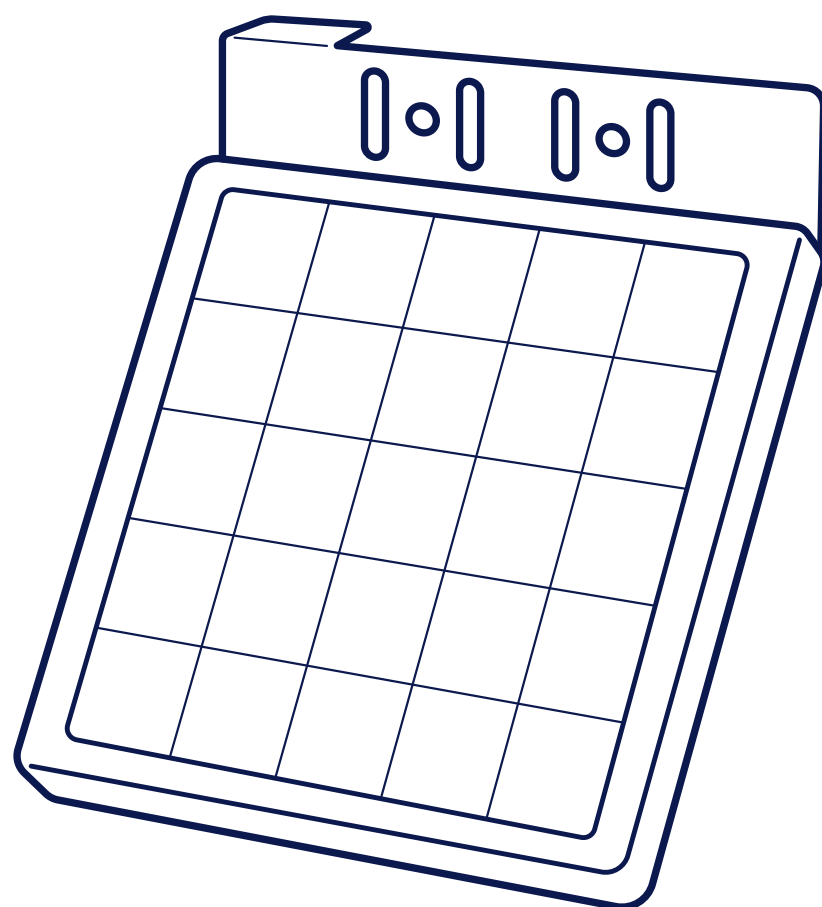
GrowSphereTM FLEX

User Manual

What is in the BOX



GrowSphere™ FLEX



*** Optional -**
External solar panel
5.5W or 11W if needed
+ 5m extension cable

We're always happy to help!
Get in touch with our [Support Team](#)
and we'll guide you every step of the way."



What is in the BOX

Accessories Kit:



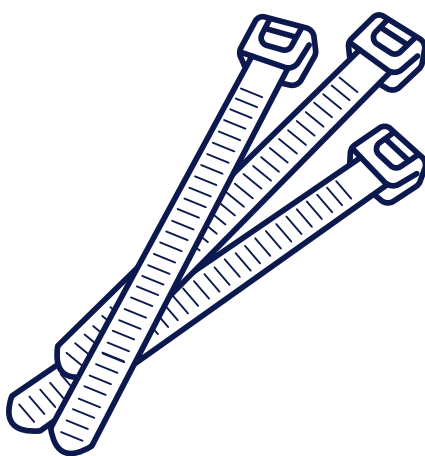
Antena



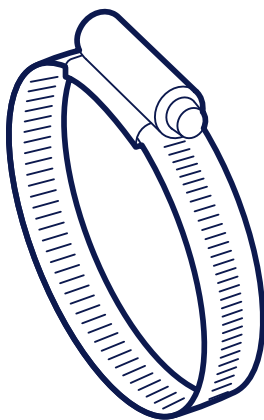
Bird spikes



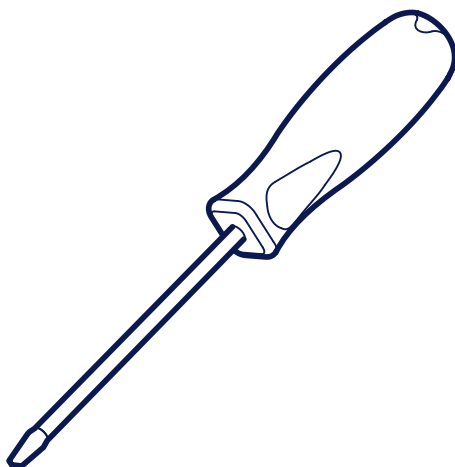
Base plate



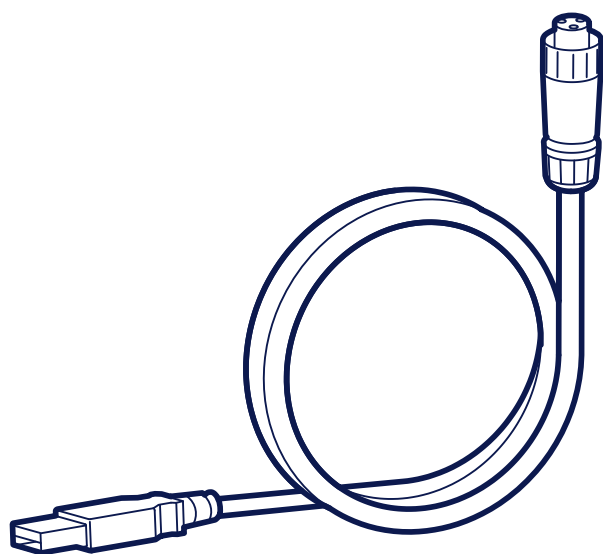
Plastic bands



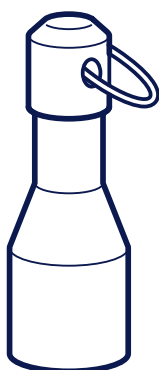
Metal
cable ties



Flat
screwdriver
2x50mm



Charging
cable



Activation magnet

*The activation magnet is used only to activate BLE communication and is intended for technician use only.
It is not required for regular operation

Supported Devices and Features

Number of Main Lines	1
Number of valves	Up to 16 local valves
Irrigation by time/quantity	Both
Dosing channels	4
BLE	√
Connection to internet	Cellular
Digital inputs	8
Analog inputs	4

Programs, Shifts and Recipes

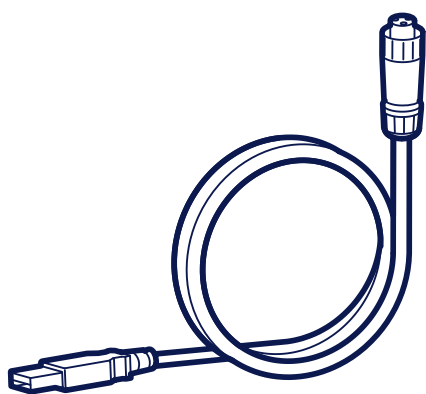
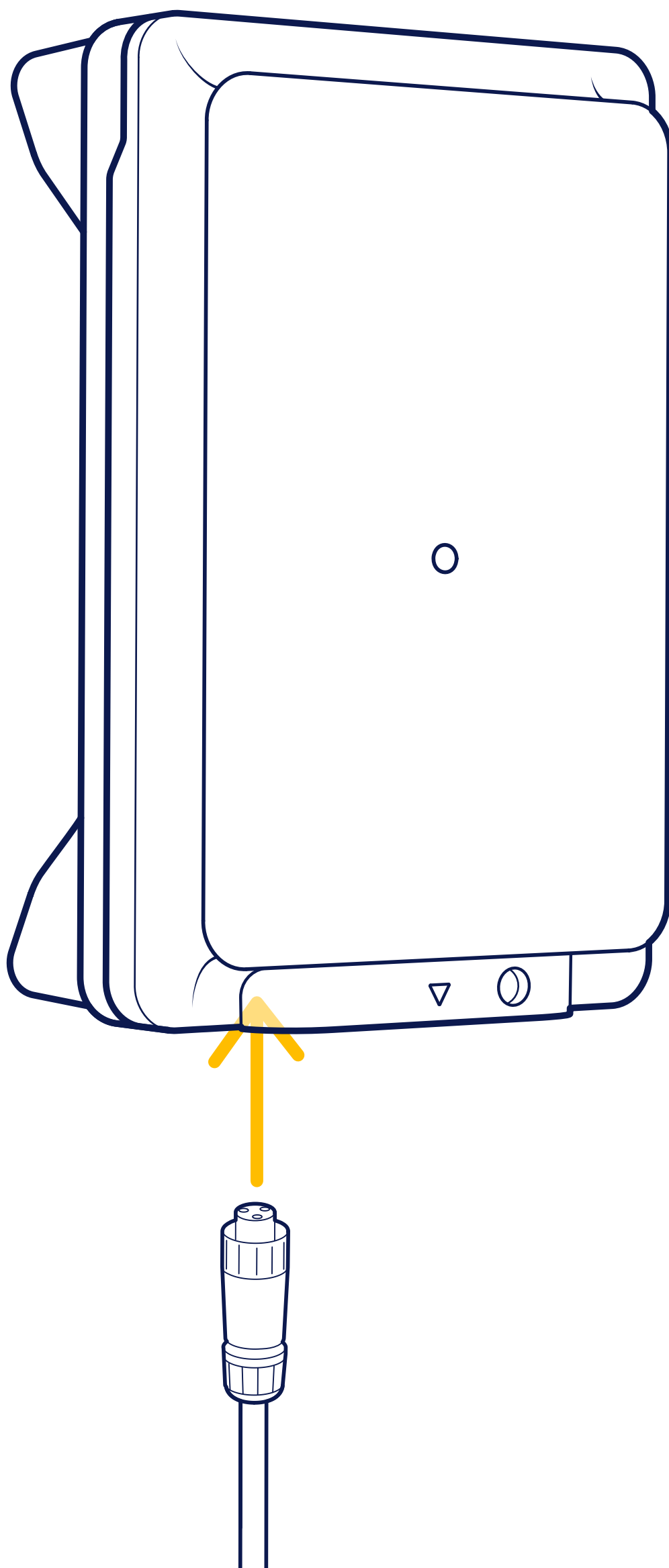
Irrigation programs	8
Shifts per program	8
Dosing methods	Bulk, Spread, or Proportional
Dosing recipes	8

Battery Description

Nominal capacity	5200 mAh
Nominal voltage	3.7V
Charger input	5.5-7.8V (Up to 1A)

