

THANK YOU FOR CHOOSING ROBOTIQ

This step-by-step guide will allow you to **install and use** your **2-Finger Adaptive Gripper** on Universal Robots **CB-Series** robots.



1. WHAT IS SUPPLIED?

Standard upon delivery of **AGC-UR-KIT-002 or -140**

2F-85 Basic gripper unit.....(AGC-GRP-2F85)

or 2F-140 Basic gripper unit.....(AGC-GRP-2F140)

Gripper coupling.....(GRP-CPL-062)

High-flex device cable.....(CBL-COM-2065-10-HF)

Required hardware



2. TOOLS YOU NEED



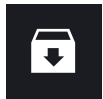
2mm
slotted screwdriver



2mm
hex key



4mm
hex key



3. GET THE LATEST

Visit: support.robotiq.com

DOWNLOADING THE URCAP

1. Go to **Select brand > Universal Robots > 2F-85 and 2F-140 Grippers > Software > Gripper Software**.
2. Select **DOWNLOAD ZIP**.
3. Save the ZIP file **UCG-X.X.X** to a USB stick.

DOWNLOADING THE INSTRUCTION MANUAL

Go to **Select brand > Universal Robots > 2F-85 and 2F-140 Grippers > Documents > Gripper Instruction > Download PDF**.



BEFORE OPERATING THE GRIPPER, PLEASE READ YOUR INSTRUCTION MANUAL.



4. MOUNTING

- i** For easier mounting, move the robot tool flange to make it point upwards.

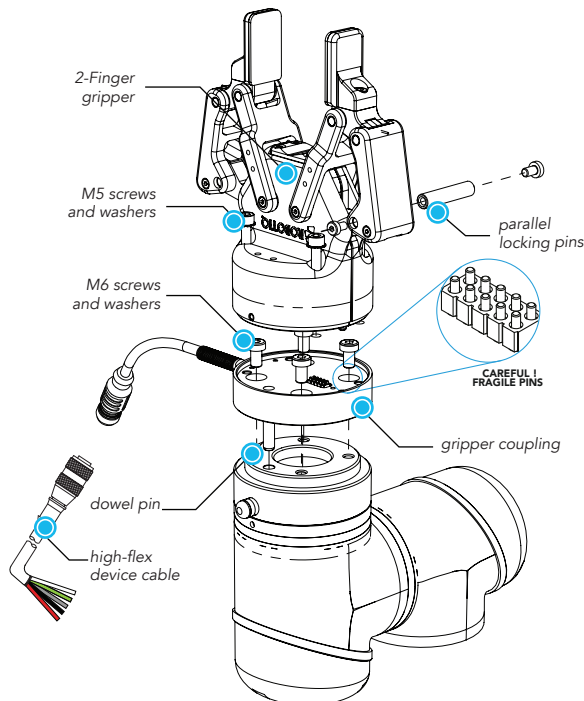
MOUNTING THE GRIPPER COUPLING

1. Insert the provided dowel pin into the tool flange.
2. Mount the gripper coupling on the tool flange of the robot. Align with the provided dowel pin.
3. Secure the gripper coupling on the tool flange with the provided M6 screws and tooth lock washers.

MOUNTING THE 2-FINGER GRIPPER ON THE GRIPPER COUPLING

1. Align the 2F gripper on the coupling, using the dowel pin of the 2F gripper.
2. Secure the 2F gripper to the coupling with the provided M5 screws and tooth lock washers.
3. Plug the high-flex device cable into the gripper coupling pigtail, and route the cable along the robot arm.

- i** Parallel locking pins can be installed to perform parallel grasps only. For more details, see the instruction manual.



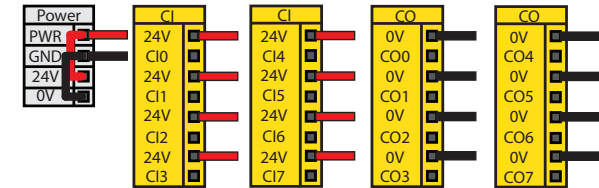
LEAVE ENOUGH EXCESS CABLE TO ALLOW FULL ROBOT MOVEMENT.



5. WIRING

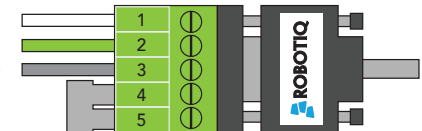
- i** The red (24V) and black (0V) wires of the device cable provide power to the gripper.

1. Connect the red wire to a **24V** pin.
2. Connect the black wire to a **0V** pin.



3. Connect communication wires to the USB converter.

- (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

4. Connect the USB converter in the robot controller.



6. INSTALLING SOFTWARE

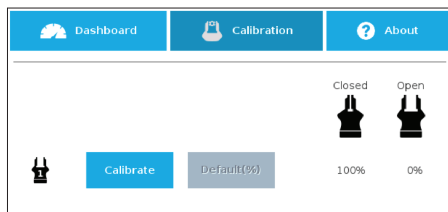
1. Have a USB stick that contains the **.urcap** file (see section 3).
2. Insert the USB stick in the robot teach pendant.
3. Tap **Setup Robot > URCaps Setup**.
4. Tap the **+** sign.
5. Open **Robotiq_Grippers-X.X.X.urcap**.
6. Tap **Restart** to activate the URCap.
7. The **Gripper** toolbar will display shortly after completing the installation.






7. CALIBRATING THE GRIPPER

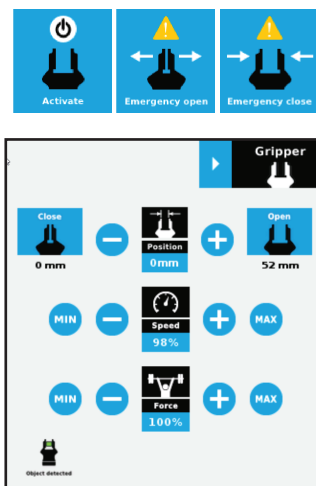
1. Access a robot program.
2. Select the **Installation** tab.
3. Select the **Gripper** node.
4. Select **Calibration**.
5. To start the Calibration wizard, tap **Calibrate**.
6. Follow instructions provided by the teach pendant calibration wizard.
7. Select **Finish** to save your calibration settings.



8. TESTING AND JOGGING THE GRIPPER

1. To initialize the gripper and access the toolbar, select **Gripper > Activate**.
 2. Jog and test the gripper as required.
- For more details, refer to your gripper instruction manual.

 Measurements can be displayed either in metric or imperial units. This is based on PolyScope settings.



9. PROGRAMMING WITH GRIPPER NODES

NODE: GRIPPER

1. Access a robot program.
2. Go to **Structure > URCaps > Gripper > Command**.
3. Edit your gripper action.

NODE: GRIP CHECK

1. Access a robot program.
2. Go to **Structure > URCaps > Grip Check > Command**.
3. Edit grip check.
4. If required, specify a condition (e.g. object detected vs. object not detected).
5. If applicable, enter object dimension for validation.



2F-85
2F-140

QUICK START GUIDE

For installation on
CB-Series
Universal Robots



This product is under a 1-year warranty.
Refer to your product instruction manual for details.

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November 2021
X-990013-C



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