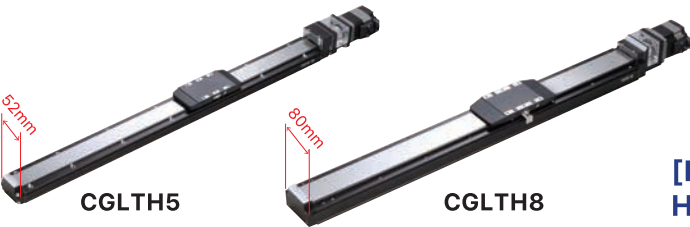


LOW PROFILE INTEGRATE BEARING MOTORIZED ACTUATOR

CGLTH Series (AZ motor, Ball screw)

DC



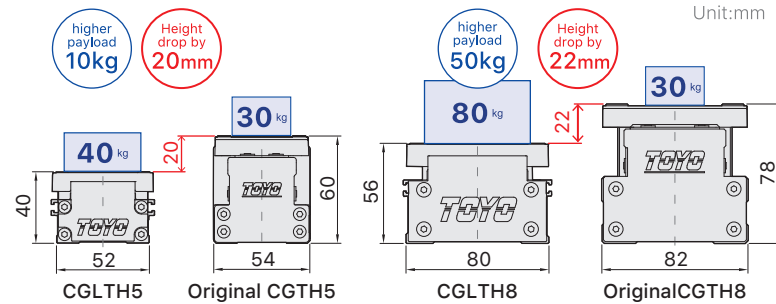
[Great moment load performance]

CGLTH8			
MY	N.m	271	
MP	N.m	271	
MR	N.m	449	

		CGLTH5AZK			CGLTH8AZK		
Motor		AZM46AK			AZM66AK		
Lead	mm	2	6	12	6	12	24
Vmax	mm/s	100	300	600	300	600	1000
Horizontal Payload	kg	40	35	29	80	60	40
Vertical Payload	kg	15	10	8	45	25	10
Rated Thrust	N	800	300	100	1000	500	250
Repeatability	mm	±0.005					
Stroke	mm	50-1000/50 Pitch			50-1250/50 Pitch		
M Series Stroke	mm	650-2000/50 Pitch			650-2500/50 Pitch		

[Low profile, High payload, Great moment load resist, High repeatability]

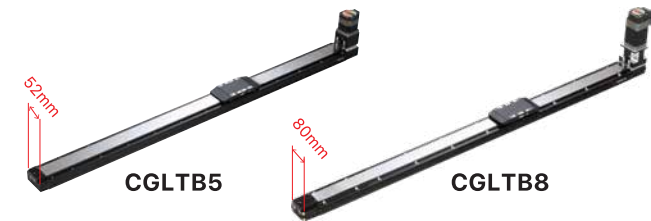
- An integrated design featuring a proprietary technology aluminum body with embedded rails and a specially integrated nut.



LOW PROFILE INTEGRATE BEARING MOTORIZED ACTUATOR

CGLTB Series (AZ motor, Belt drive)

AC



		CGLTB5AZC	CGLTB8AZC
Motor		AZM48AC	AZM66AC
Lead	mm	32	60
Vmax	mm/s	1600	3000
Horizontal Payload	kg	8	15
Vertical Payload	kg	-	-
Rated Thrust	N	53	115
Repeatability	mm	±0.06	
Stroke	mm	50-3000/50 Pitch	50-3000/50 Pitch

[No gearbox required]
[No gain tuning/ No hunting]
[Highly responsive/ Max acceleration 0.76G]