Installation Preparation

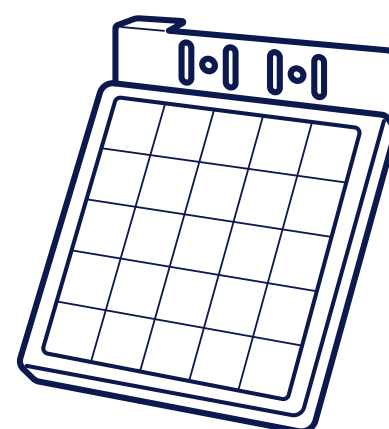
1. Charge the unit before installation



Charging cable

*Only the charging cable is included. The USB power adapter is not supplied

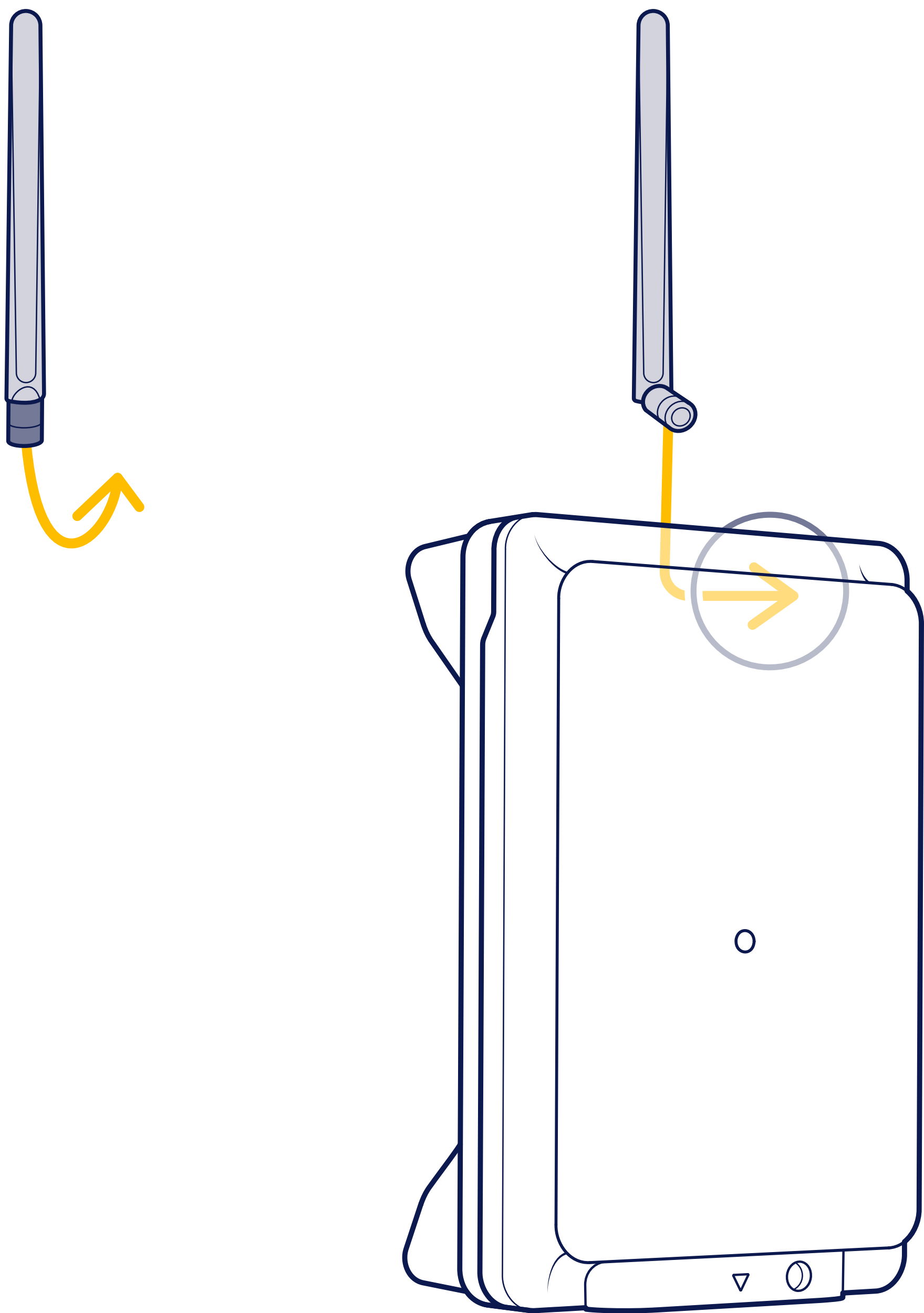
Or



External solar panel 5.5W
+5m extension cable

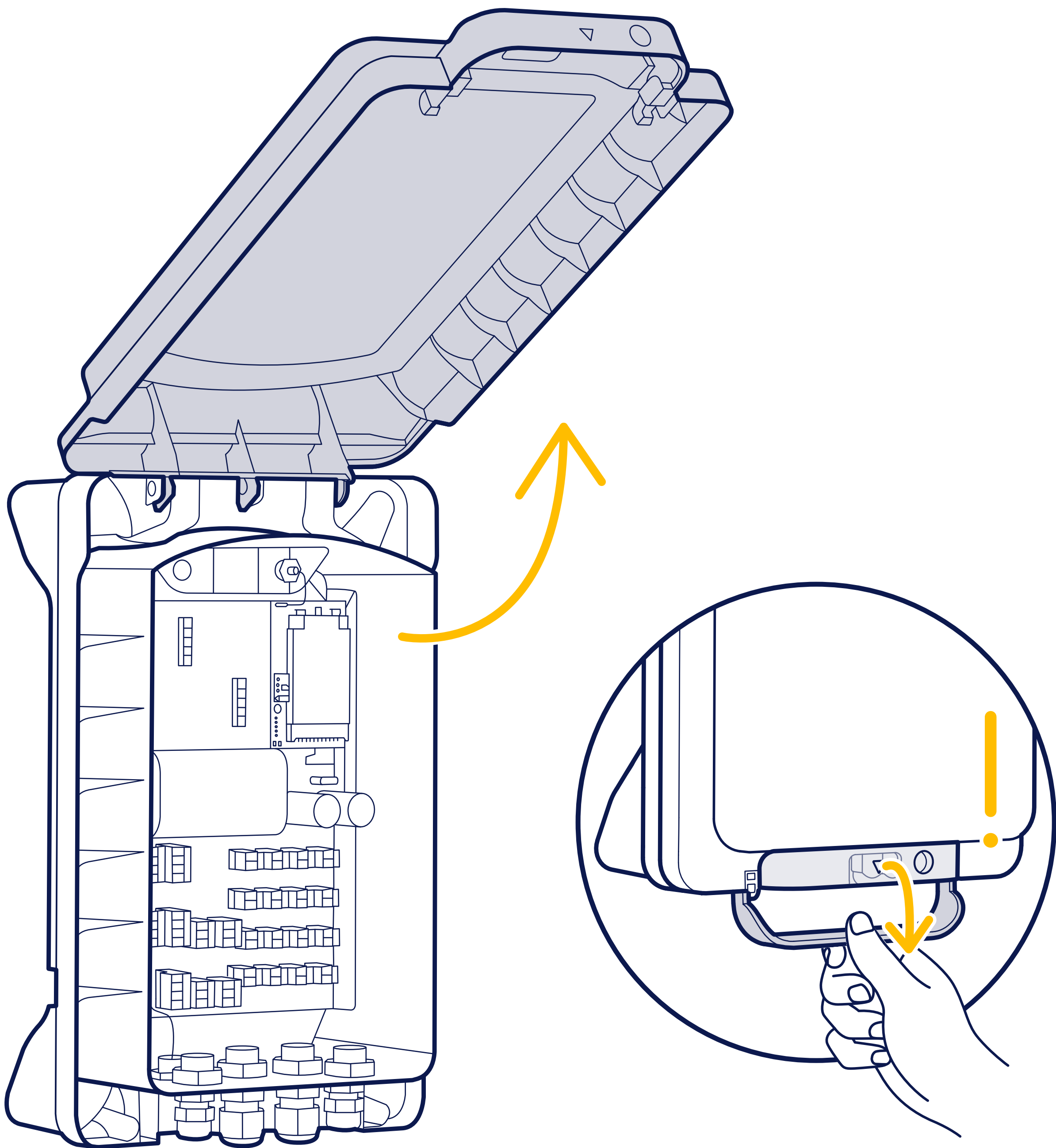
Installation Preparation

2. Connect the antenna to the device



Installation Preparation

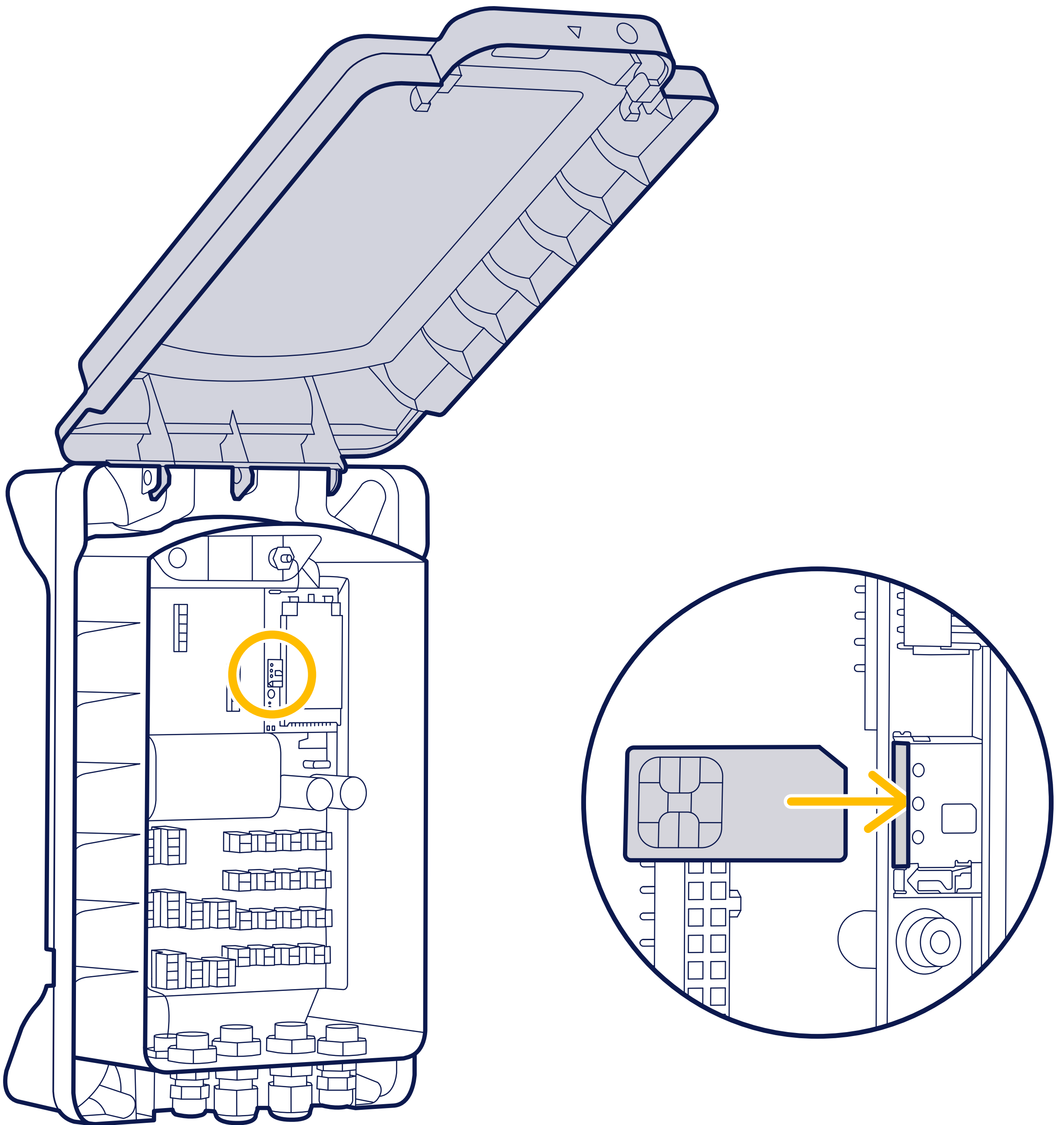
3. Open the device



Installation Preparation

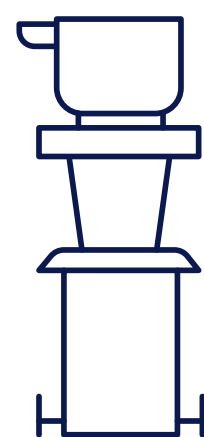
4. Insert SIM card (not included)

Note: The device requires a Data-only SIM card.
Voice and SMS capabilities are not required

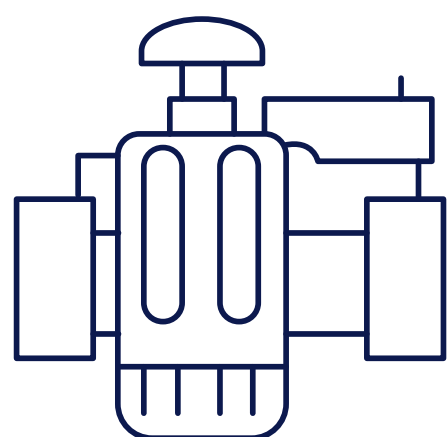


Supported devices

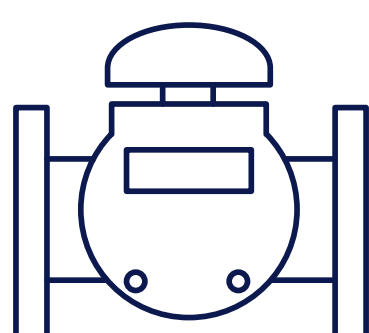
Wire all your devices to the relevant ports
(see supported devices below)



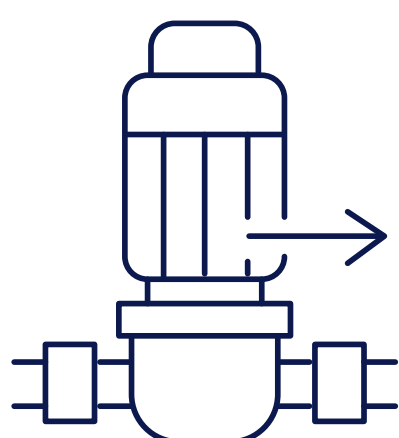
Pump x1



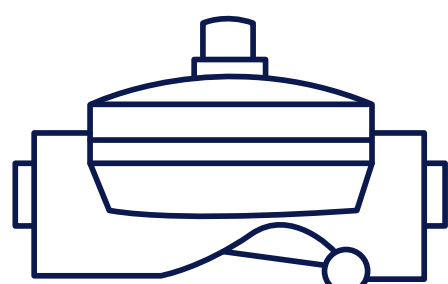
DC latch
valves x16



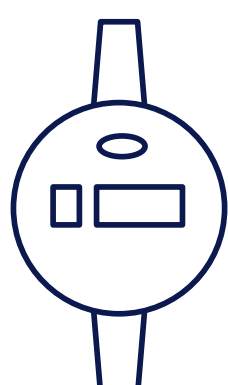
Water
meter x1



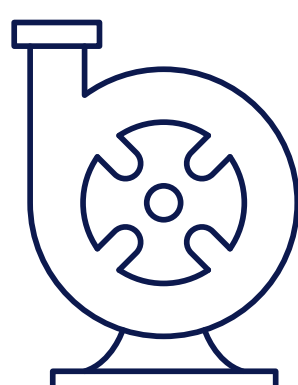
Dosing
channels x4



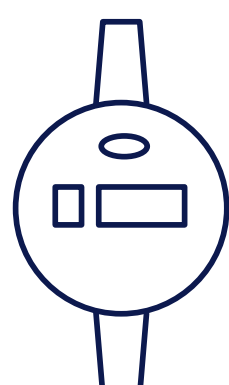
Main
valve x1



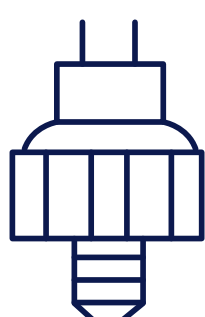
Dosing
meter x4



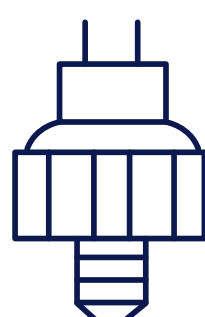
Booster
pump x1



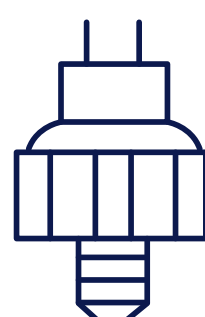
Pressure
sensor x1



irrigation
pressure
switch x1



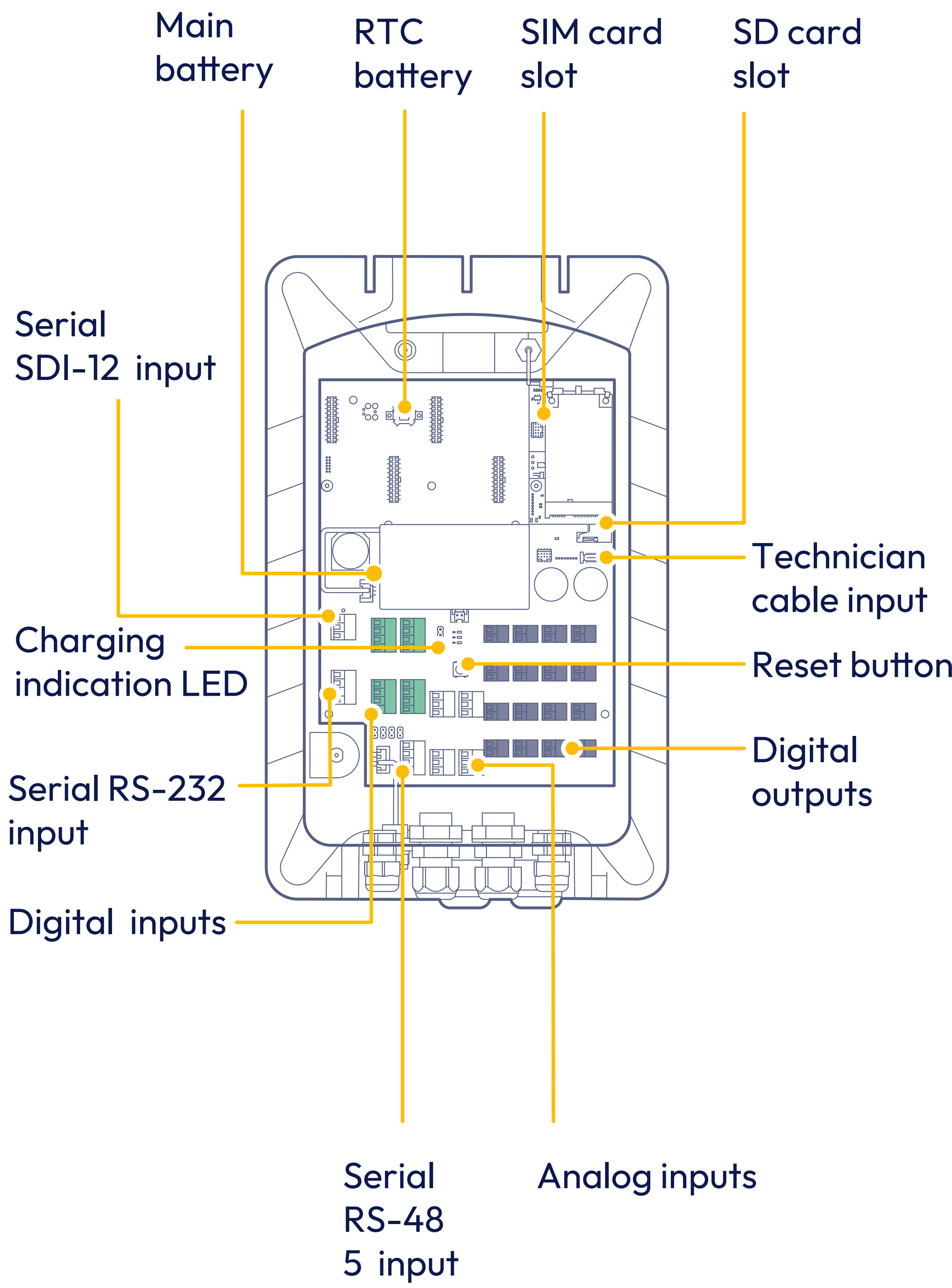
Dosing
pressure
switch x1



dry contact
switch x1

Supported devices may be connected in any combination, up to 16 outputs total (pump, valves, main valves, dosing channels, booster pump).

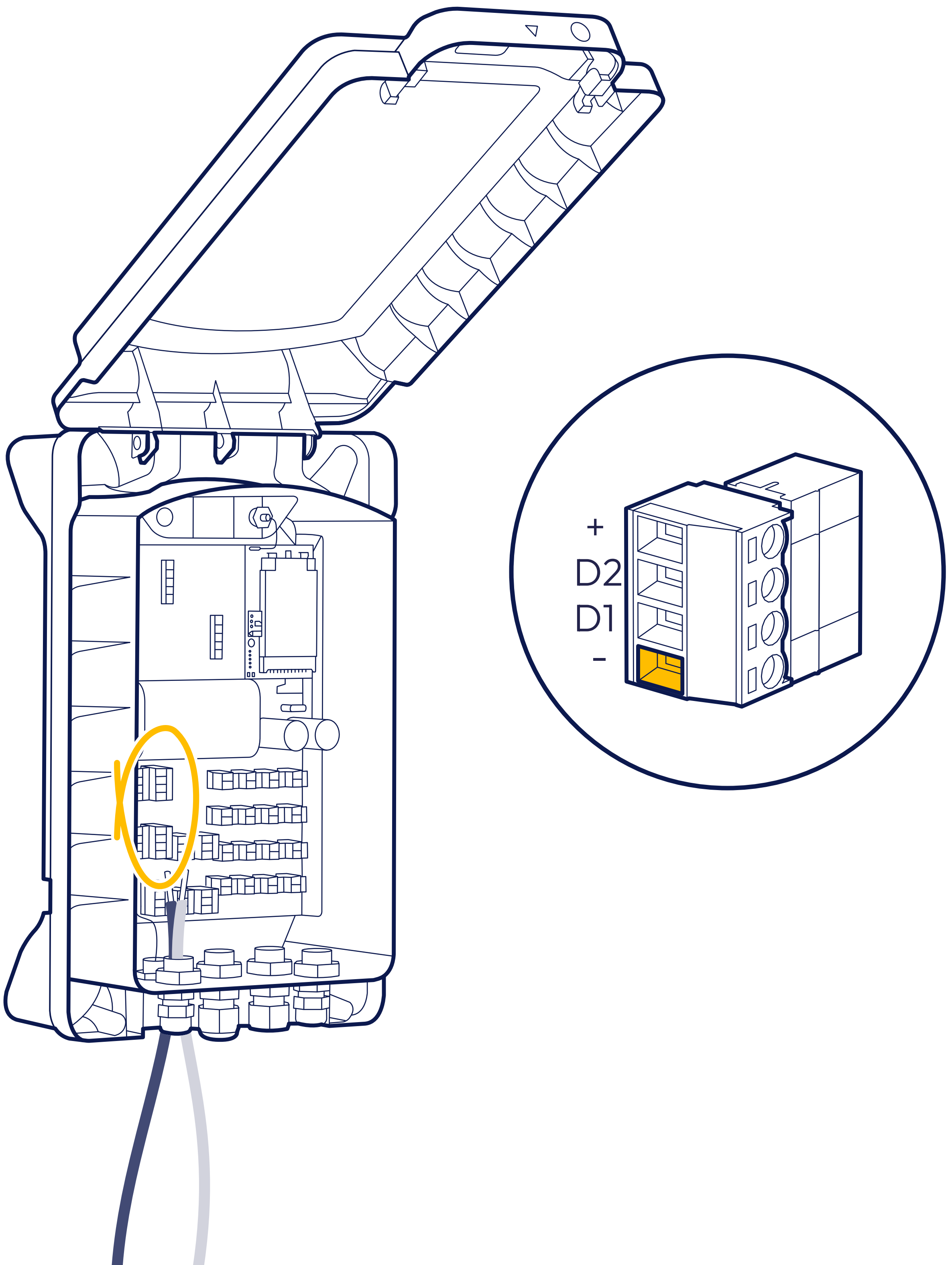
Know your GrowSphere™ FLEX



Wire your GrowSphere™ FLEX

Digital Input - General info

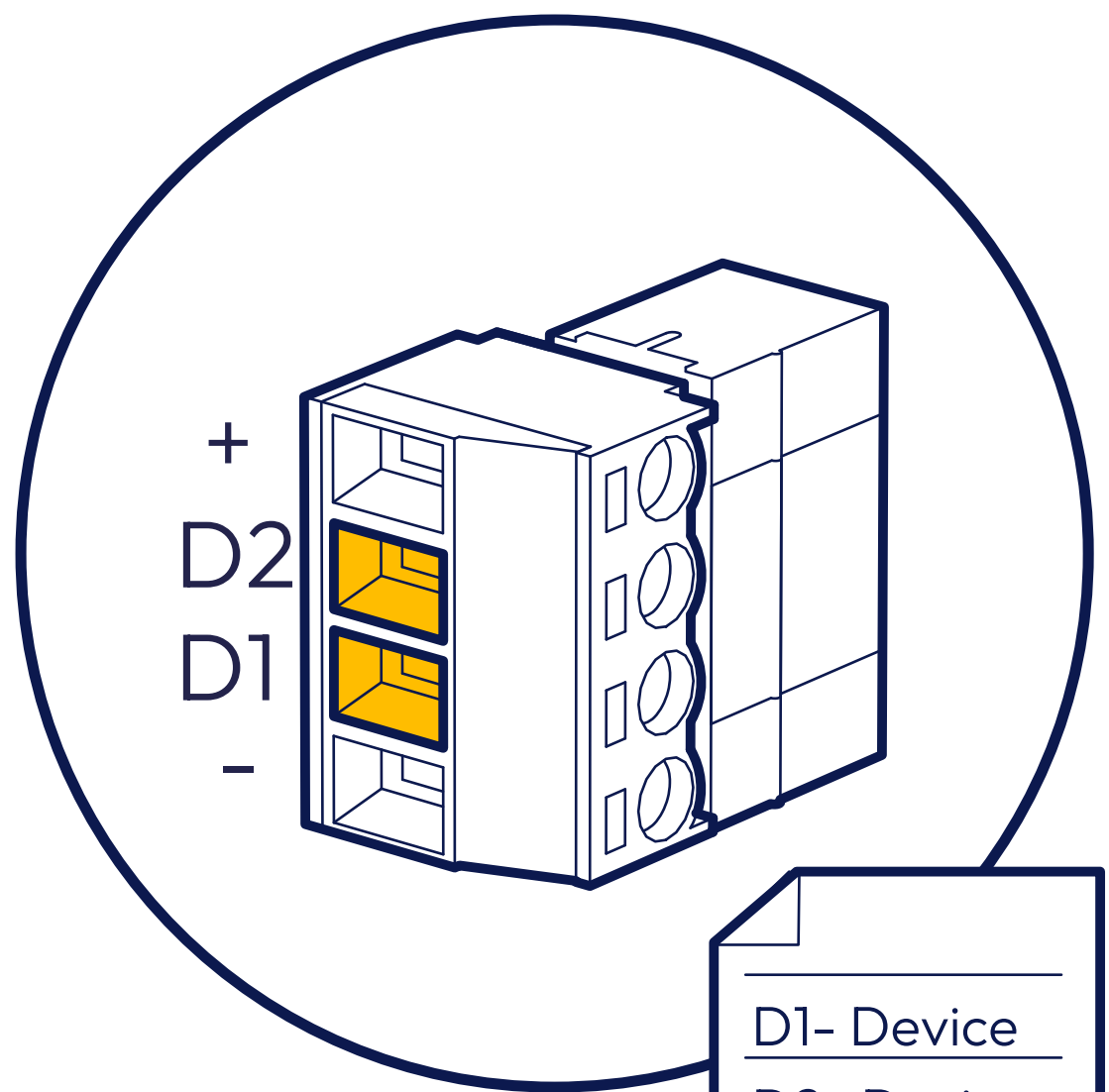
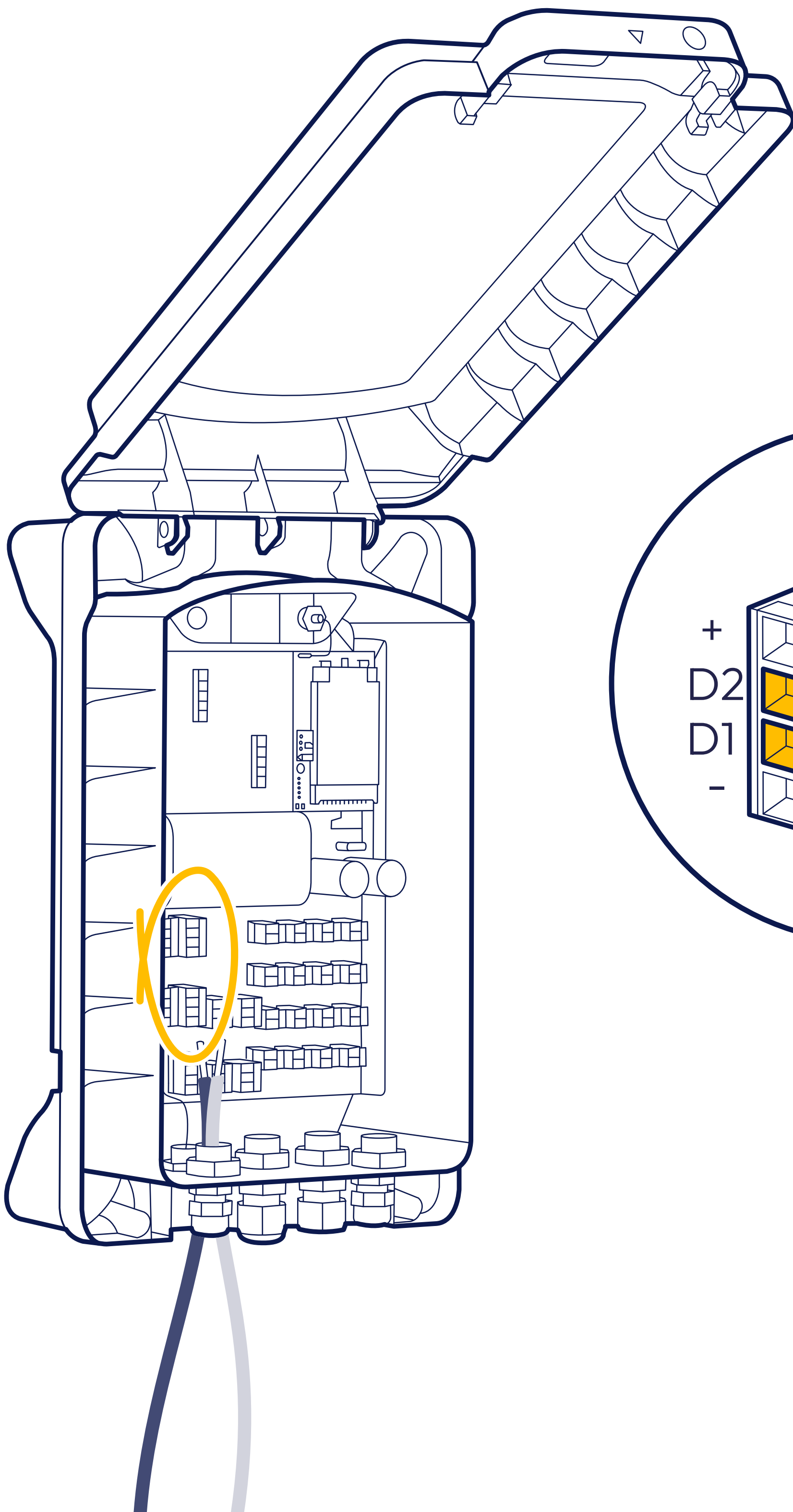
- Each digital input terminal includes a:
 - Shared ground (-)



