## THANK YOU FOR CHOOSING ROBOTIO

This step-by-step guide will allow you to **install** and **use your AirPick Vacuum Gripper** on CB Series Universal Robots.



## 1.WHAT IS SUPPLIED?

Standard upon delivery of a Universal Robots kit:

- Vacuum generator.....(GRIPPER-AIRPICK)
- Gripper coupling.....(GRP-CPL-062)
- USB to RS485 Adapter....(ACC-ADT-USB-RS485)
- High-flex device cable...(CBL-COM-2065-10-HF)
- Suction cup
- 8 mm Air Tube (8 m)
- USB Stick
- Required Hardware



### 2.TOOLS YOU NEED





## **3.GET THE LATEST**

Visit support.robotiq.com

- Get the latest instruction manual (PDF or HTML).
- Download the applicable Robotiq\_Grippers-X.X.X.urcap.
- Copy the .urcap file on a USB stick.



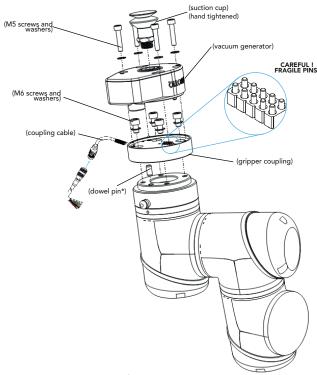


## **4.MOUNTING**

- Mount the gripper coupling on your robot arm. Align with the dowel pin\*.
- Secure by inserting the M6 screws and tooth lock washers.
- Mount the Vacuum Gripper on the gripper coupling.
   Align with the dowel pin.
- Secure by inserting the M5 screws and tooth lock washers.
- Plug the device cable into the Gripper's pigtail and fix the cable along the robot arm using a cable routing system.
- To install either a 2 or a 4 suction cups gripper, please refer to the Connector Assembly Guide. You can find details on assembling the Suction Cup System.
- Once the air tube is connected to the vacuum generator, ensure that the safety clip is in place.



- Maximum pressure allowed is 7 bar (Recommended pressure is 6.5 bar).
- Use dry and filtered air only. Follow standard ISO 8573-1, class 3.4.3.
- We recommend using a local pressure regulator with a filter and air dryer.



\* The dowel pin should fit tightly on the robot wrist, and loosely in the end effector.



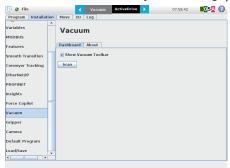
### **5.SOFTWARE INSTALLATION**

- Have a USB stick that contains the .urcap file (refer to step 3) and insert it in the robot's teach pendant.
- Go to Setup Robot.
- Tap **URCaps Setup** and tap the + button.
- Open the file Robotiq\_Grippers-X.X.X.urcap.
- Tap the **Restart** button, in the bottom right corner of the screen, to activate the URCap.

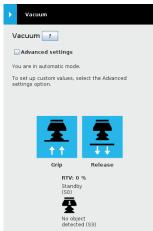


### 6. DETECTING THE GRIPPER

- Initialize the robot.
- Tap the **Installation** tab in the Header.
- Select **Vacuum** in the navigation pane on the left.
- Tap the **Scan** button to locate any connected gripper.



- Tap the **UR+** tab to expand the Vacuum Toolbar.
- The Vacuum Toolbar allows you to test the vacuum gripper.



Vacuum Gripper Toolbar



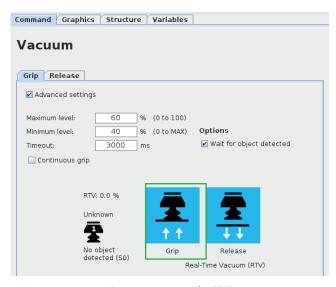
# 7. PROGRAMMING THE GRIPPER

#### Vacuum Node

- Tap the **Program** tab at the top of the screen.
- Tap the **Structure** tab.
- Tap the **URCaps** tab and select the Vacuum URCap.
- Tap the **Command** tab to edit the action of your gripper.

### To grip a part

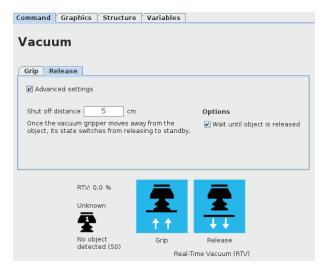
- In the Command tab, select the Grip tab;
- You can specify a range for the maximum and minimum vacuum levels (%), and specify a timeout (ms) by checking the **Advanced settings** box.
- To establish nominal values for your application, tap the Grip button.



Vacuum command - GRIP

#### To release a part

- In the Command tab, select the Release tab;
- If the Advanced settings box is checked, enter a Shut off distance (cm).
- To establish nominal values for your application, tap the Release button.



Vacuum command - RELEASE



**Vacuum Gripper** 



## **QUICK START GUIDE**

For installation on CB Series
Universal Robots



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