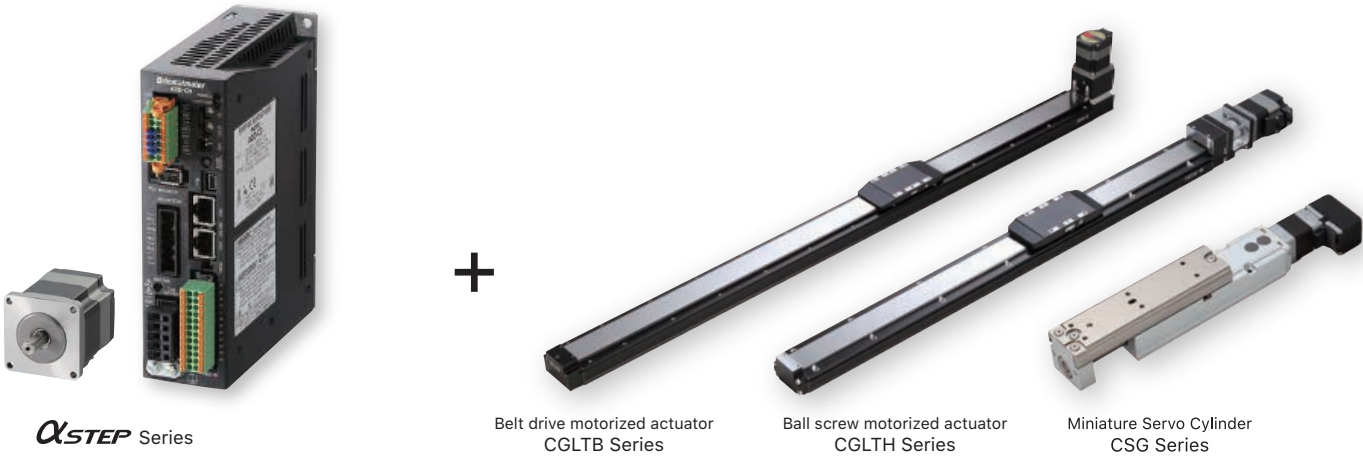
Orientalmotor Taiwan Oriental Motor Co., Ltd.
Business Coop · Tech support service center
TEL : 0800-060708
Quotation · Ordering · CAD download
Oriental motor website www.orientalmotor.com.tw

TOYO TOYO Automation Co., Ltd.
No. 55, Xinji 3rd Rd., Annan Dist., Tainan City 709, Taiwan.
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Fax: +886-6-2025974
www.toyorobot.com

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TOYO

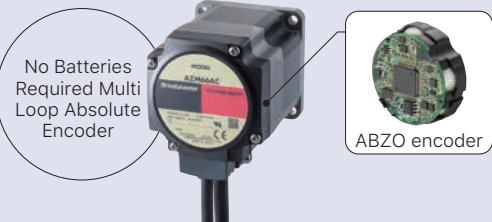


STRONG CO-BRANDING, PROVIDING COST EFFECTIVE MOTORIZED ACTUATOR

High Performance Motor
AlphaSTEP AZ motor series

AlphaSTEP The a STEP motor is based on a stepper motor and utilizes an innovative hybrid control method, combining the advantages of both open-loop control and closed-loop control.

ABZO Absolute Encoder



Wide Range of Protocol Support

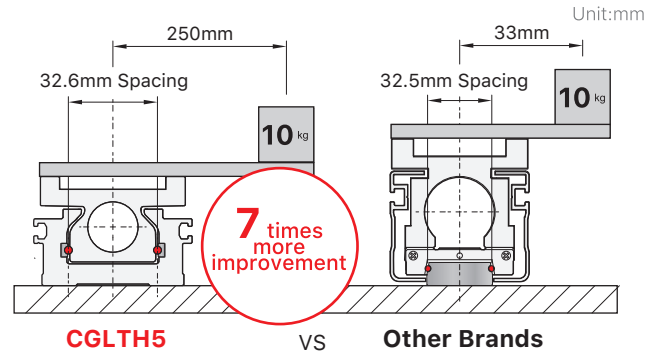
EtherNet/IP Modbus(RTU) PROFINET CC-Link

EtherCAT MECHATROLIN SSCNET III

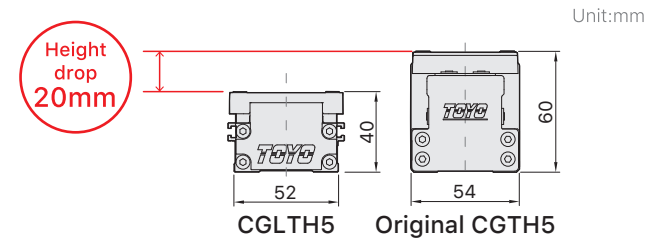


Best Mechanical Design
Latest Motorized Actuators

Integrated Rail Design for Better Moment load capacity



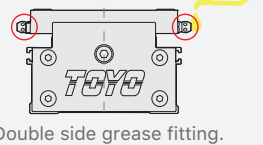
Lower CG, Lower Profile for space saving



See though coupling cover. Monitor any potential risk.