Wire your GrowSphere™ FLEX

Digital Input - General info

- Each digital input terminal includes a:
 - Shared ground (-)
 - A dedicated positive input for D1, D2, and so on

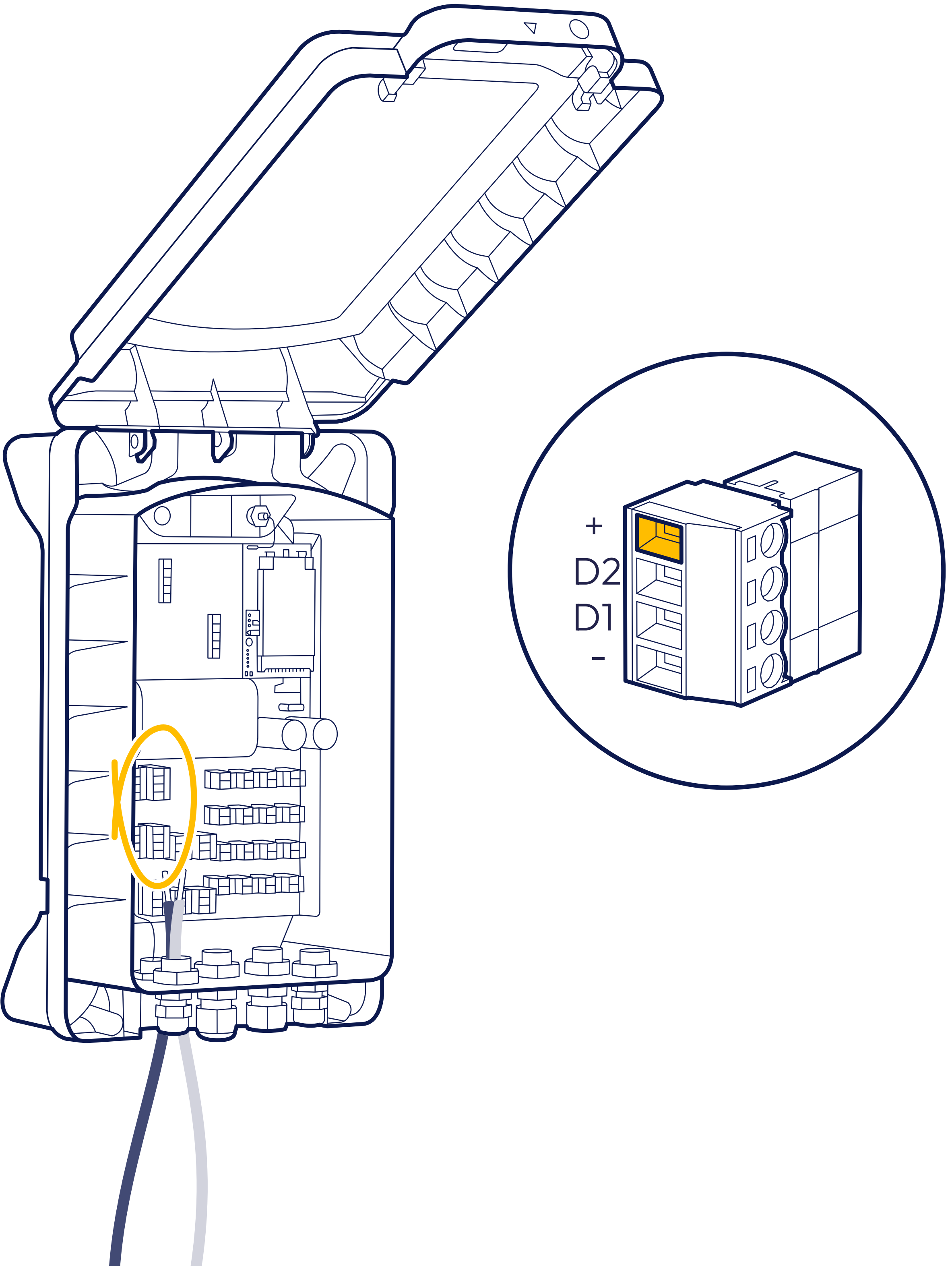


D1- Device
D2- Device
D3- Device
...

Wire your GrowSphere™ FLEX

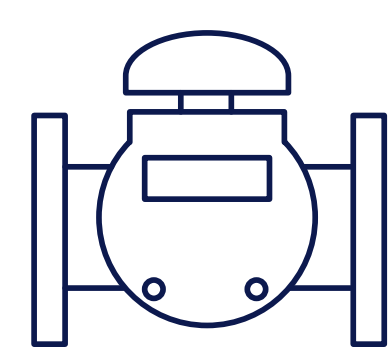
Digital Input - General info

- Each digital input terminal includes a:
 - Shared ground (-)
 - A dedicated positive input for D1, D2, and so on.
 - An auxiliary (+) supply to power active devices that require a power source (devices such as ultrasonic water meters, available in future versions)

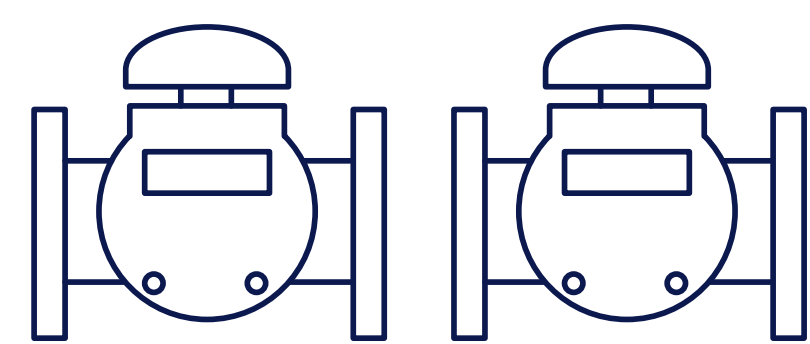
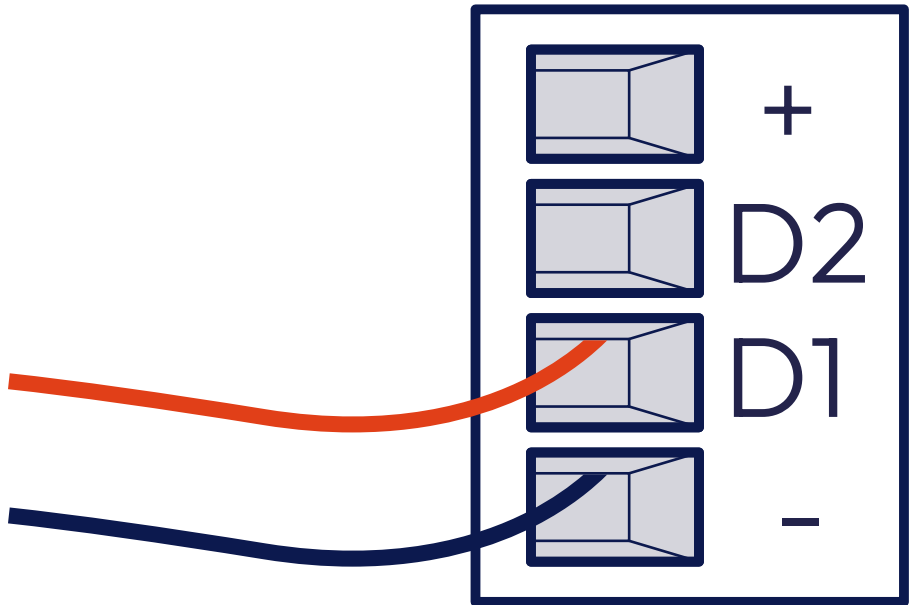


Wire your GrowSphere™ FLEX

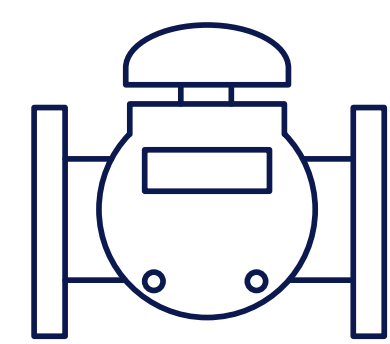
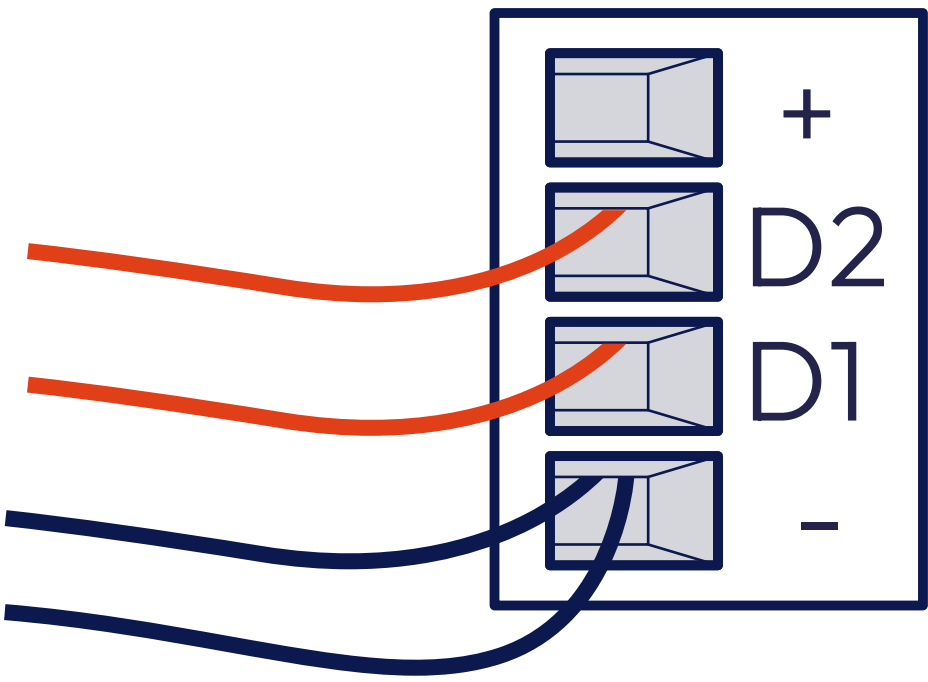
Digital Input - General info



