THANK YOU FOR CHOOSING ROBOTIQ

This step-by-step guide will allow you to **install** and **test your 2-Finger Gripper** on Universal Robots with a CB3 controller*.

*For installation with a Universal Robots CB2 controller, refer to the instruction manual.

1.WHAT IS SUPPLIED?

Standard upon delivery of a Universal Robots kit:

2-Finger Adaptive Gripper ...... (AGC-GRP-002 or -140)
Gripper Coupling .... (AGC-CPL-062-002)
Gripper Fingertips .... (AGC-TIP-204-002)
High-Flex Device Cable .... (CBL-COM-2065-10-HF)
USB to RS485 Adapter .... (ACC-ADT-USB-RS485)
USB Stick
Necessary Hardware

2.TOOLS YOU NEED

2 mm Slotted Screwdriver

4 mm Hex Key

3.GET THE LATEST

Visit: **support.robotiq.com**

• Get the up-to-date instruction manual (PDF or web browser).
• Get the latest **Robotiq_2-Finger_Adaptive_Gripper-X.X.X.urcap**.
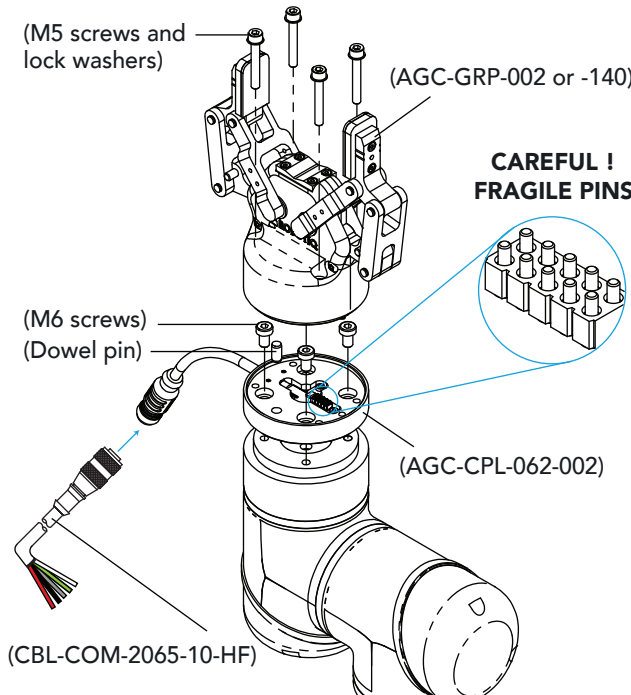• Download the .urcap file on a USB stick.

⚠ **BEFORE OPERATING THE GRIPPER, PLEASE READ INSTRUCTION MANUAL.**

4.MOUNTING

• Mount the coupling (AGC-CPL-062-002)on your robot arm. Align with the provided dowel pin*.

• Fix using the provided M6 screws (use of threadlocker is recommended).

• Mount the Gripper (AGC-GRP-002 or -140) on the coupling. Align with the dowel pin*.

• Fix using the provided M5 screws and lock washers.

• Plug the device cable (CBL-COM-2065-10-HF) into the Gripper's pigtail and fix the cable along the robot arm using a cable routing system.

(M5 screws and lock washers)

(AGC-GRP-002 or -140)

CAREFUL ! FRAGILE PINS

(M6 screws)
(Dowel pin)

(AGC-CPL-062-002)

(CBL-COM-2065-10-HF)

*The dowel pin is meant to have a tight fit on the robot side and a slip fit on the effector side of the assembly.
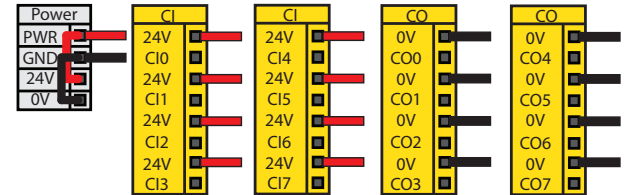
⚠ **LEAVE ENOUGH EXCESS CABLE TO ALLOW FULL ROBOT MOVEMENT.**

5.WIRING

• The red (24V) and black (0V) wires of the device cable (CBL-COM-2065-10-HF) provide power to the Gripper.
• Connect the red wire to a 24V pin.
• Connect the black wire to a 0V pin.

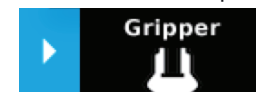• Connect the communication wires in the USB converter (ACC-ADT-USB-RS485) as shown.

(1) **485+**
(2) **485-**
(3) **485 GND**

Pin	Signal Name	CBL-COM-2065-10-HF High-Flex Device Cable
1	**485 + (A)**	WHITE
2	**485 - (B)**	GREEN
3	**485 GND**	SHIELD

• Connect the USB converter to the UR controller.
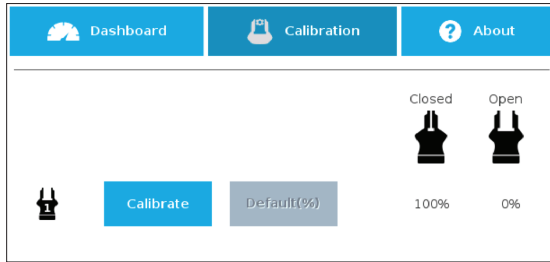
6.SOFTWARE INSTALLATION

• Have a USB stick that contains the **.urcap** file (step 3).
• Insert the USB stick in the robot's teach pendant.
• Tap **Setup Robot** and then **URcaps Setup**.
• Tap the **+** sign.
• Open **Robotiq_Grippers-X.X.X.urcap.**
• Tap the **Restart** button to activate the URCap.
• The Gripper toolbar button will display a short time after the installation of the software is completed.

Gripper

7. HOW TO CALIBRATE THE GRIPPER

- From a robot program, go to the **Installation** tab and select **Gripper** in the left pane.
- Tap the **Calibration** tab.
- Tap the **Calibrate** button next to the Gripper icon to start the Calibration wizard.

- The wizard prompts the user to fully **close** the Gripper, regardless of the type of fingers/fingertips used.
- Measure the distance between the fingers/fingertips and enter the measurement in the appropriate box.
- Tap the **Continue** button.

- The user is then asked to fully **open** the Gripper.
- Measure the distance between the fingers/fingertips and enter the measurement in the appropriate box.
- Tap the **Continue** button to complete the Calibration wizard.

8. TEST AND JOG THE GRIPPER

- Tap the **Gripper** button to expand the Gripper toolbar.
- Tap **Activate** to initialize the Gripper and access the toolbar.

- The Gripper toolbar allows you to jog and test the Gripper. For more information, refer to the instruction manual.

- Depending on the PolyScope settings used, the Gripper position measurements can either display in metric or imperial units.

9. HOW TO PROGRAM THE GRIPPER

- From your robot program, go to the **Structure** tab.
- Go to the **URCaps** tab.
- Tap the **Gripper** button.
- Go to the **Command** tab to edit your Gripper's action.
- More information on how to program the Gripper using the URCap can be found in the instruction manual.

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ADAPTIVE GRIPPER 2-FINGER 85 & 140

QUICK START GUIDE

For installation on Universal Robots