Maintain without open the cover. Easier greasing.



QTY10 and below, lead time 3 weeks!

One channel service for both brand

Short lead time

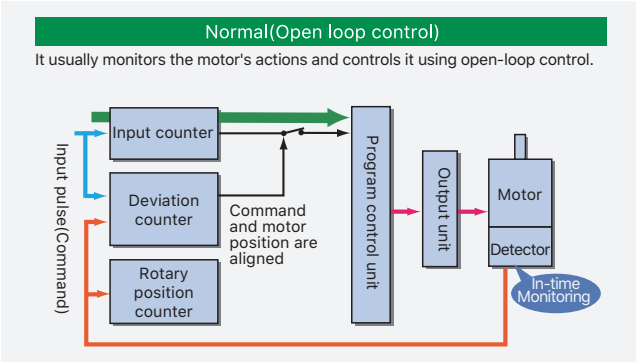
High performance spec/ Cost effective choice

αSTEP Feature

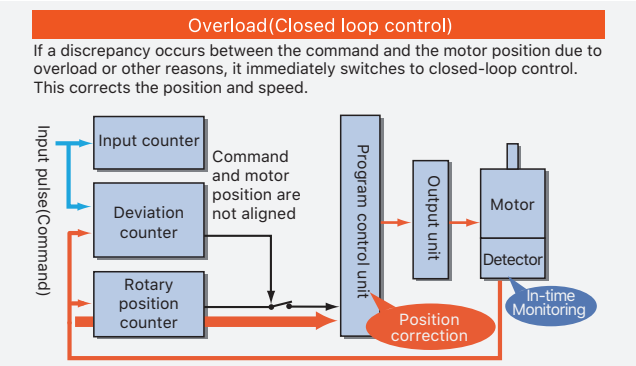
Close/Open loop control in one unit for better user experience and control.

αSTEP Utilizes an innovative hybrid control method, combining the advantages of both open-loop and closed-loop control. It continuously monitors the motor position and can automatically switch between the two control methods based on the situation.

- Open loop control in normal situation. Easier to use. Equal to stepper motor.



- When overloaded, switching to closed loop control for better permanence



Mini

High Torque

Highly Responsive

Low Vibration

High Efficiency

No Micro Vibration

AZ feature

● Multi-turn absolute encoder

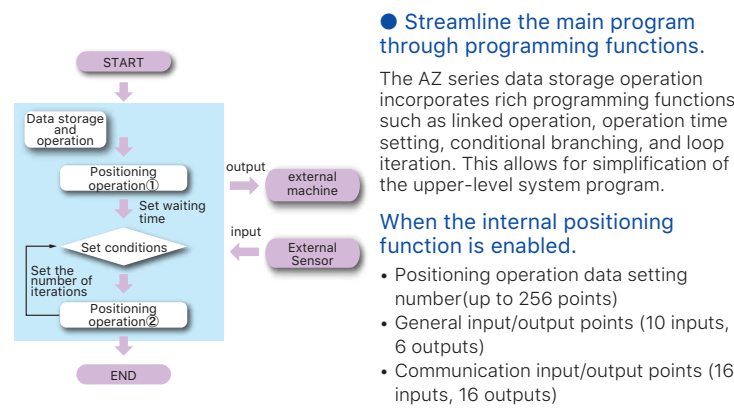
Installation dimensions of 20mm and 28mm (30mm) allow for ±450 operation (900 operating range).

No external sensor

- Fast homing + Better homing repeatability

No Batteries Needed

- After EMG stop, Can retrieve action from stop position.