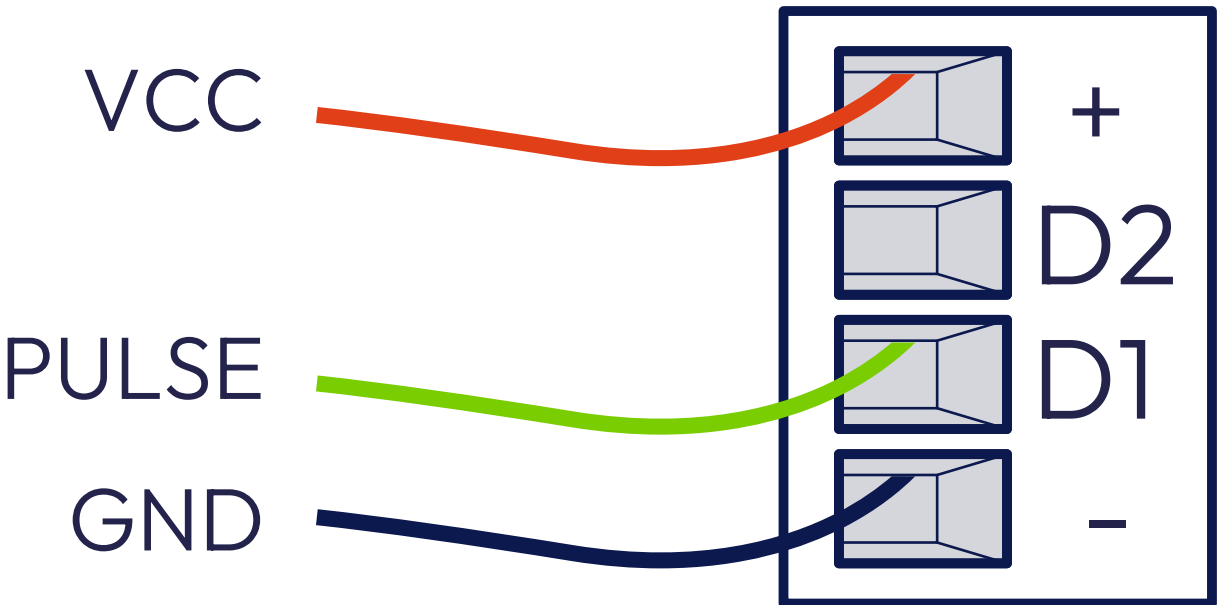
Water meter x1



Water meter x2



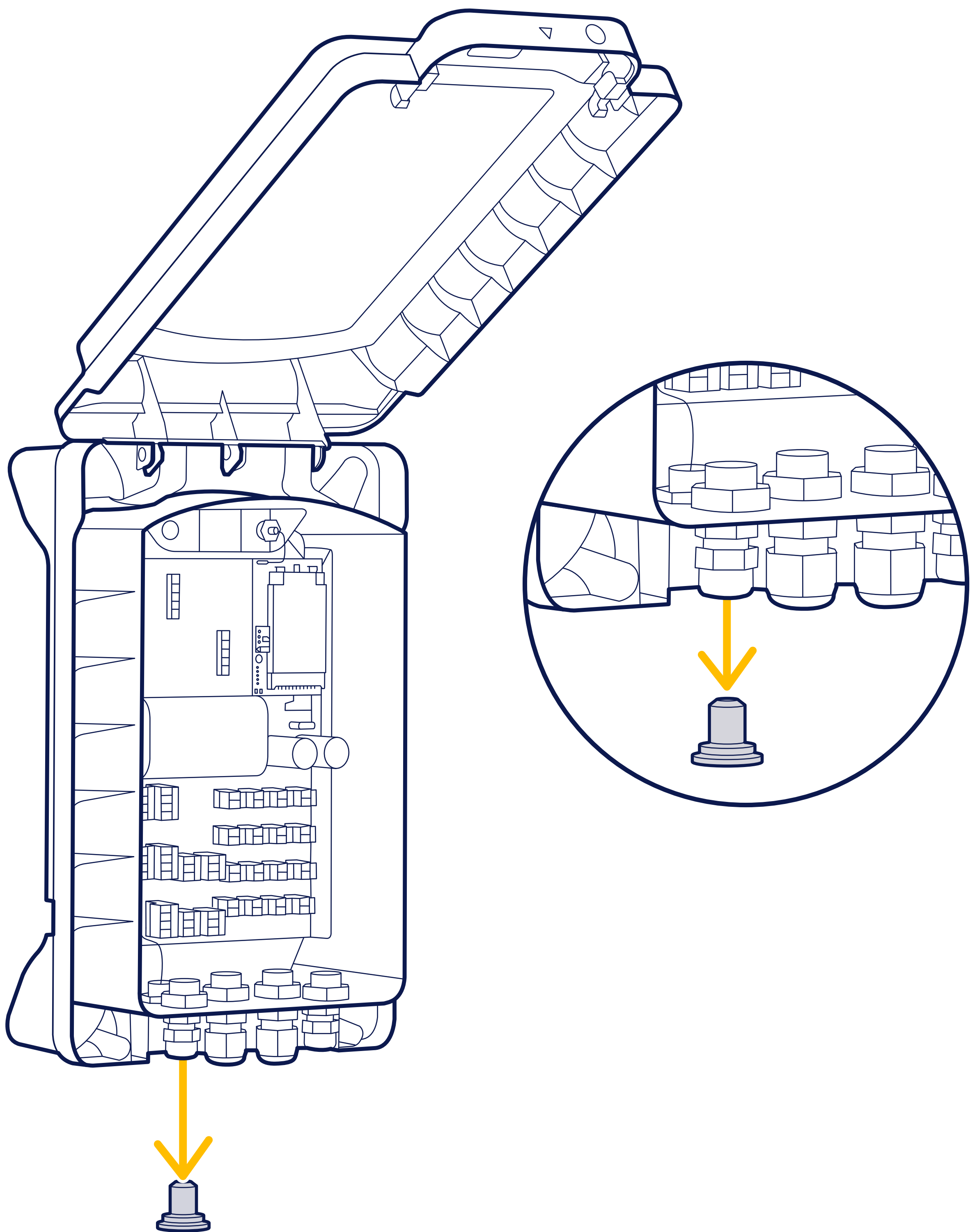
Ultrasonic
Water meter x1



Wire your GrowSphere™ FLEX

Digital Input - Wiring

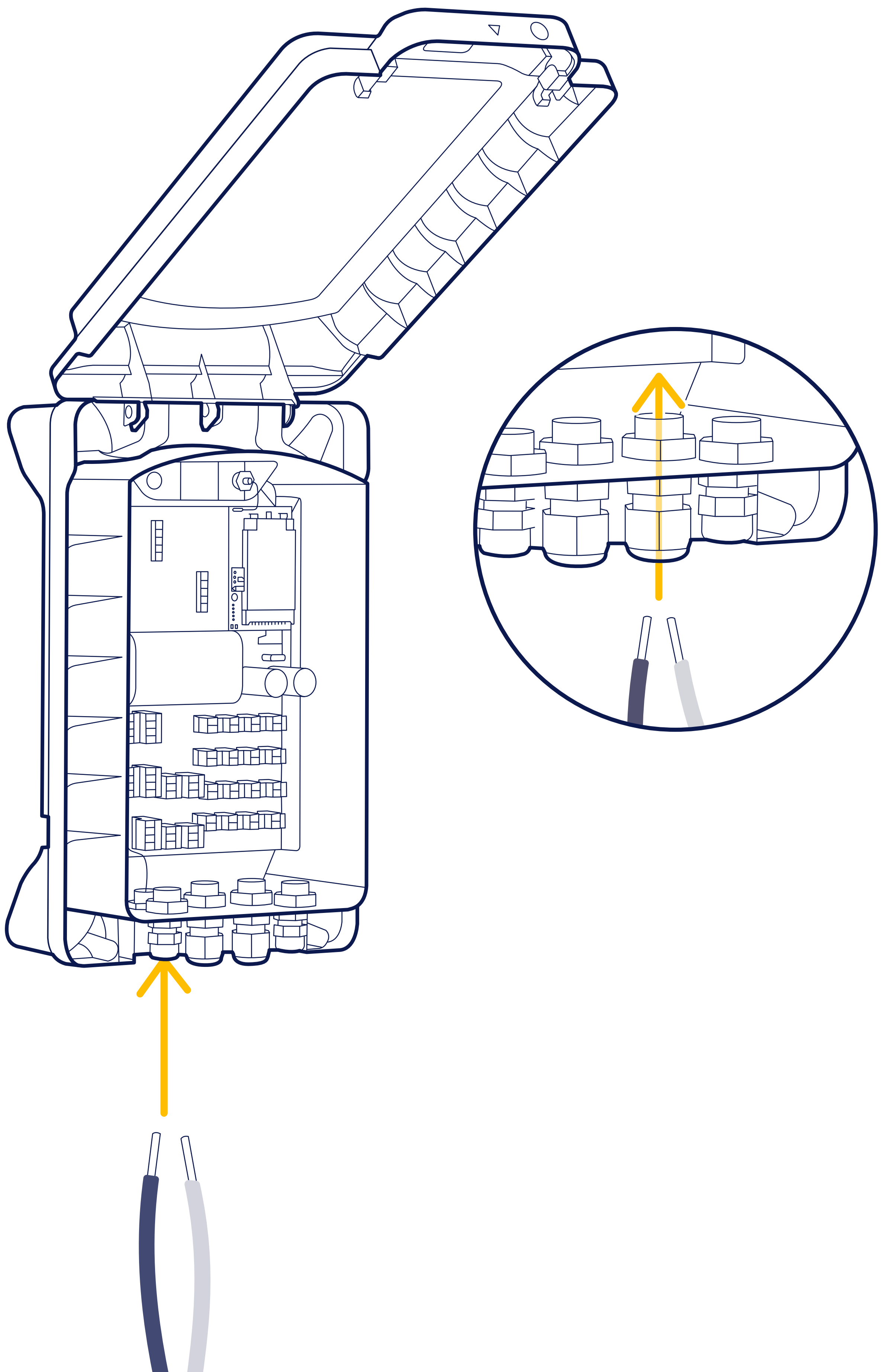
1. Take out a cork



Wire your GrowSphere™ FLEX

Digital Input - Wiring

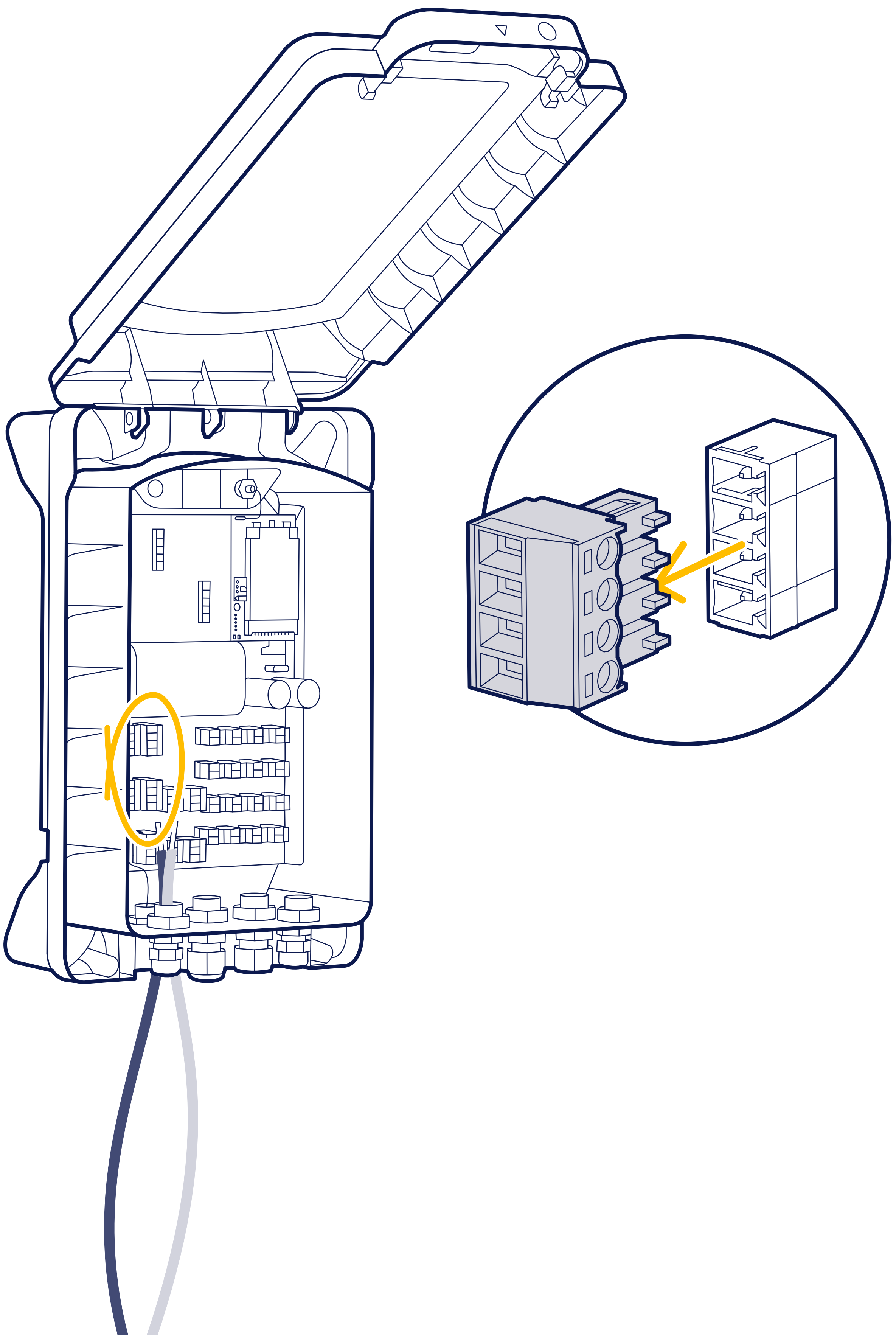
2. Insert the wires



Wire your GrowSphere™ FLEX

Digital Input - Wiring

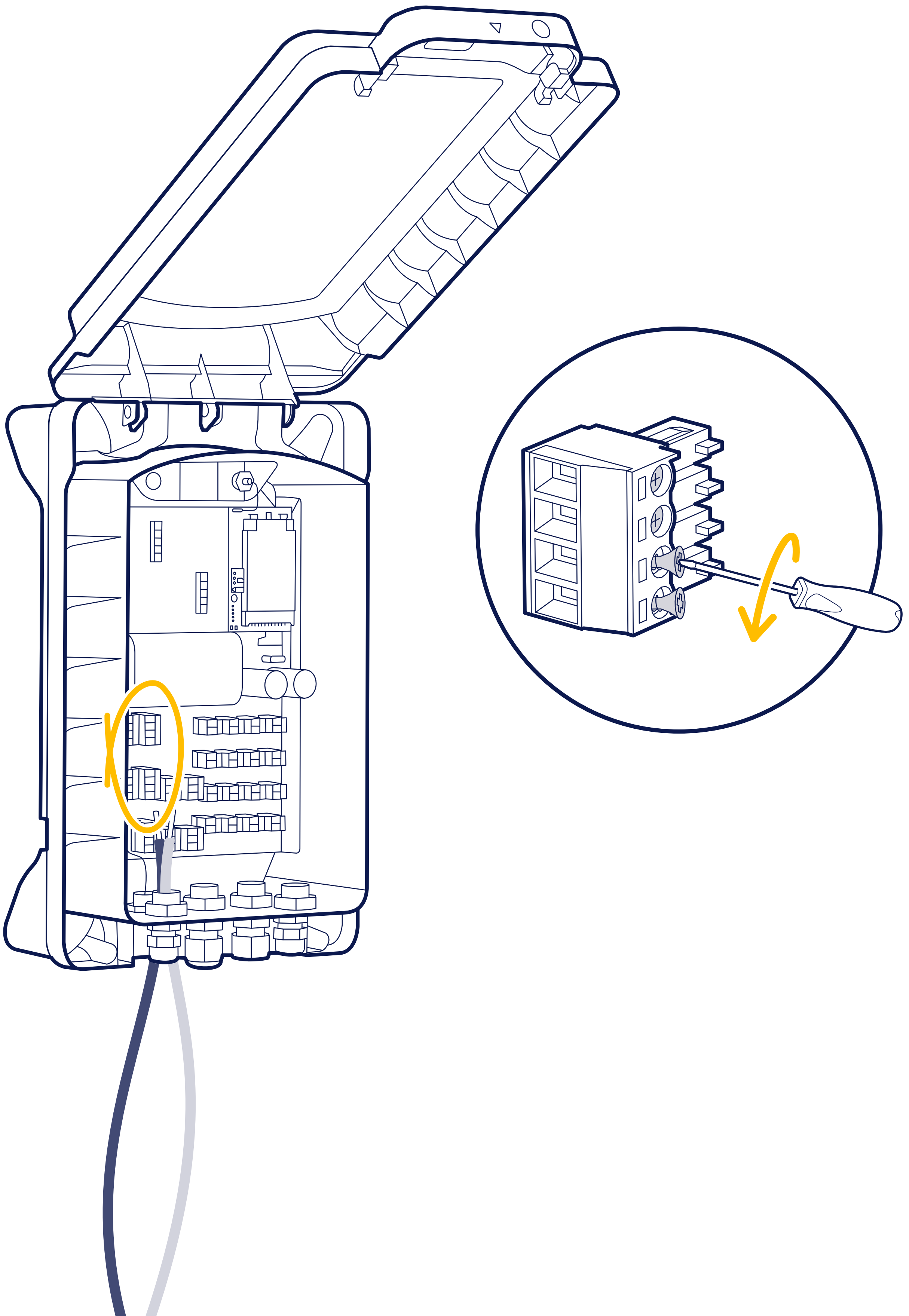
3. Take out the connector



Wire your GrowSphere™ FLEX

Digital Input - Wiring

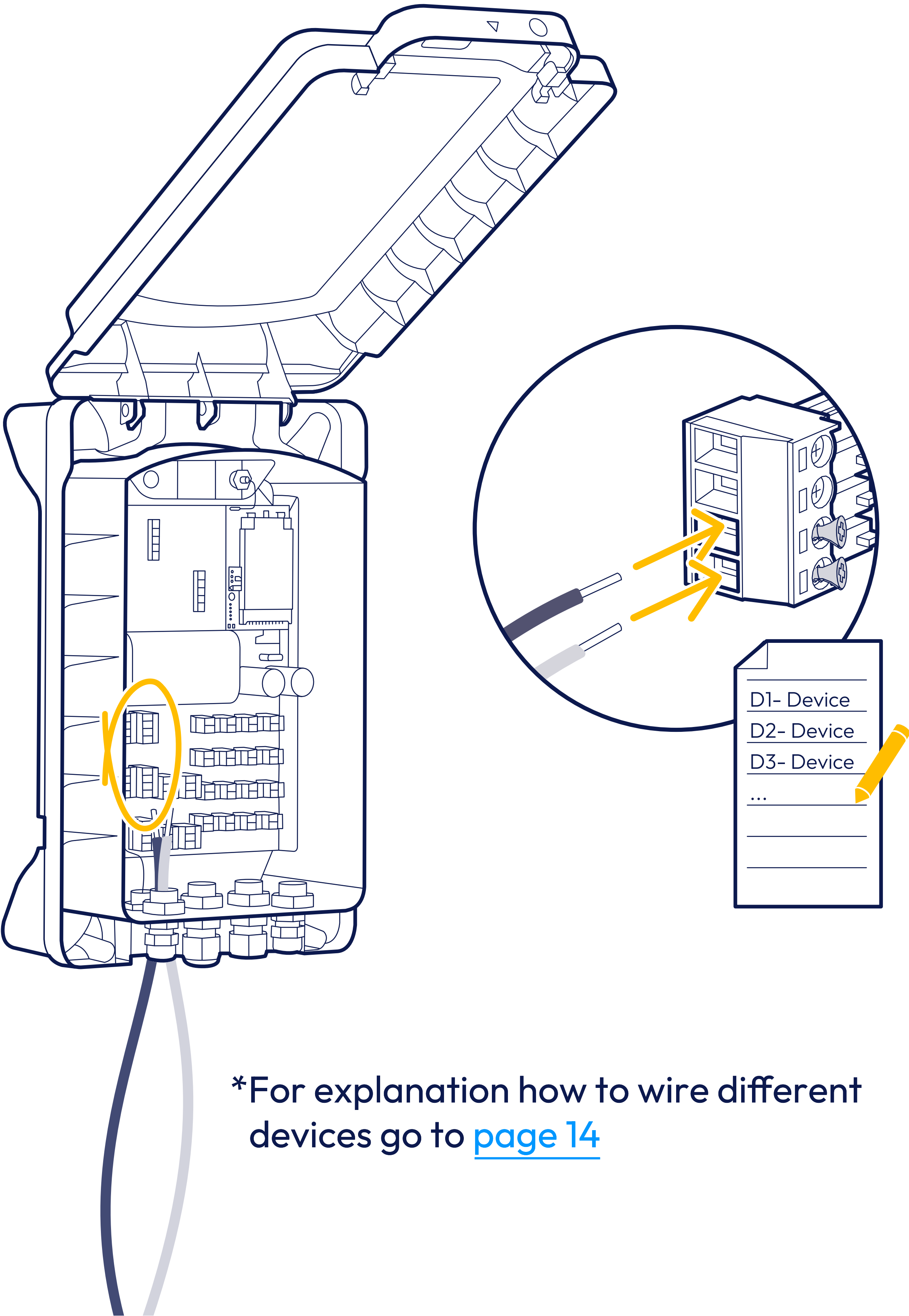
4. unscrew the small screw on the side of the connector, insert the wire, and tighten it back



Wire your GrowSphere™ FLEX

Digital Input - Wiring

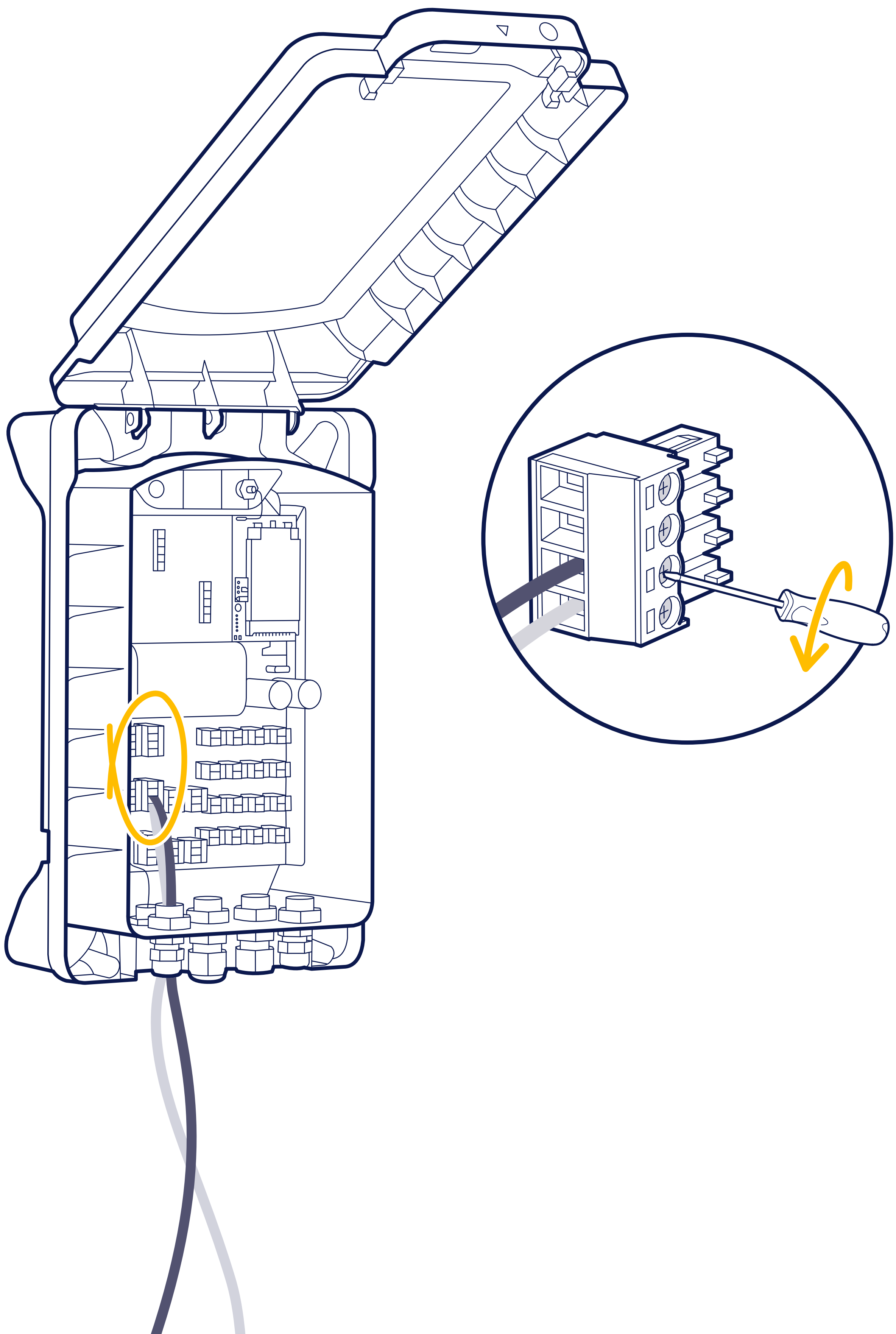
5. Insert the device wires into the appropriate terminals as defined in at the [General info](#)



