# THANK YOU FOR CHOOSING ROBOTIO

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



### I.WHAT IS SUPPLIED?

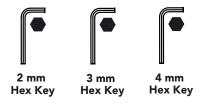
Standard upon delivery of a Universal Robots kit:

2-Finger Adaptive Gripper.	.(GRIPPER-2F85 or -2F140)
Gripper Coupling	(GRP-ES-CPL-062)
Connection Protector Kit	(GRP-ES-CPL-PRO)
Parallel Locking Pins	(AGC-PARA-KIT)
USB Stick	

**Necessary Hardware** 



### 2.TOOLS YOU NEED





## **3.GET THE LATEST**

Visit: support.robotiq.com

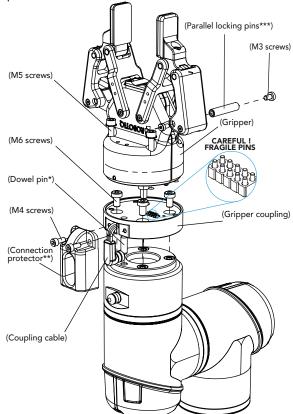
- Get the up-to-date instruction manual (PDF or web browser).
- Get the corresponding Robotia Grippers-X.X.X.urcap.
- Download the .urcap file on a USB stick.



BEFORE OPERATING THE GRIPPER, PLEASE READ INSTRUCTION MANUAL.



- Mount the coupling (GRP-ES-CPL-062) on your robot arm. Align with the provided dowel pin\*.
- Fix using the provided M6 screws (use of threadlocker is recommended).
- Mount the Gripper (GRIPPER-2F85 or -2F140) on the coupling. Align with the dowel pin\*.
- Fix using the provided M5 screws and lock washers.
- Plug the coupling's cable in the robot's wrist connector.
- Cover the connection using the protector and the provided M4 screws.



- \* 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.
- \*\* Select the connection protector corresponding to your robot model in the GRP-ES-CPL-PRO kit.
- \*\*\*Parallel locking pins can be installed to perform exclusively parallel grasps with the Gripper. See instruction manual for more details.



### **5.SOFTWARE INSTALLATION**

- Have a USB stick that contains the .urcap file (step 3).
- Insert the USB stick in the robot's teach pendant.
- Tap the triple bar icon in the upper right corner and select the System menu on the left.
- Tap the URCaps submenu and then tap the + sign at the bottom of the screen.
- Open Robotiq\_Grippers-X.X.X.urcap.
- Tap the **Restart** button to activate the URCap.



# 6. ACTIVATE THE GRIPPER

#### **Gripper Activate Node**

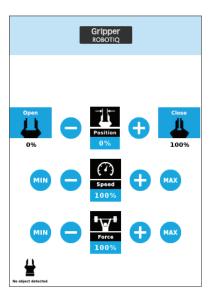
- Tap the **Installation** button at the top of the screen.
- Tap the **URCaps** button in the navigation pane on the left.
- Select **Gripper** in the dropdown list.
- Go to the Dashboard tab.
- Check the **Gripper is connected to the wrist** checkbox.
- Tap the **Scan** button to locate any connected Gripper.



• Once the Gripper is located, tap the **Activate** button.



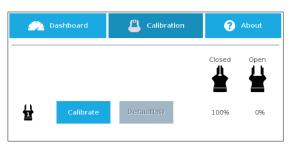
- Tap the **UR+** button to expand the Gripper Toolbar.
- The Gripper toolbar allows you to jog and test the Gripper. For more information, refer to the instruction manual.





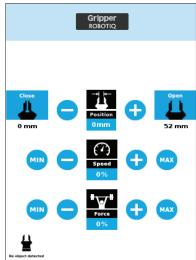
# 7. HOW TO CALIBRATE THE GRIPPER

- Go to the **Installation** tab, tap the URCaps menu on the left and select **Gripper**.
- 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.
- $\bullet$  The user is then asked to fully  $\mbox{\bf open}$  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.

 Tap the UR+ button to expand the Gripper Toolbar.
The Gripper position measurements can either display in millimeters or inches, depending on the PolyScope settings used.



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



# 8. USE NODES TO PROGRAM WITH THE GRIPPER

#### **Gripper Node**

- Tap the **Program** button at the top of the screen.
- Tap the **URCaps** button in the navigation pane on the left.
- Select **Gripper** in the dropdown list.
- Go to the **Command** tab to edit your Gripper's action.

#### **Grip Check Node**

- Tap the **Program** button at the top of the screen.
- Tap the **URCaps** button in the navigation pane on the left.
- Select Grip Check in the dropdown list.
- Go to the Command tab to edit the node.
- Select a condition (If object is detected vs. If object is not detected).
- If applicable, enter the object dimension for validation.

New product has a 1-year warranty from the above date. Refer to your product instruction manual for details.

#### support.robotiq.com

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V1.1



## 2F-85 & 2F-140 ADAPTIVE GRIPPERS

## **QUICK START GUIDE**

### For installation on e-Series Universal Robots

