



Congratulations on your purchase of **Gentle Duo**: A patent pending, mechanically intelligent robotic hand that automatically conforms around a large range of object sizes and shapes to pick them up, gently. Gentle Duo is the first electrically actuated soft robotic gripper and it offers individual finger actuation!

Product ID:

The Product ID of your Gentle Duo is **[serial number]**. Please note your product ID and refer to it when you contact us.

How to Mount:

We are including a mechanical adapter to mount Gentle on your robotic arm. If you need different/additional adapters, please let us know at info@ubiros.com and we will be happy to help you. See the mechanical interface below.

How to Setup:

Gentle Duo is pre-programmed to host its own WiFi Access Point. To program settings, please connect power (typically 24 V, 1 A) and direct any WiFi-enabled device to the WiFi Network named “Ubiros-<Product ID>”. Please note that this WiFi network is used for setup only and not connected to internet. The WiFi password is “GentleUbiros”. After a connection is established, your device may automatically open a web page within a few seconds. If this doesn’t happen, please open any browser and go to:

<http://192.168.4.1/>

At this page, you will be able to adjust open/close percentages and offset finger positions as desired for your application. In open and close percentages, a 0 corresponds to fully open fingers, while 100 is a fully closed gripper. In practice, we rarely use the full range and find that a 20-30% range of operation is sufficient for most objects. We have tested Gentle for 500,000 cycles between 0 and 100.

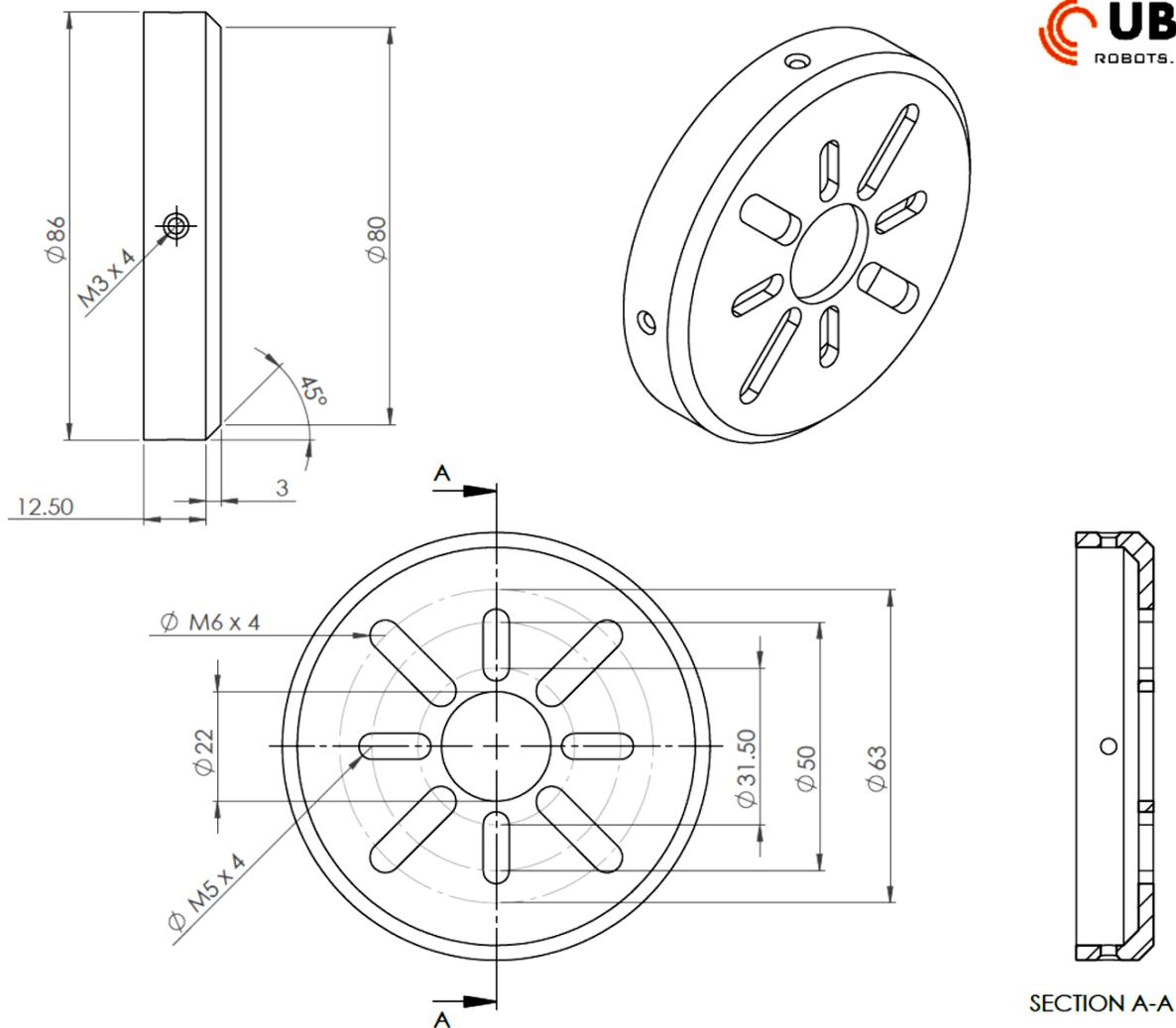
After making any adjustments, if you click the “Test” button, Gentle will demonstrate the new settings by opening and closing the fingers for 1 second. After the test, Gentle will use your latest settings until a power cycle. If you click the “Set” button, Gentle will save these settings in its long-term memory which will survive a power cycle.

How to Operate:

Gentle Duo requires 12–24V and 24 Watt power and takes in a digital input signal of up to 24V to open and close the fingers to predefined positions. The digital input line is pulled up internally such that the normal level of the signal is at a digital HIGH, which corresponds to an open state of the fingers. A LOW signal would result in closing the fingers. Use our URCAPS on Universal Robots arms for simple operation. Please note we provide a short connector cable for the wrist connection on UR e-series.

For other robots including UR CB-series, the provided connection cable comprises 3 wires (GND, 12-24V, digital input). You can connect these wires to appropriate pins at your end of arm tool connector or the control box connector to drive your Gentle Duo with a simple digital pin.

Mechanical Interface:



If you have any questions whatsoever, we will be pleased to work with you.

We are excited to see what you will do with your Gentle Duo! Please do let us know.

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