Wire your GrowSphere™ FLEX

Digital Input - Wiring

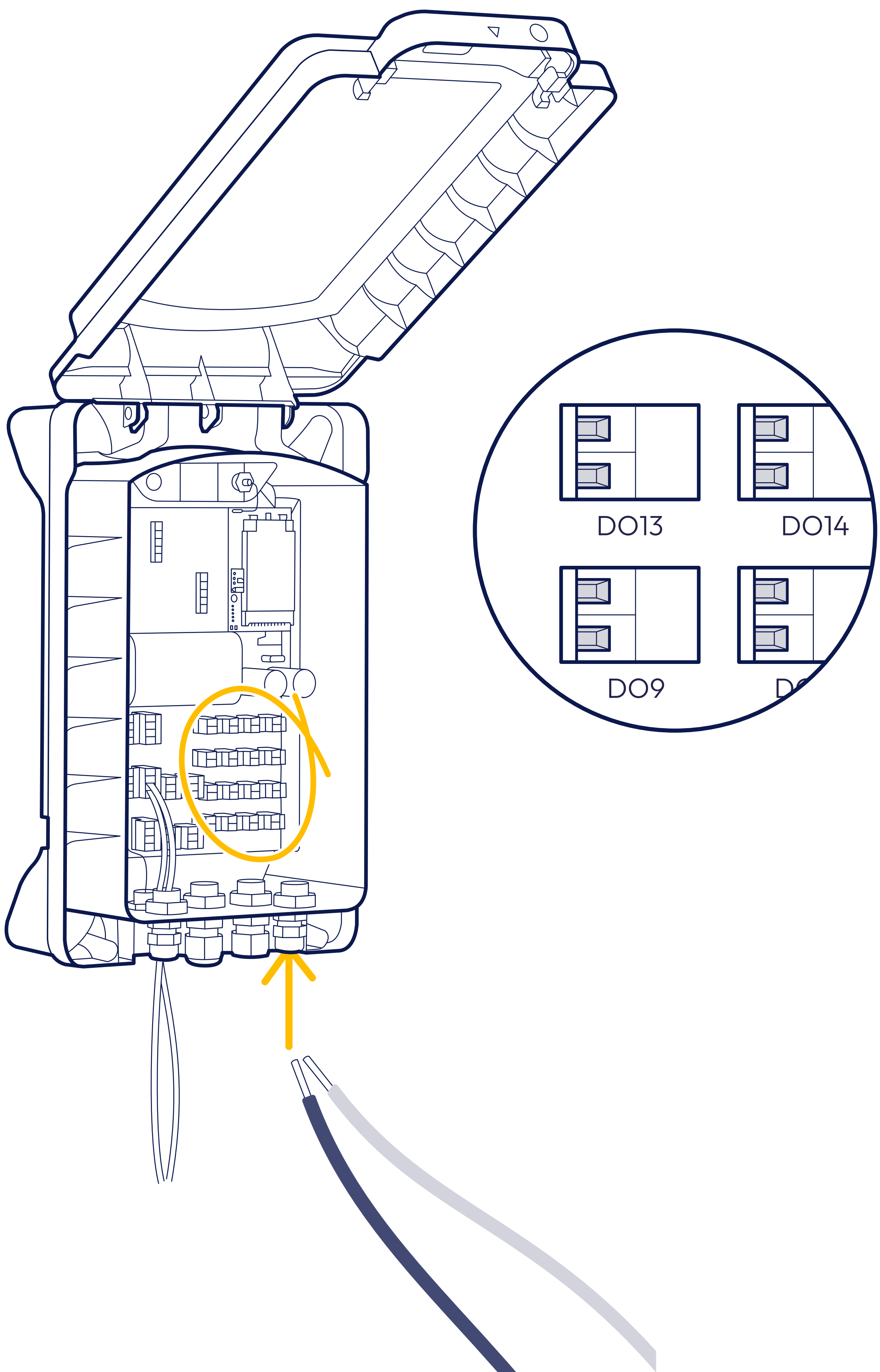
6. Tighten the screws to secure the wires



Wire your GrowSphere™ FLEX

Digital Output - Wiring

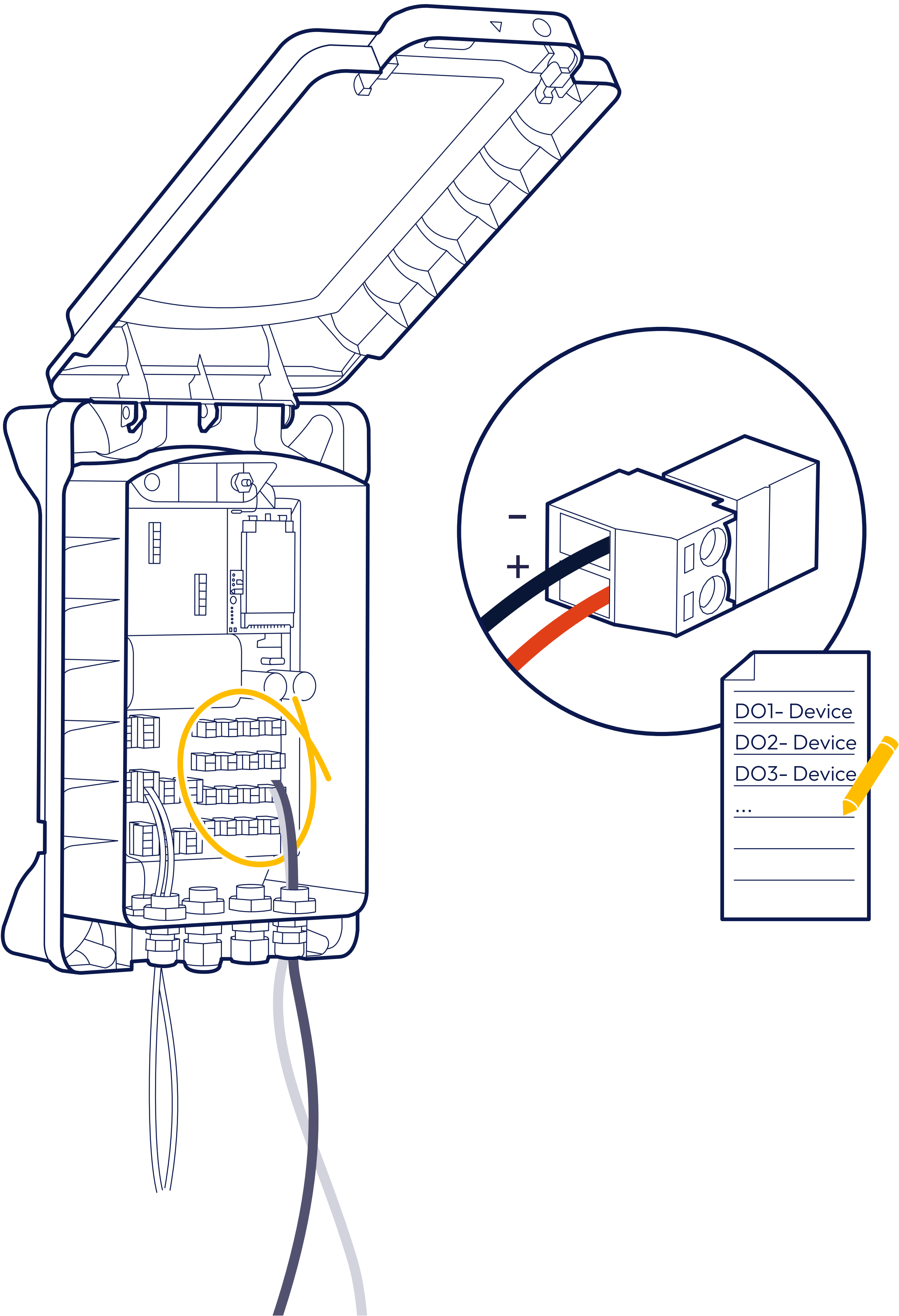
7. DC valves – Connect the valve wires to the digital output's ports, following the + and - markings.



