

**Family Datasheet** 



# **R12 Electric Gripper Datasheets**





## **EG12**

The R12 has a range of different electric grippers available that can be purchased as an option together with the robot. The range comprises:

E1 – a fulcrum gripper with styled fingers ready to use

- E2 a fulcrum gripper with jaws to which you can fit your own fingers
- EG12 a parallel action gripper

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# R12 Electric Gripper Family Datasheet





### **Fulcrum Gripper – E1**

The E1 gripper for the R12 robot arm is an electric gripper employing a DC motor and leadscrew to drive the gripper fingers. This unit has specific styled fingers.

The gripper is supplied ready fitted to the robot and can not be retro-fitted. The option comprises the gripper, connectors on the robot arm and a driver circuit in the robot controller. No extra attachments are required between the robot and the controller.



The E1 gripper is the standard model in our R12 series of electric grippers which features pre-designed stylised fingers with high friction rubber tips.

The E1 gripper can collect and manipulate any items that can fit within the 30mm separation of the two fingers.

#### **Specifications**

Gripping Force: 5N Operating Temperature: 0 - 40°C Total Stroke: 30mm (15mm per finger) Time to close/open: 500ms

## **Applications and uses**

Typical applications include pick and place routines, product handling and manipulation.

The fingers are specifically modelled into a designed shape making them instantly ready for use without further preparation or finger design. The E1 gripper is therefore ideal for education and training.

Technical support: support@strobotics.com Telephone: +44 122 342 0288





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## **Fulcrum Gripper – E2**

The E2 gripper is an electric gripper employing a DC motor and leadscrew to drive the gripper fingers.

The gripper is supplied ready fitted to the robot and can not be retro-fitted. The option comprises the gripper, connectors on the robot arm and a driver circuit in the robot controller. No extra attachments are required between the robot and the controller.

### **Features and specifications**

The E2 gripper is very similar to the E1 in design however the jaws feature tapped holes to allow for custom fingers to be fitted.

By utilising the two tapped holes on each finger you can customise the gripper to directly suit your needs and thus grip a very wide variety and range of sizes of items to be handled.

#### **Specifications**

Gripping Force: 5N approx. depending on fingers. Operating Temperature: 0 - 40°C Total Stroke: 37mm (18.5mm per finger) Time to close/open: 500ms



## **Applications and uses**

Typical applications include pick and place routines, manipulation and orientation of test items and laboratory based projects.

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**Parallel Gripper – EG12** 

The EG12 kit features a high precision D.C. Powered linear parallel gripper with a large reach and tapped holes on the jaws to allow for complete customisation for the user.

The gripper is supplied ready fitted to the robot and can not be retro-fitted. The option comprises the gripper, connectors on the robot arm and a driver circuit in the robot controller. No extra attachments are required between the robot and the controller.

### **Features**

Using a hybridisation of high strength plastics and aluminium the attachment is light while also strong enough for rigorous tasks.

Unlike the E1/E2 the EG12 jaws are a parallel action. The jaws feature tapped holes on to which you can attach your own fingers shaped according to the requirements of the products to be handled.

EG12 also has a more powerful motor than E1/E2 resulting in much faster grip/ungrip time.

#### **Specifications**

Gripping Force: 5N Operating Temperature: 0 - 40°C Total Stroke: 22mm (11mm per jaw) Time to close/open: 200ms

### **Applications and uses**

Typical applications include pick and place routines, manipulation and orientation of test items and laboratory based projects.

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