

DM Series

Small as a business Card!



Tiny electric cylinder

With built-in Servo motor for enhanced compactness, lightness, and convenience.



9001^{ISO} 14001^{ISO} 18001^{OHSAS}

Electric Gripper

TOYO 2019
CH Series

Comparable to the cost of pneumatic gripper!

Control of Positioning and Speed

High Stiffness/High Accuracy



TOYO Product Lineup

Electric Actuator Series



Servo Cylinder Series



Linear Motor Robots Series



Single Robots Series



AGVS Series



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Electric Gripper | Lineup

ACME Lead Screw Type

CHZ Series

- Closed-Loop Stepping Motor
- Max.Stroke 14mm
- Max.Speed 50mm/s
- Max.Gripping Force 98N

Low Cost. Replace pneumatic gripper Easily.

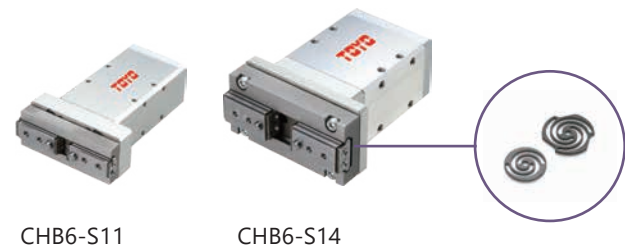


Cam Structure Type

CHB6 Series

- Closed-Loop Stepping Motor
- Max.Stroke 14mm
- Max.Speed 100mm/s
- Max.Gripping Force 7N

Compact and tiny torque control.



The high gripping force was actualized with light and compact size by the peculiar cam structure.

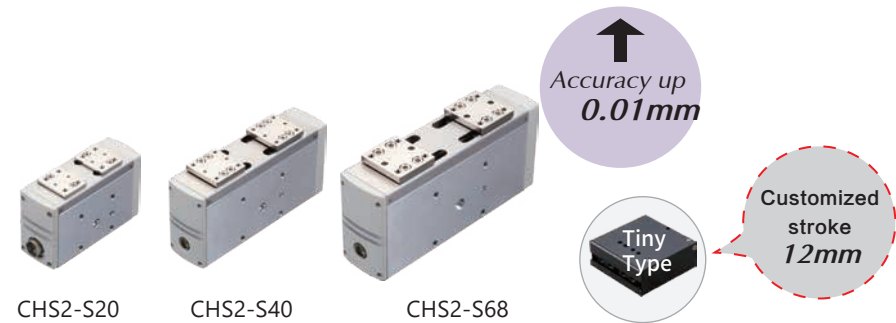
Built-in Guideway

Ball Screw Type

CHS2 Series

- Closed-Loop Stepping Motor
- Max.Stroke 68mm
- Max.Speed 50mm/s
- Max.Gripping Force 509N

High Accuracy Ground Ball Screw Used.

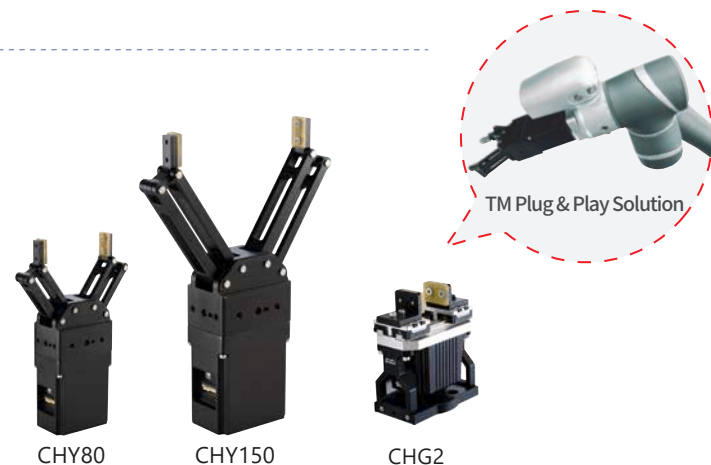


Long-Stroke Type

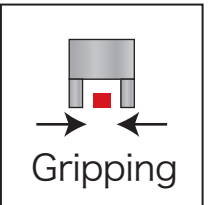
CHY/CHG2 Series

- Closed-Loop Stepping Motor
- Max.Stroke 150mm
- Max.Speed 200mm/s
- Max.Gripping Force 120N
- Built-in Controller
- Input Voltage DC24V

Suitable for Human-machine cooperation robot.



Control System | Features



Suitable for CHZ、CHB6、CHS2 Series.

1 Multi-position Control Gripping Force Control

127 points position can be set. Gripping force is settable in 1% unit from 30% to 100%.

2 Measuring Workpiece Workpiece check Function

With the position control function, the size measurement can be achieved 0.01mm. You also can utilize the HOLD output signal to check if the gripper fails to grip a workpiece or drops, without using a sensor.

3 Speed / Acceleration control

The speed and acceleration can be set within 100 mm/s. 1% unit set, the speed will change 1mm/s. Multi-speeds could be set too.

4 Communication format is open Flexible Control

Gripping force and speed can be controlled directly through communication signal(RS485). PLC can drive the electric gripper flexibly.

Control	Driven By	Model	Repeatability (mm)	Max.Stroke (mm)	Max.Speed (mm/s)	Gripping Force (N)												
						5	10	20	30	40	50	60	70	80	90	100	150	200
TC100 Controller	Screw	CHZ20	±0.02	10	50	22-98												
		CHZ25		14	50	22-98												
	Cam	CHB6-S11	±0.02	11	100	0.72-2.4												
		CHB6-S14		14	100	2.1-7												
	Ball Screw	CHS2-S20	±0.01	20	33	51-124												
		CHS2-S40		40	41	111-256												
CHS2-S68		68		50	114-509													
Built-in Controller	Cam	CHG2	±0.05	30	150	4.5-15												
		CHY80		80	200	32-120												
	Shaft	CHY150	150	200	12-45													



1 Built-in controller Saving wiring

- Gripper and controller integrated, one piece design.
- With optional flange, CHY/CHG2 gripper can connect robot end directly.
- Plug and play. Saving time and convenience.

2 Setting is simple

Set up the unit rotary switch before turning the power supply ON, and set the speed and gripping power as below.