Wire your GrowSphere™ FLEX

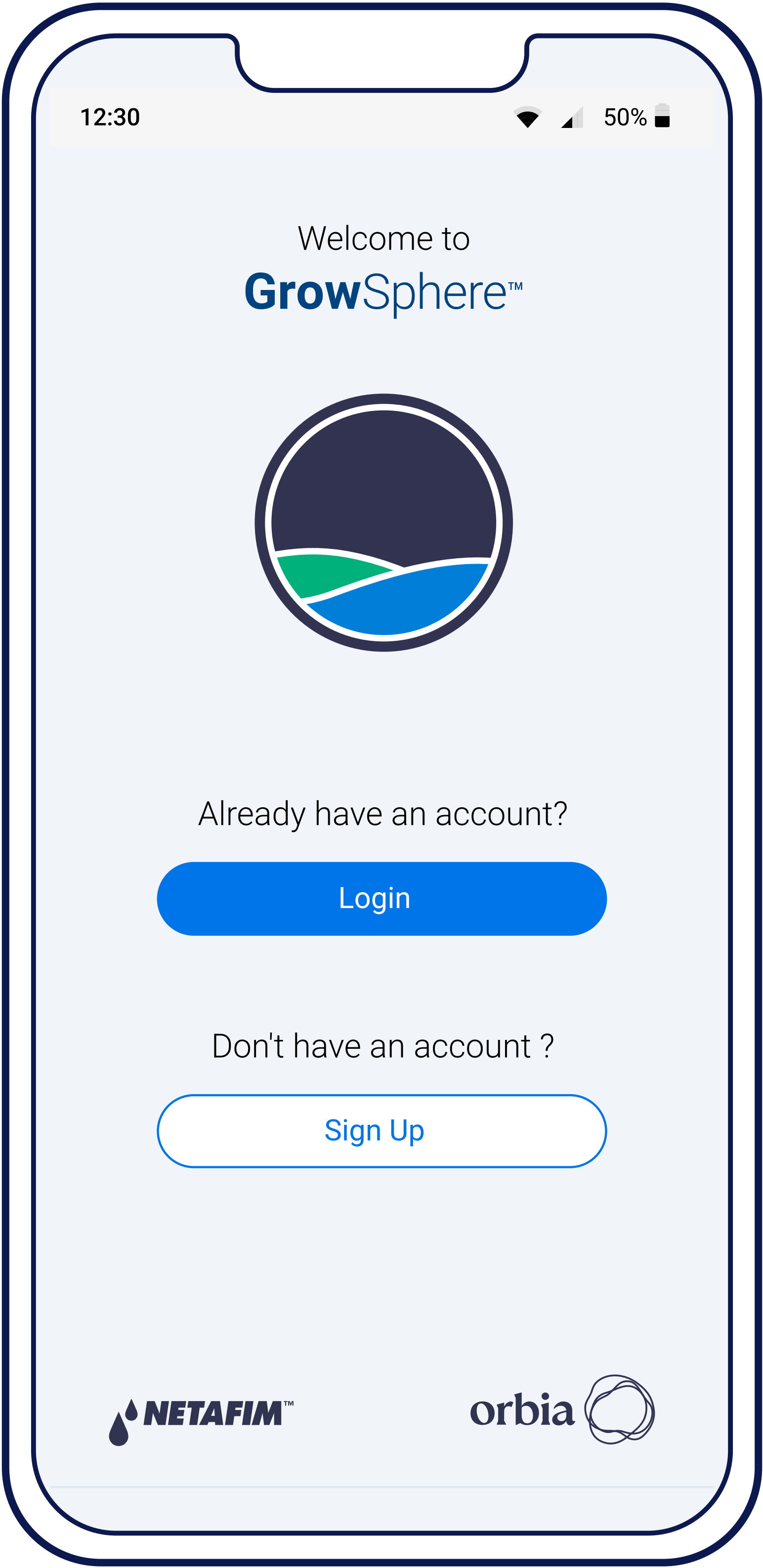
Digital Output - Wiring

8. DC valves – Connect the valve wires to the digital output's ports, following the + and - markings.



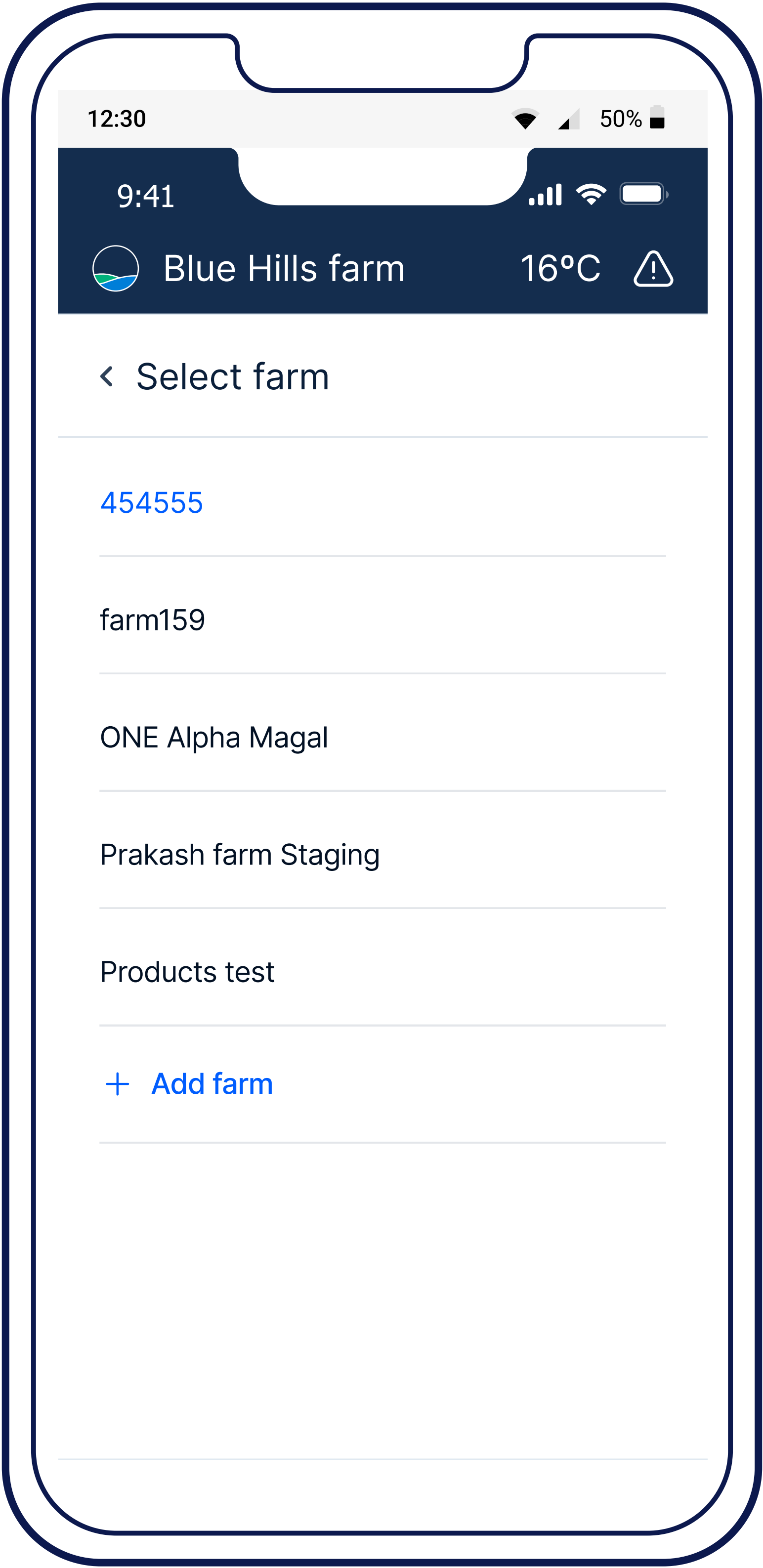
App Installation

1. Download / Open GrowShpere™ app



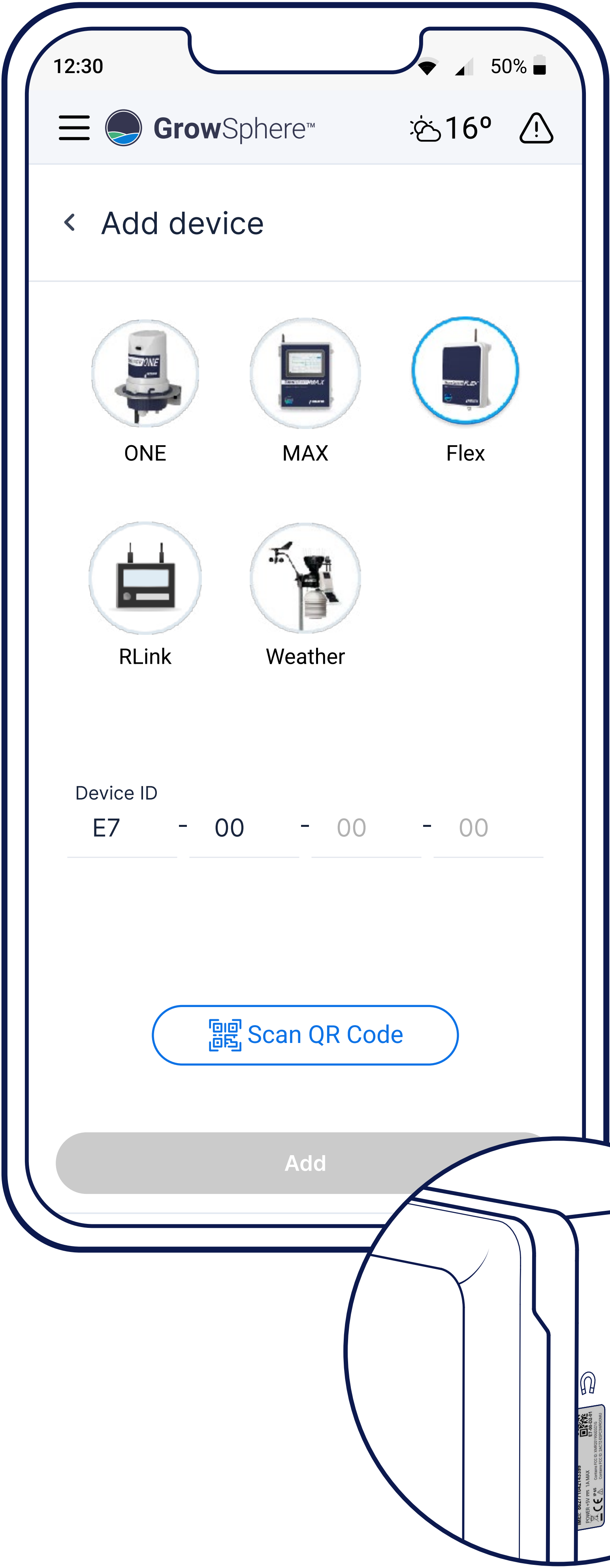
App Installation

2. Create a new farm / Open your exiting farm



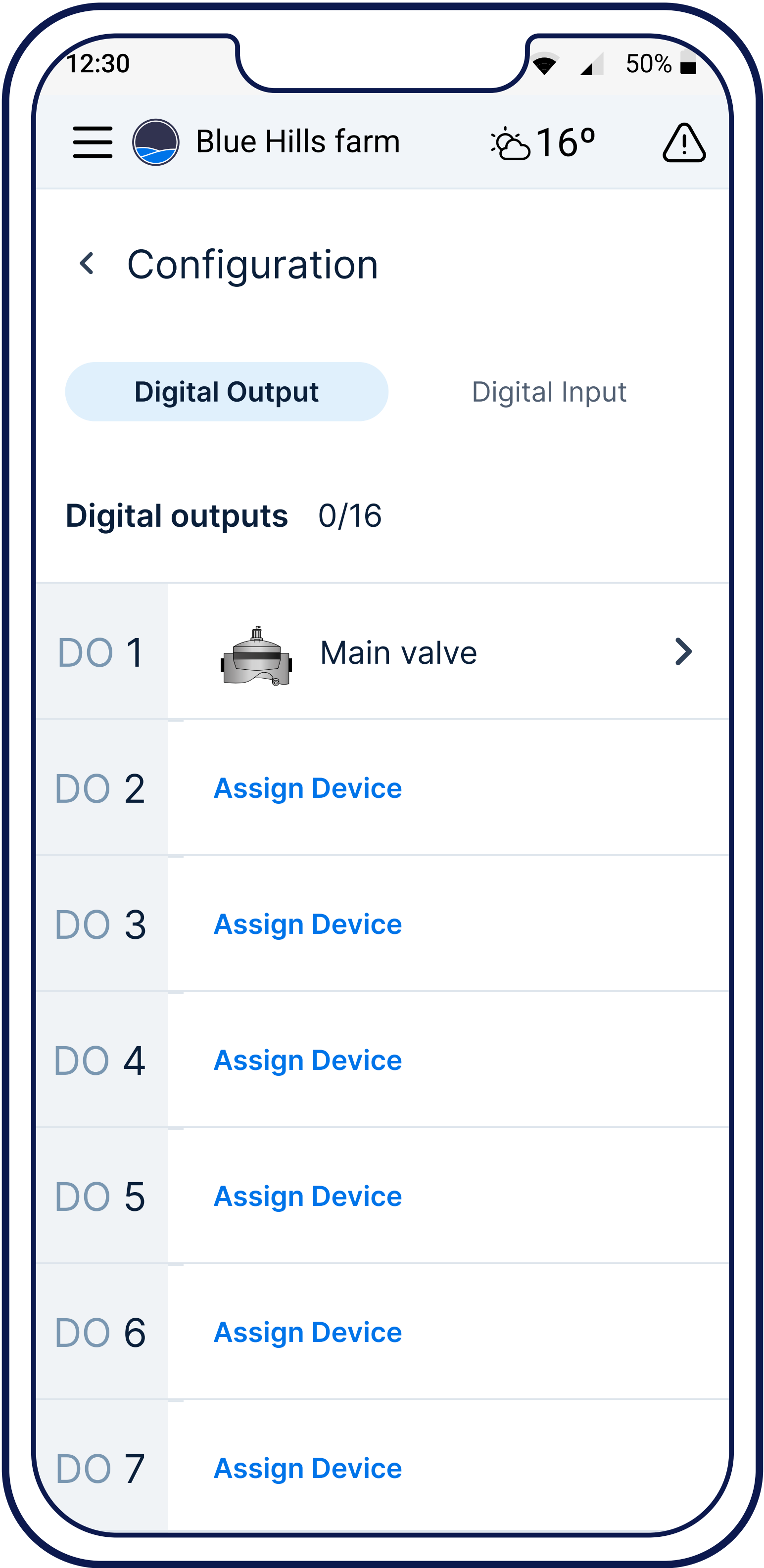
App Installation

3. Add the FLEX as a new device
(scan / enter a code)



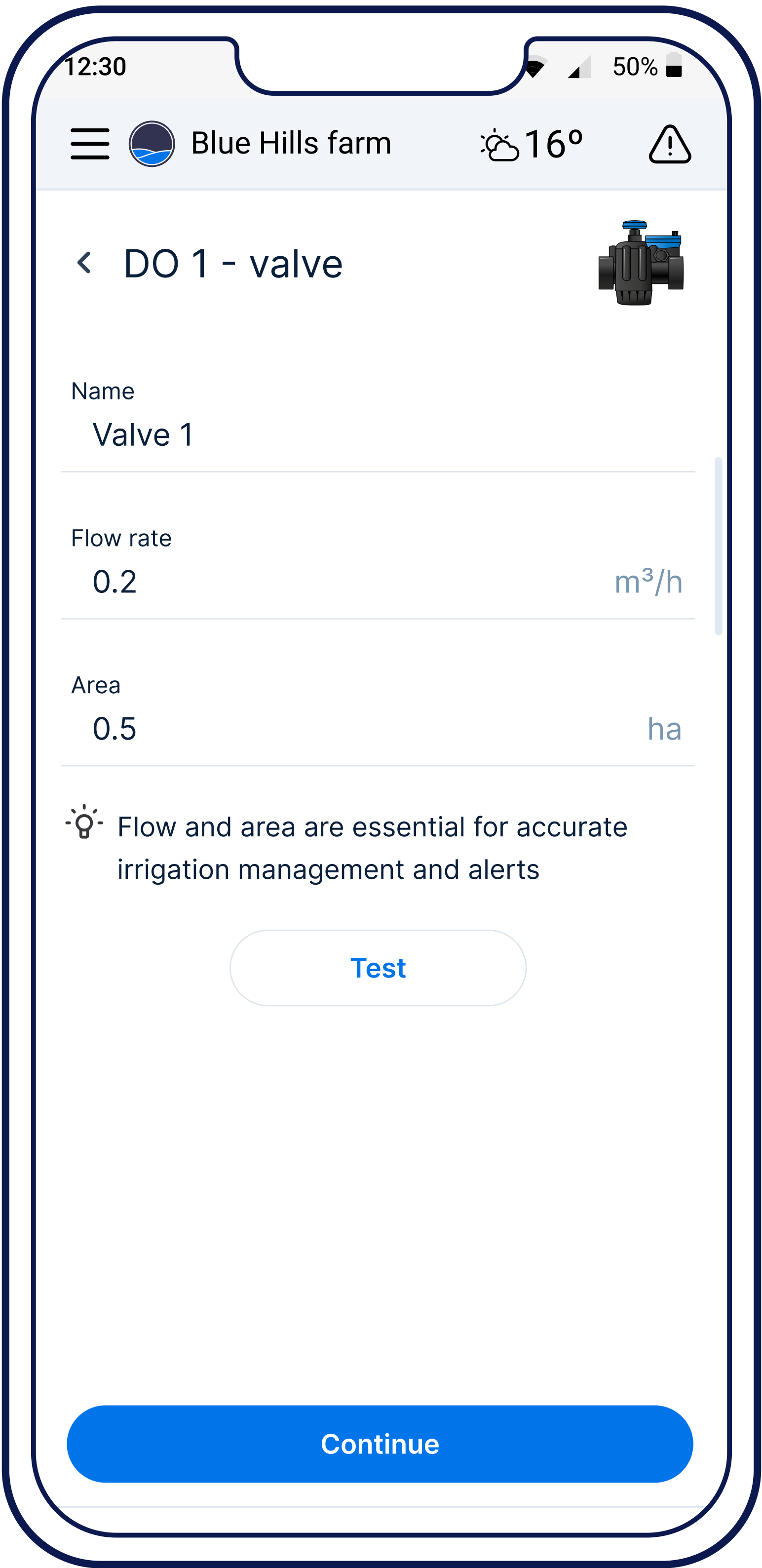
App Installation

4. Define input / output wired instruments, set the parameters + test



App Installation

5. Define and configure specific device parameters for each connected instrument

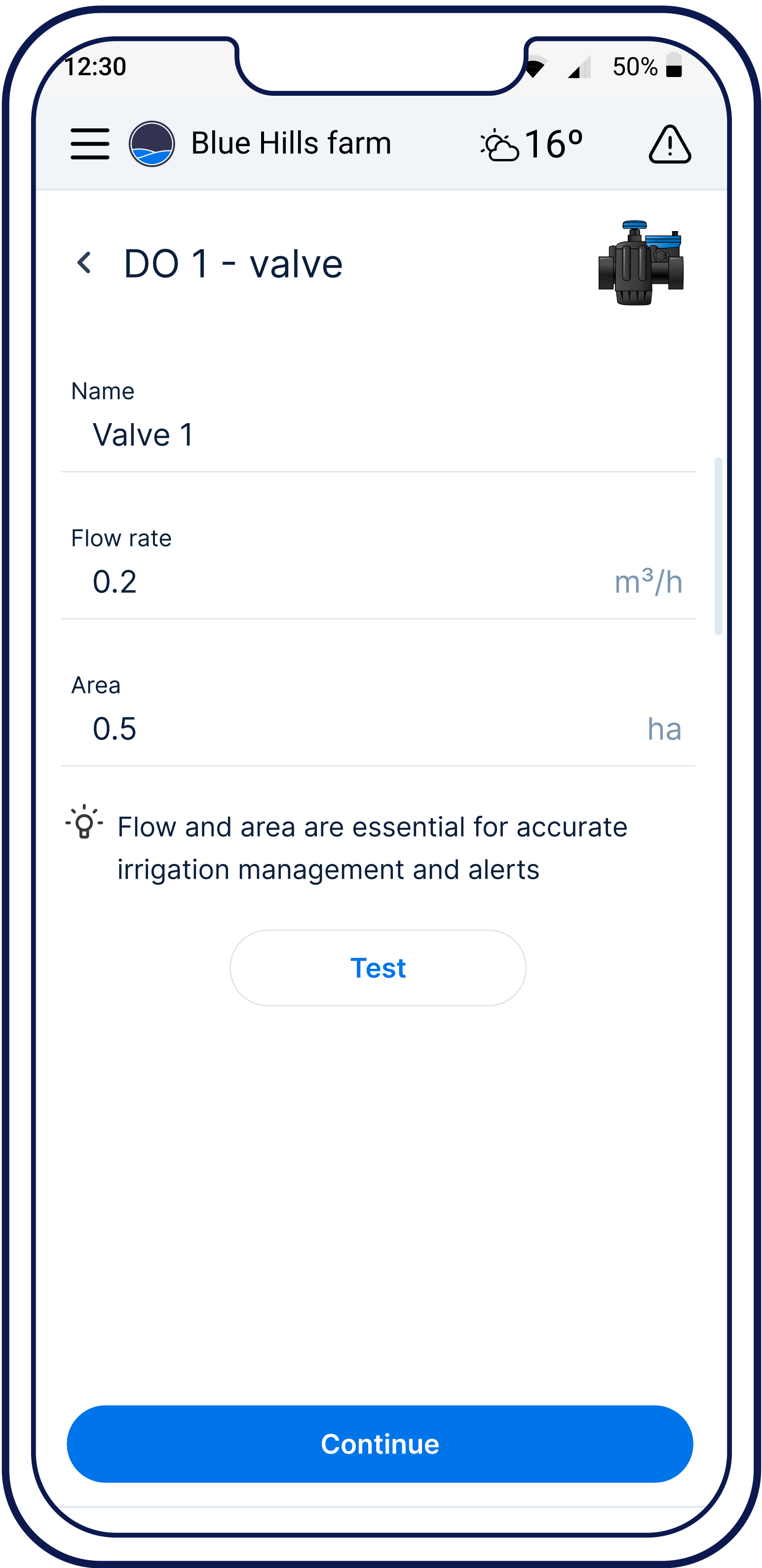


Recommended Procedure : Valve Configuration & Flow Validation

Follow these steps to complete the configuration for newly installed valves (when water meters is also installed)

App Installation

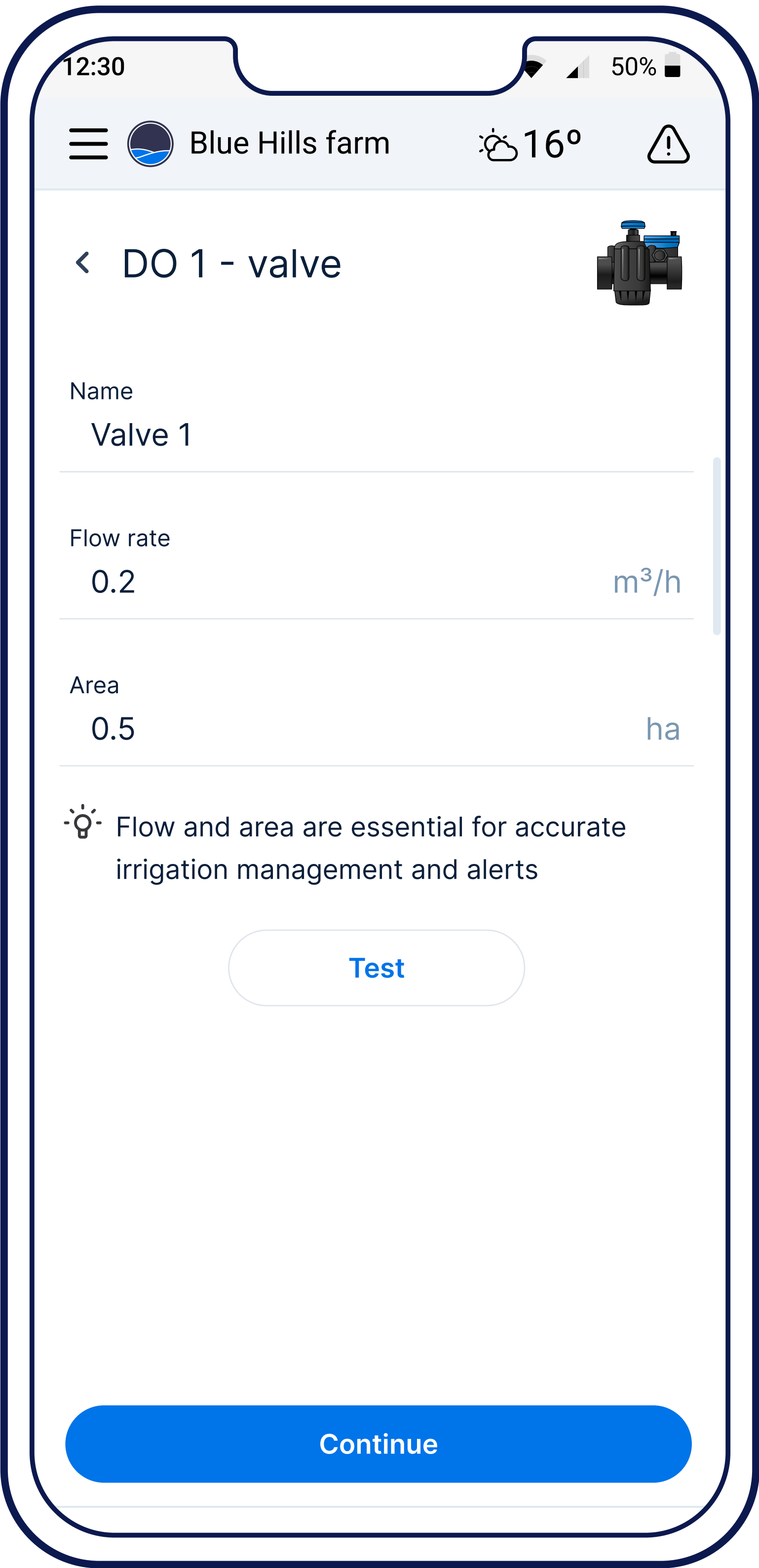
5. Define and configure specific device parameters for each connected instrument



Disable Alerts: Set flow alerts to INACTIVE to prevent false notifications during the calibration phase.

App Installation

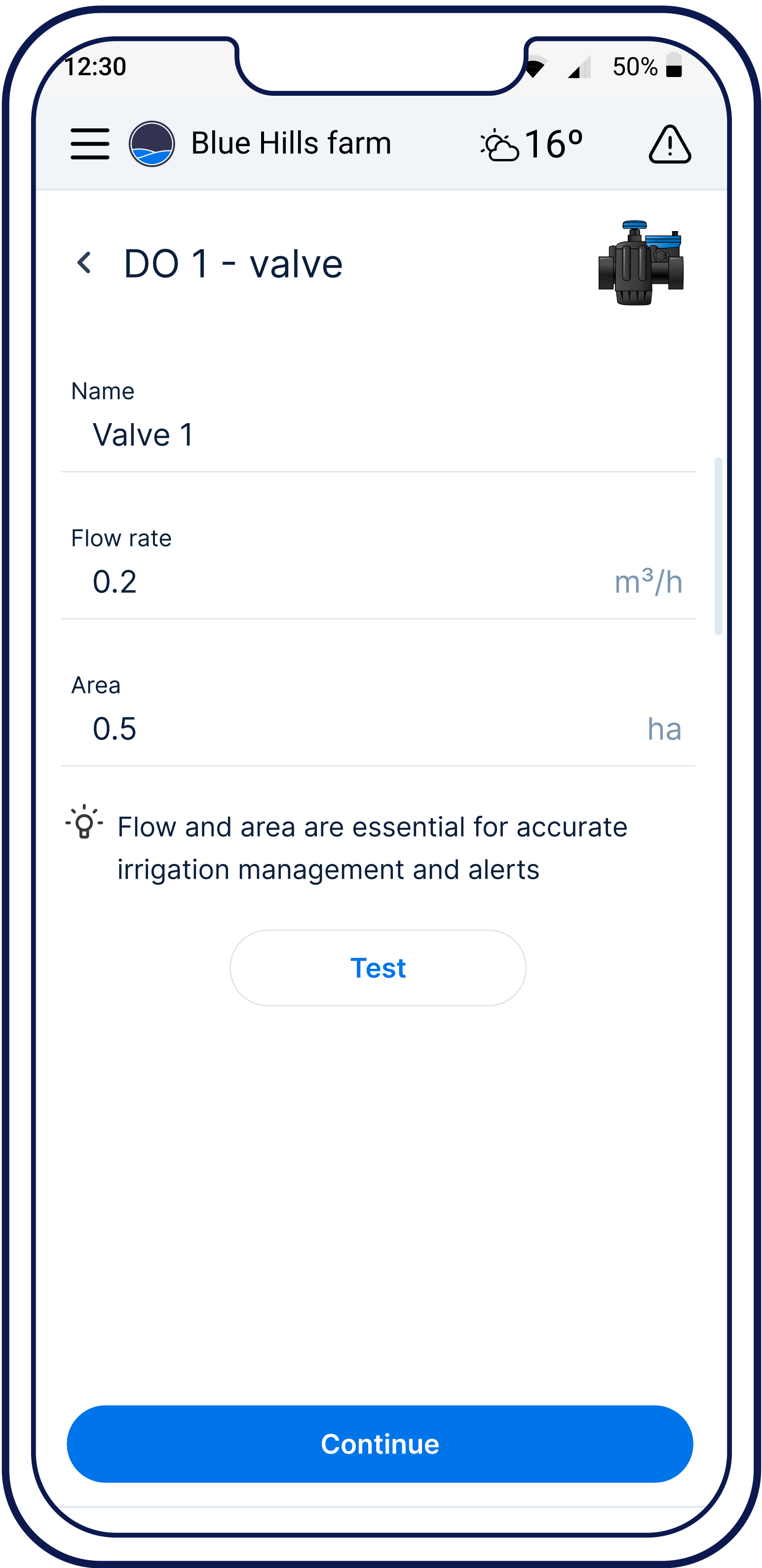
5. Define and configure specific device parameters for each connected instrument



Configure Irrigation Program: Assign each valve to a separate shift and run the irrigation program for a duration of X minutes.

