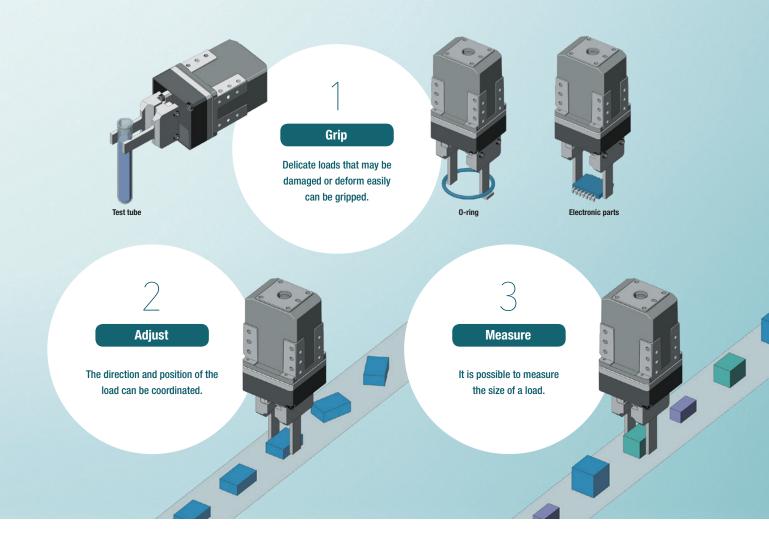
The On-Board **AZ** Series Provides a Delicate Grip.

A delicate grip is achieved by fine-tuning the grip force in 1% operating current increments and implementing a slow approach to the load.

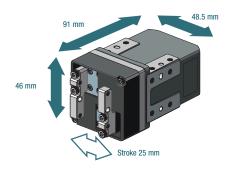


Contributes to the Reduction of Equipment Size.

Small and Lightweight

91 mm \times 46 mm \times 48.5 mm in size, and weighs 380 g.

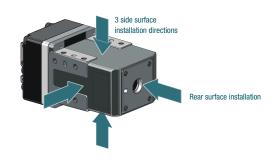
The combination of a motor with a frame size of 28 mm and the rack-and-pinion mechanism results in smaller equipment. With a 25 mm stroke available to grip the load.



Multi-Surface Installation OK

Installation in various directions is possible.

The design is compatible with multi-surface installation, making it ideal for installation on robotic arms, etc.



Grip

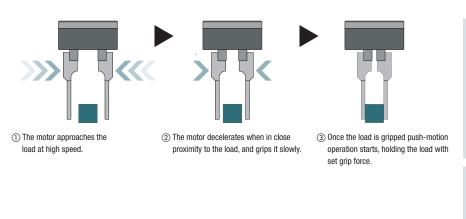
Reliably Grip Loads that may Easily Deform or Break.

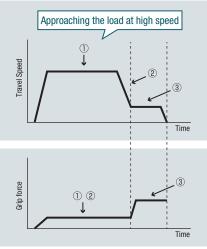
Easily set the grip force, grip time, and speed according to the object being gripped.

Safely and reliably grip objects that may easily break, such as glass, and objects that easily deform, such as plastic or springs.

Quick Approach, Slow Grip

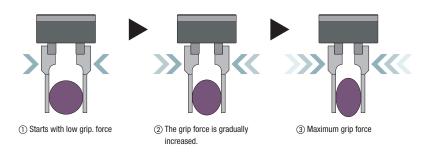
The motor approaches the load at high speed, then decelerates just before contacting the surface at low speed.

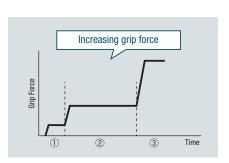




Grips at Low Grip Force, then Gradually Increases the Force

Pushing force and timing can be easily changed.





Grip Force Characteristics during Push-Motion Operation

The grip movement of the electric gripper works by utilising push-motion operation. The pushing force (grip force) is set according to the running current of the motor.

Grip Force and Operating Current [Reference values]

30
25
20
30
25
15
00
10
20
30
40
50
60
70
80
90
100

Operating Current [%]

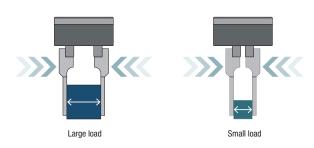
Maximum grip force **25 N**[Grip force range (reference value) Approx. 6 N~25 N]

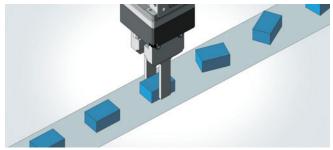
• Push-motion operation speed max. 10 mm/s (per side)

2 **Adjust**

The Direction and Position of the Load can be Coordinated.

The minimum travel distance between the pincers - attached to the base jaws - is 0.02 mm. The direction and position of components can be coordinated by gripping them according to their size.





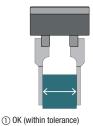
Pincers are not included with the product, and must be supplied by the customer.

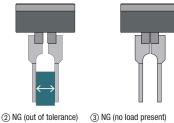
Measure 3

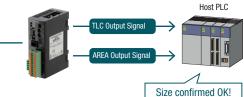
The Size of the Load can be Verified without an External Sensor.

The Size and Presence of a Load are Determined within the Operational Range of the Pincers

The operational range of the pincer is confirmed by the output signal (TLC output, AREA output) from the driver, allowing the size and presence of a load to be determined.





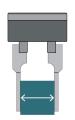


Work gripped OK!

- ①② Determine of size of load
 - The position of the attachment when the load is gripped is confirmed, allowing for sorting by size.
- (3) Detect the presence of a load Determine whether or not a load is gripped.
- * AREA output: This signal is output when the motor is in a set area. TLC output: This signal is output during push-motion operation when the output torque reaches a set torque limit value.

Monitor the Gripper Position to Measure Size

The Coordinates Information Monitoring Function in the driver sends data from the gripper to the host PLC, allowing the size of the load to be measured.



Measure the load size



^{*} Coordinates information monitoring function: This function sends position data to the host system.

Product Line



Built-in Controller Type <u>CFLEX</u>

The positioning data is set in the driver (256 points). Using a network converter (sold separately) facilitates control via FA network



AZ Series Driver (DC Input)

Pulse input type with **RS-485** communication

RS-485 communication allows the motor's position, speed, torque, alarm, and temperature to be monitored.



Pulse Input Type

Controls the motor from a positioning module (pulse generator).



Network-Compatible Multi-Axis Driver

- SSCNETIII/H-compatible
- MECHATROLINKIII-compatible
- EtherCAT-compatible