App Installation

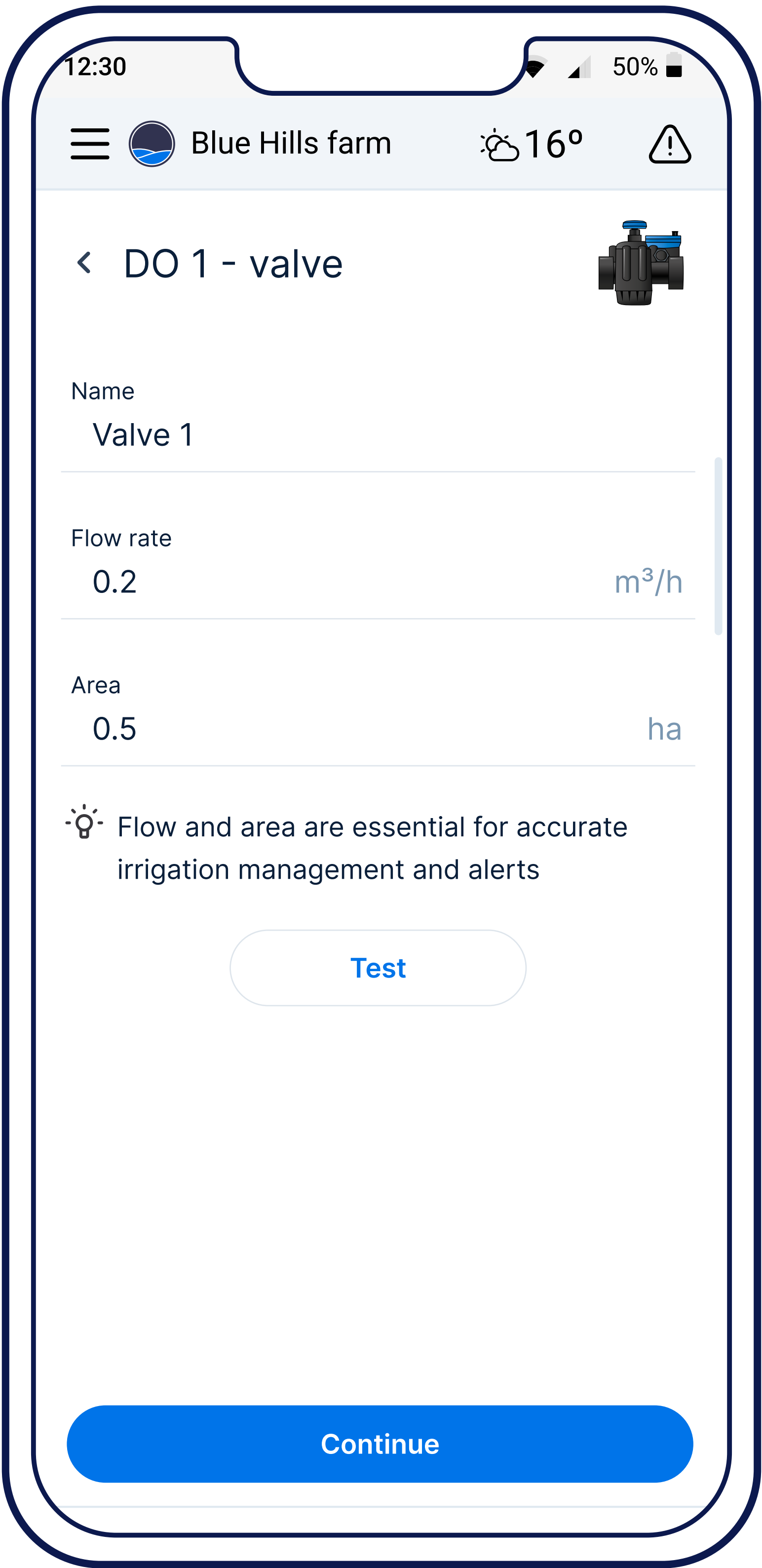
5. Define and configure specific device parameters for each connected instrument



Monitor Output: Observe the actual, real-time flow rate displayed for each valve.

App Installation

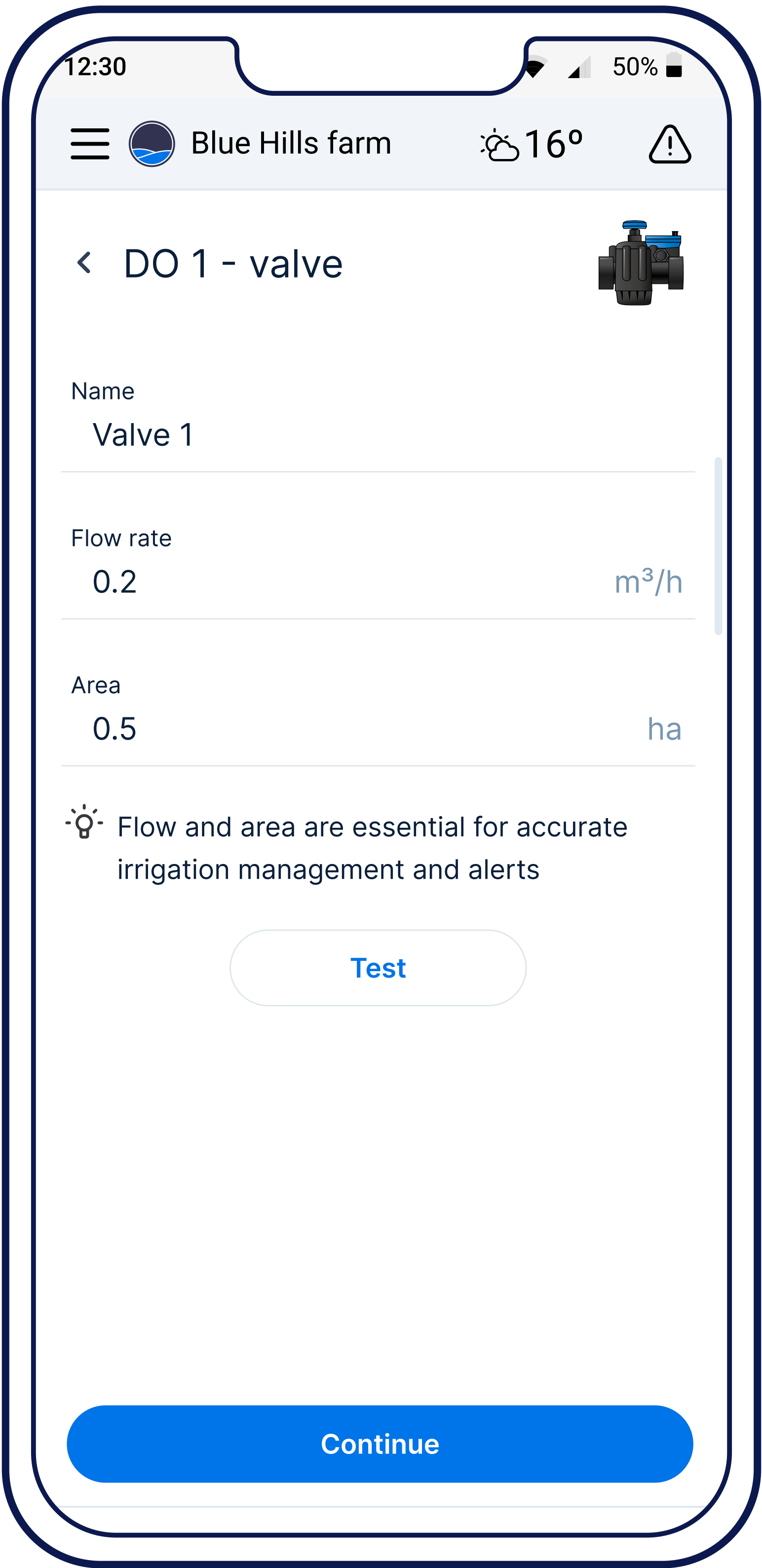
5. Define and configure specific device parameters for each connected instrument



Validate Data: Confirm that the measured flow values align with the parameters defined in the valve configuration.

App Installation

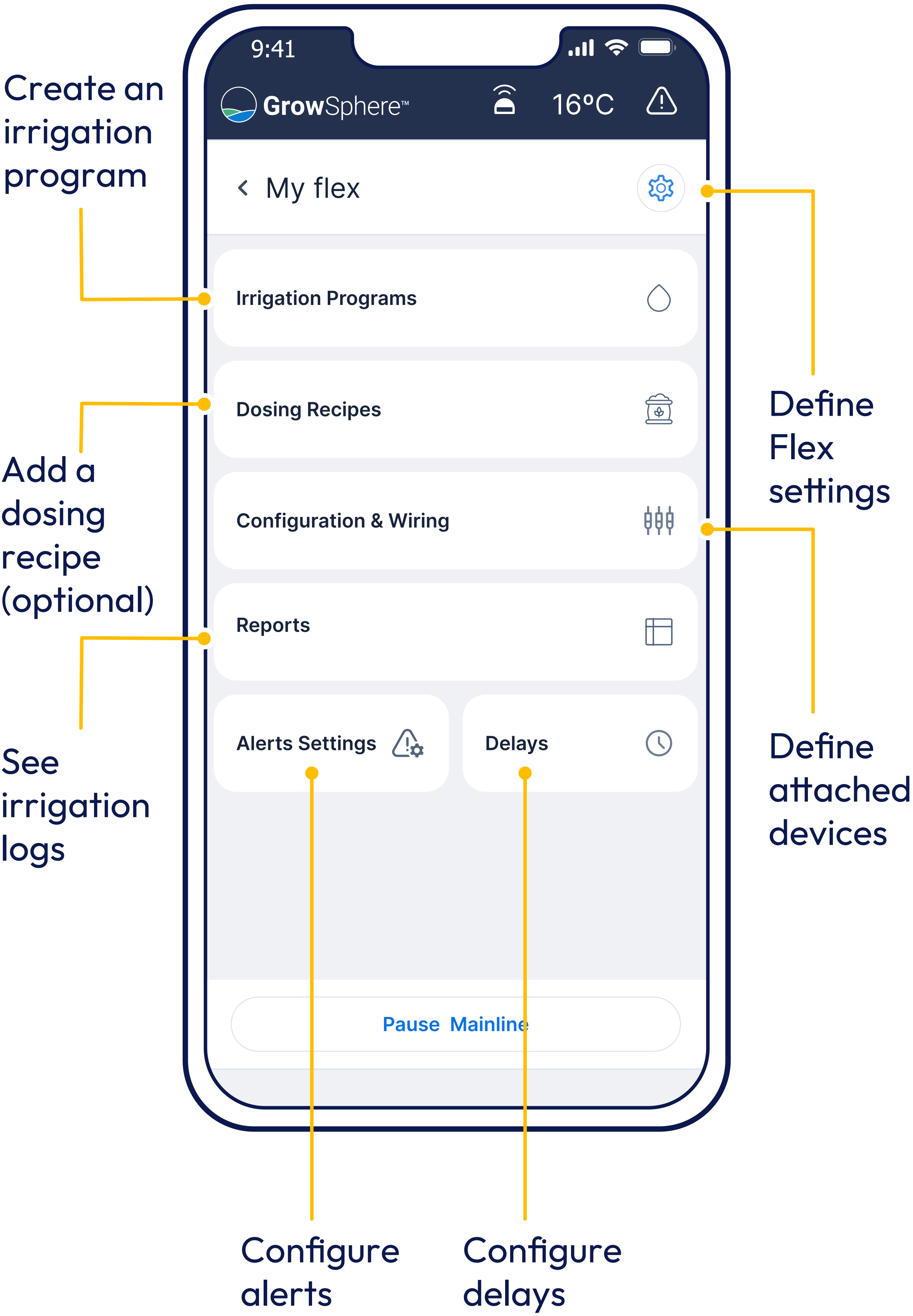
5. Define and configure specific device parameters for each connected instrument



Restore Alerts: Re-enable flow alerts once the configuration and validation are complete.

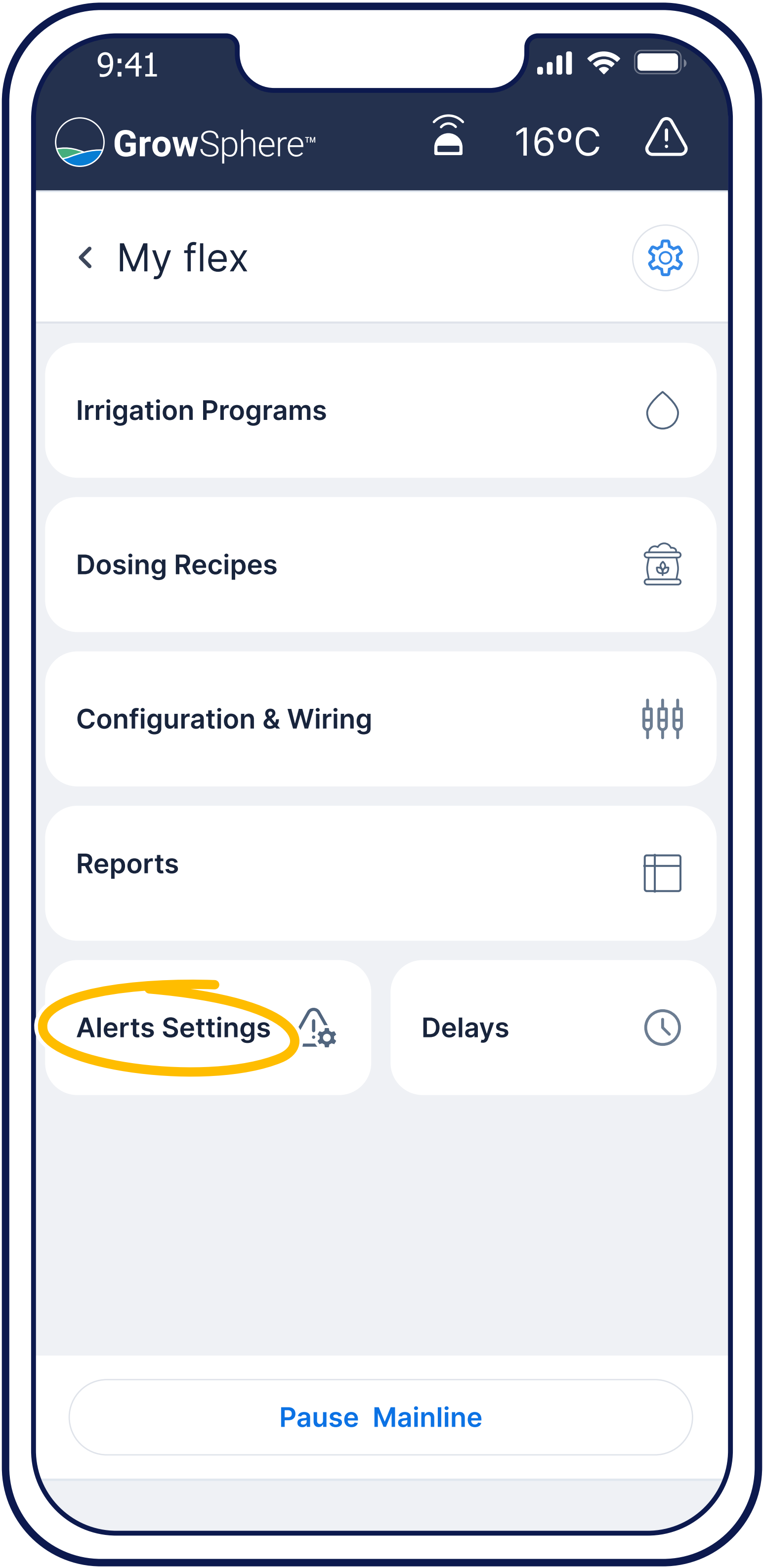
App Installation

6. Customize Your FLEX Settings



App Installation

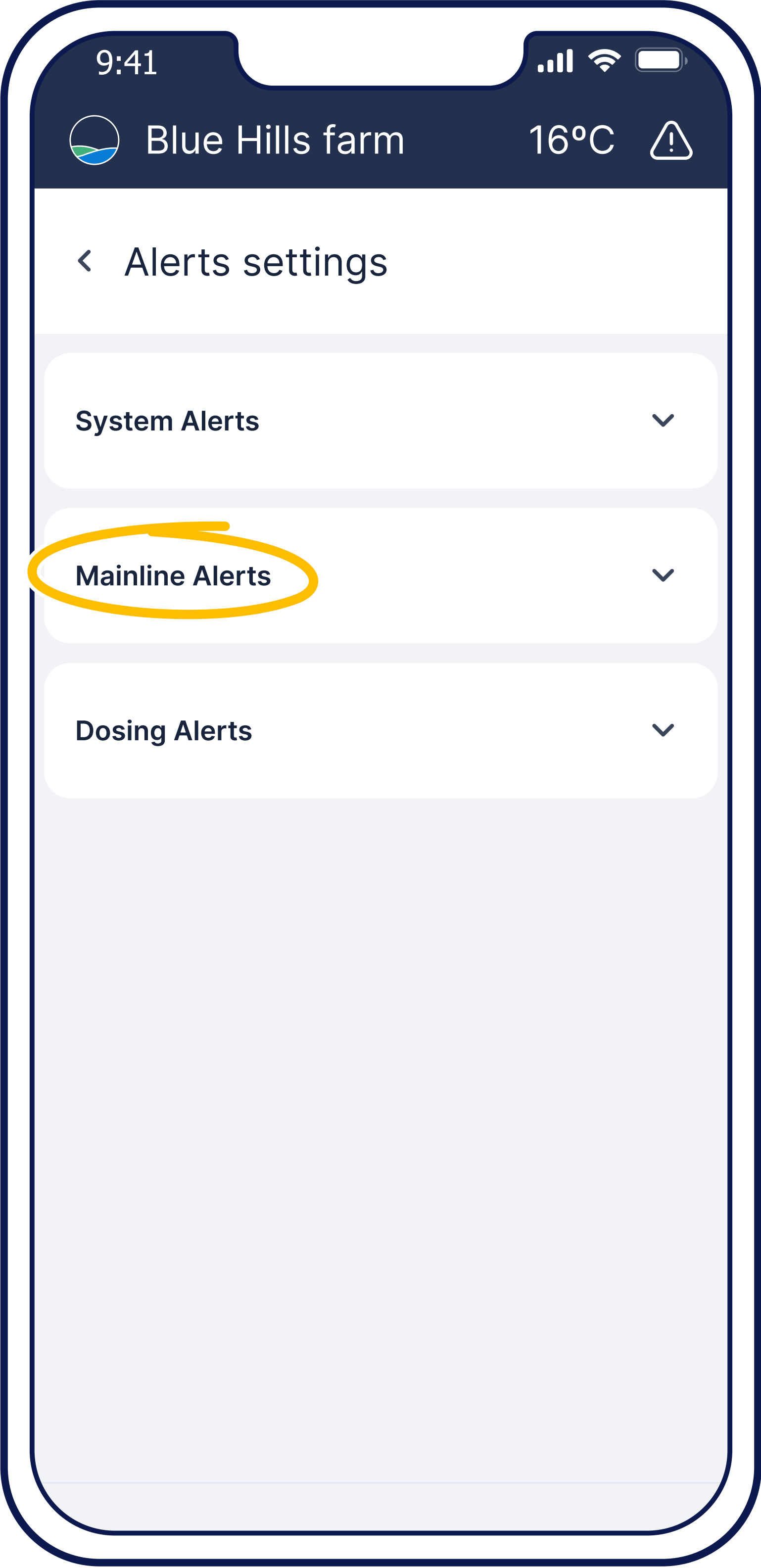
7. Set alerts



Access the ALERTS menu from the main FLEX dashboard

App Installation

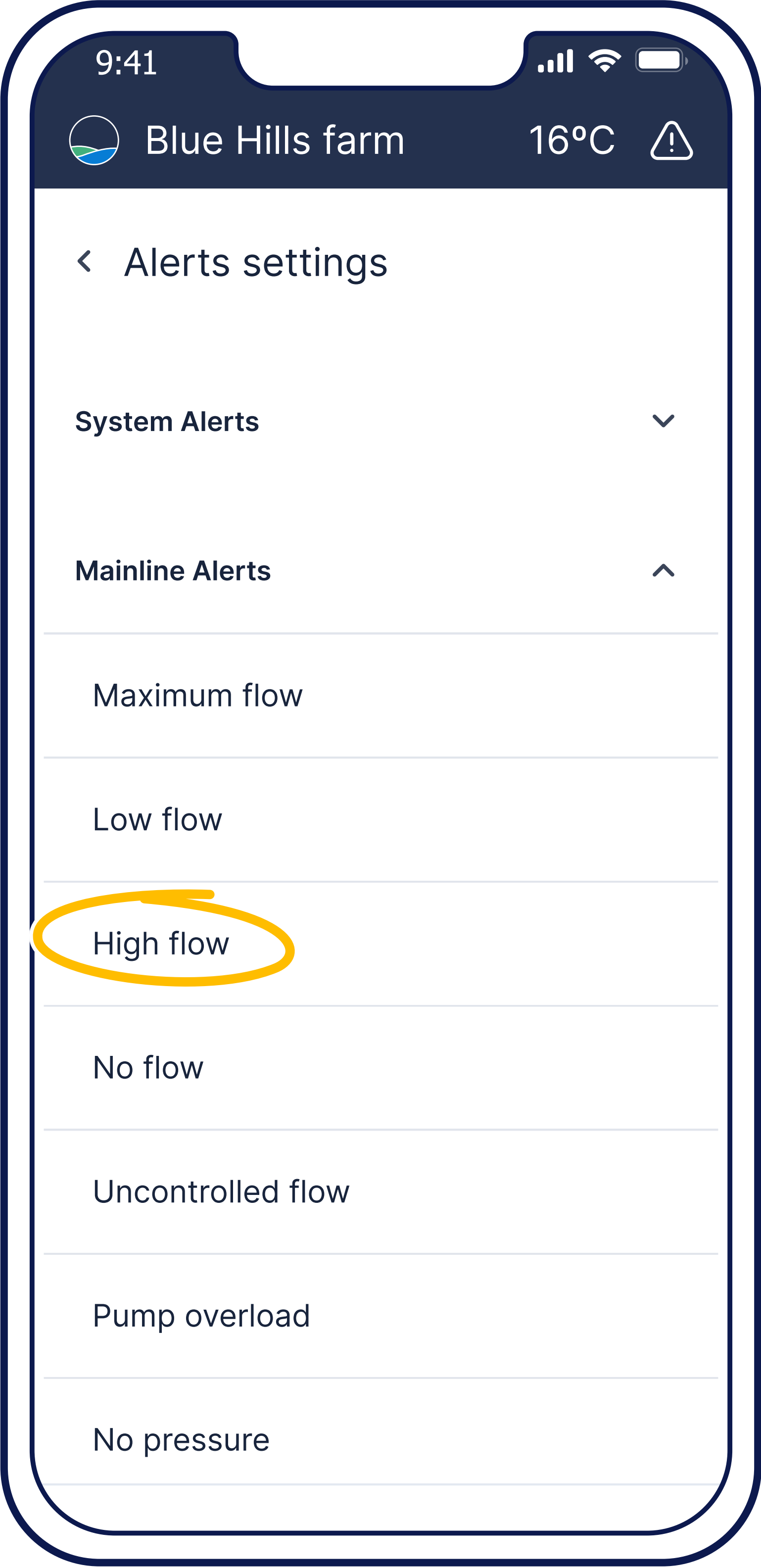
7. Set alerts



Tap Mainline alerts to see irrigation-specific alerts

App Installation

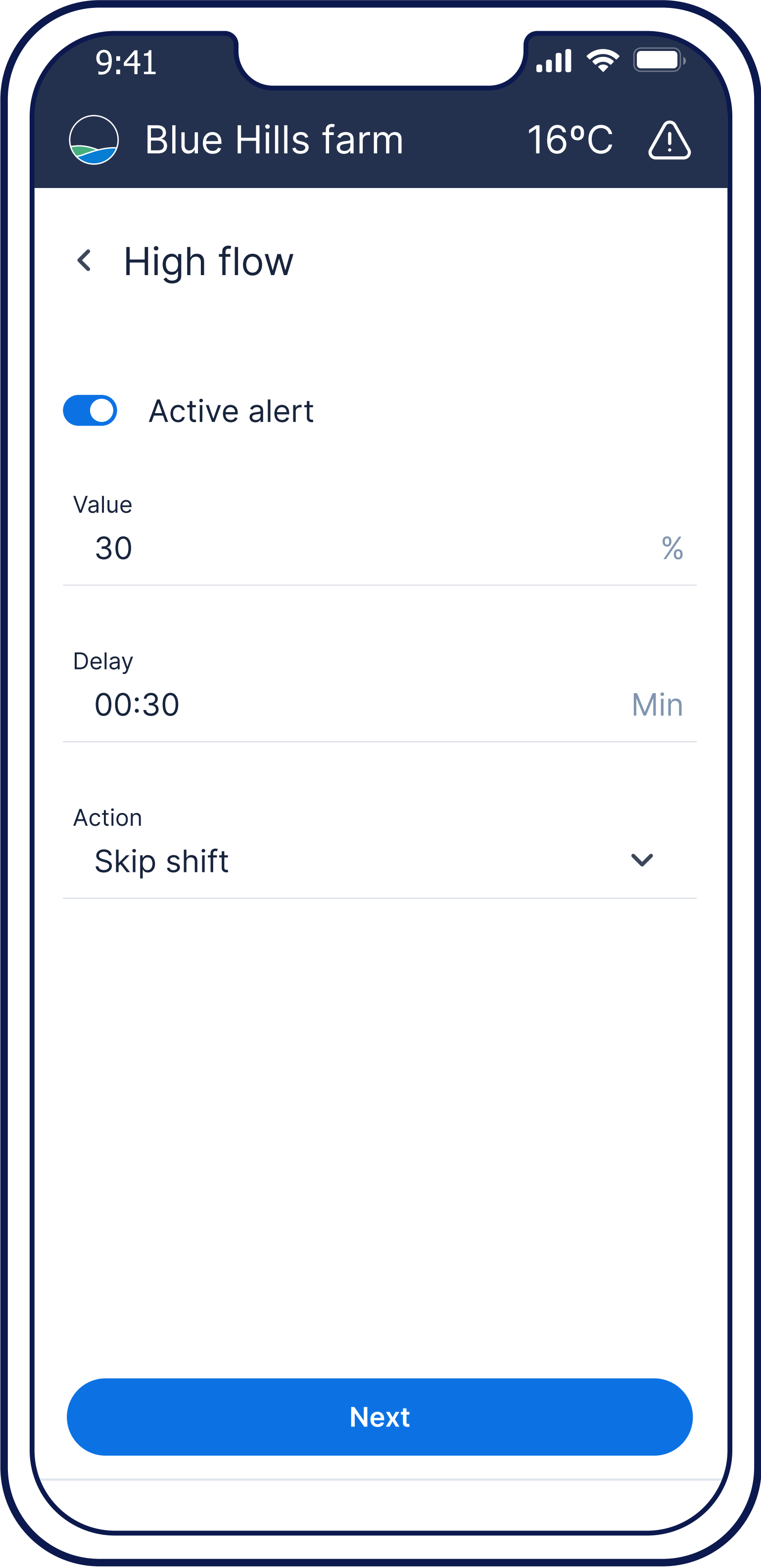
7. Set alerts



Select the specific alarm type, e.g. High flow

App Installation

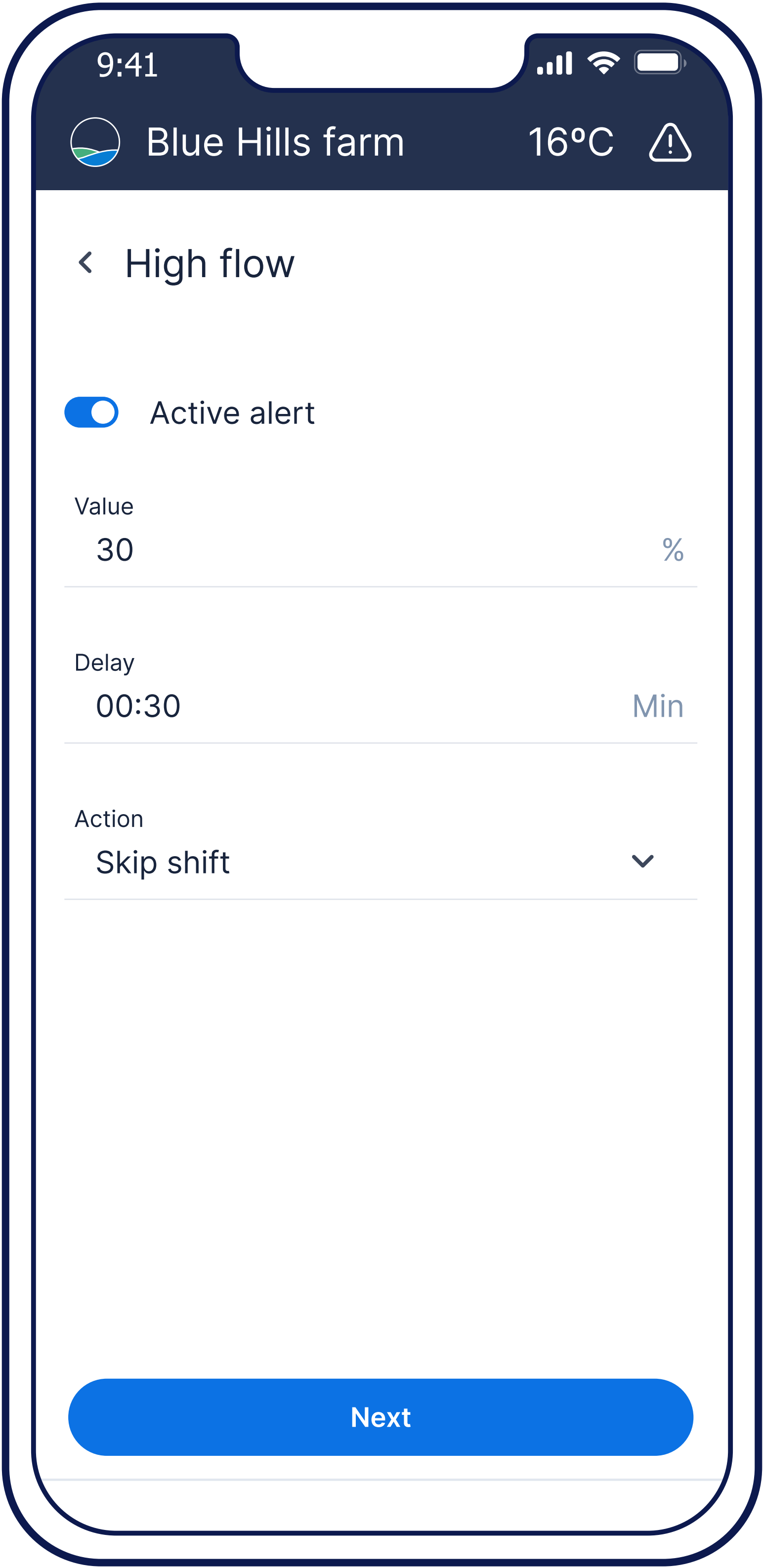
7. Set alerts



- Enable or disable this specific alert.

App Installation

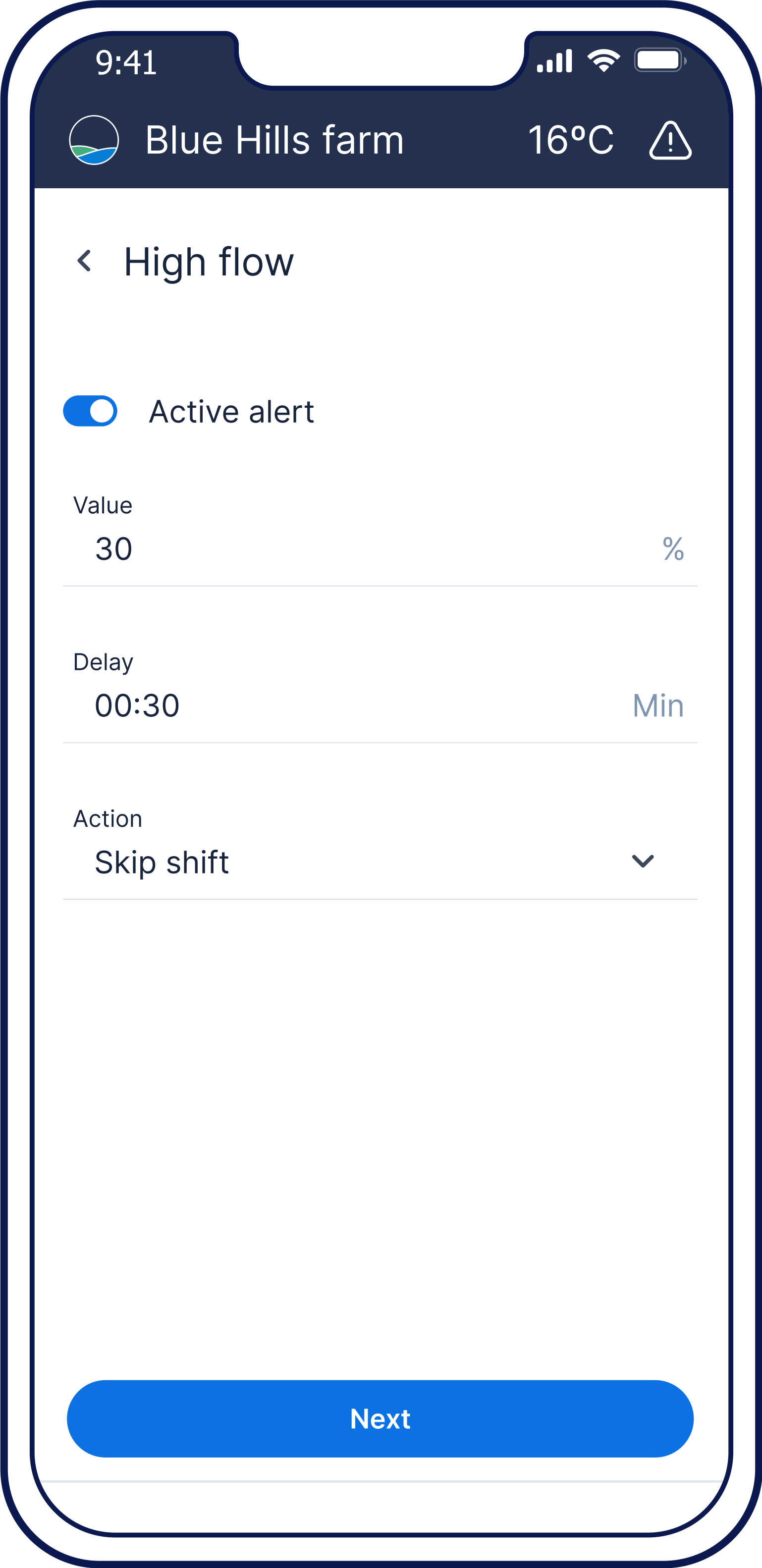
7. Set alerts



- Enable or disable this specific alert.
- Percentage above the expected flow rate to trigger the alert.

App Installation

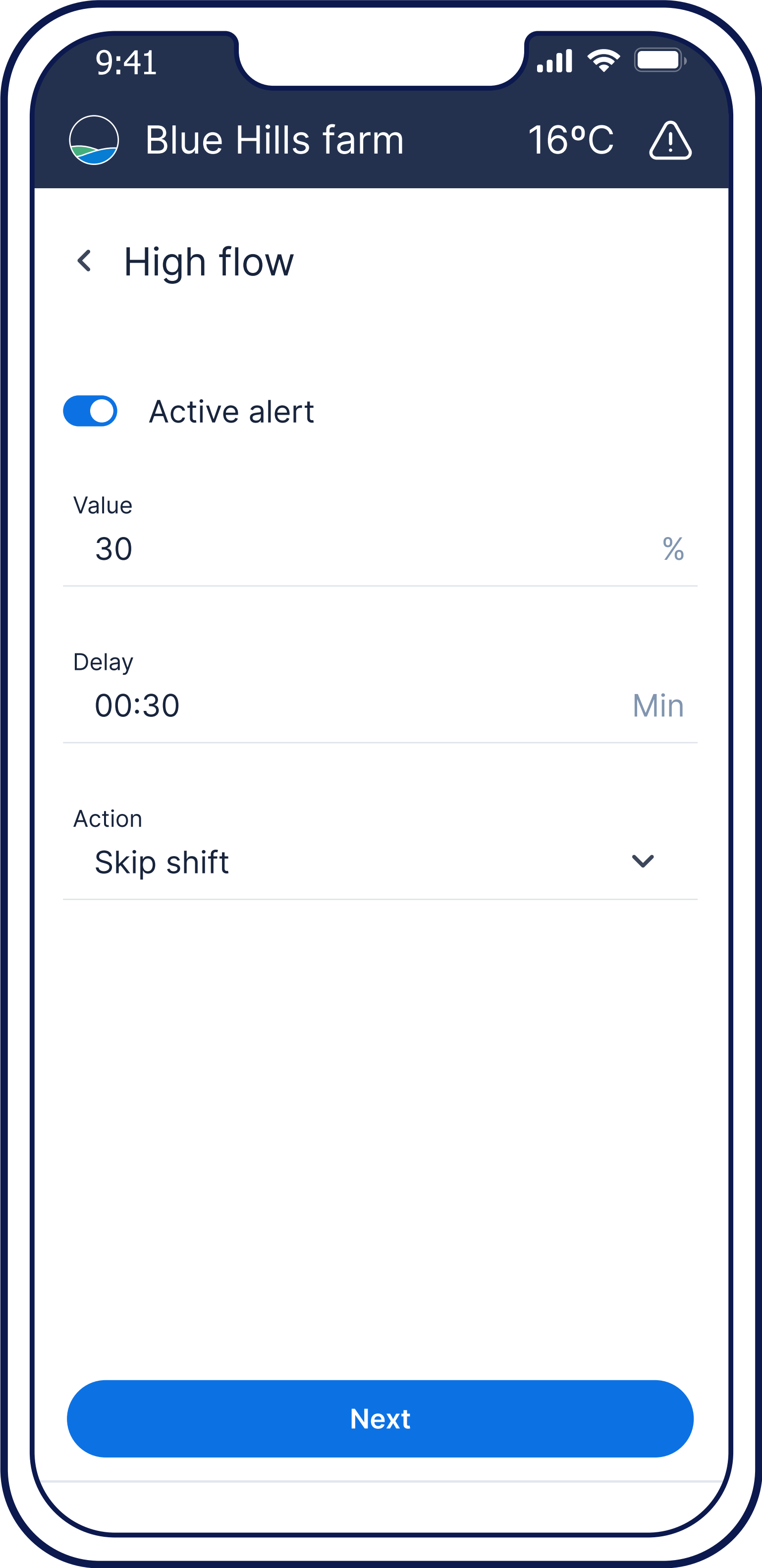
7. Set alerts



- Enable or disable this specific alert.
- Percentage above the expected flow rate to trigger the alert.
- Time duration before the alert is activated.

App Installation

7. Set alerts



- Enable or disable this specific alert.
- Percentage above the expected flow rate to trigger the alert.
- Time duration before the alert is activated.
- Choose the system response: Alarm only, Pause mainline, or Skip shift.

App Installation



Talk to us — we're here to help.
For resources, guides, documentation,
FAQs, videos, and support:

GrowSphere Support Center

Need technical help?
Open a support ticket directly:

GrowSphere Support Ticket

Whether you need troubleshooting,
onboarding help, product information,
or assistance getting the most out of
GrowSphere™, our team is ready to
support you.