- Streamline the main program through programming functions.

The AZ series data storage operation incorporates rich programming functions such as linked operation, operation time setting, conditional branching, and loop iteration. This allows for simplification of the upper-level system program.

When the internal positioning function is enabled.

- Positioning operation data setting number (up to 256 points)
- General input/output points (10 inputs, 6 outputs)
- Communication input/output points (16 inputs, 16 outputs)

Integrated rail motorized actuator feature

[Rigid profile]

Max payload **100** kg

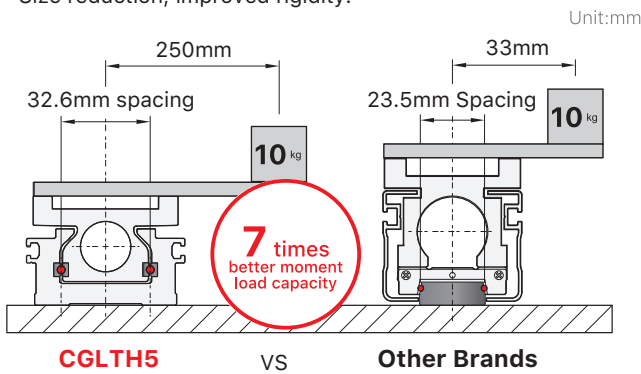
*CGLTH8+under specific conditions of use

Grinding after embedding the rail into the body.

Integrate bearing design

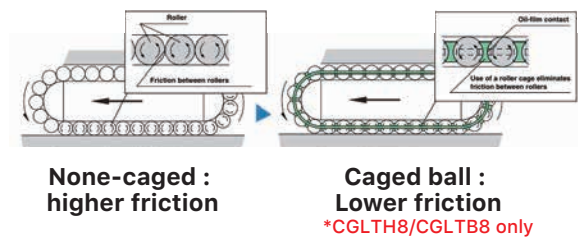
[High moment load capacity]

- The embedded slide rail structure enhances both static and dynamic torque ratings.
- Size reduction, improved rigidity.



[Caged ball design. Noise reduction. Longevity]

- Eliminating collisions and friction between ball bearings can significantly reduce movement noise and prolong lifespan, reducing maintenance frequency.



[High repeatability]

- Repeatability $\pm 0.005\text{mm}$
- After embedding and grinding the rail, achieving straightness/equal height of $\pm 0.02\text{mm}/800\text{mm}$ (CGLTH5/8)

[Ultra long M series]

CGLTH8AZKM

Longest ball screw stroke **2500** mm

CGLTB8AZK

Longest belt drive stroke **3000** mm

[Clean room-ready design]

- After incorporating a sealed design and adding an exhaust connector, it can be used in cleanroom environments for semiconductor manufacturing.

IF YOU ARE EXPERIENCING THE FOLLOWING ISSUES, BE SURE TO CONSIDER THIS CO-BRANDING PRODUCT.

- When assembling the motor and actuator yourself.

When encountering changes in load or extended travel distance, it requires recalculating, and sometimes even practical testing to confirm, which is time-consuming and labor-intensive

- The collaborative product provides specification data verified through practical testing, ensuring peace of mind and saving you design time

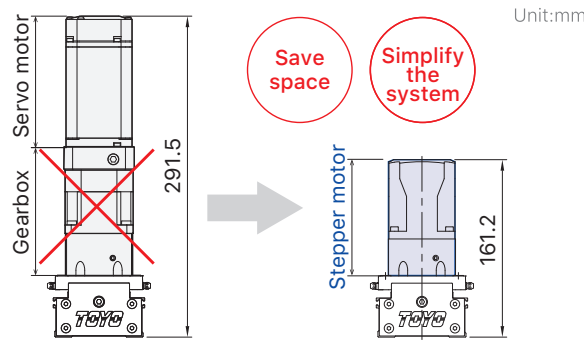


- When using a servo motor with a belt-driven actuator.

Due to the insufficient permissible inertia of the motor, it requires adding a gearbox, leading to insufficient space, decreased speed, and increased costs.

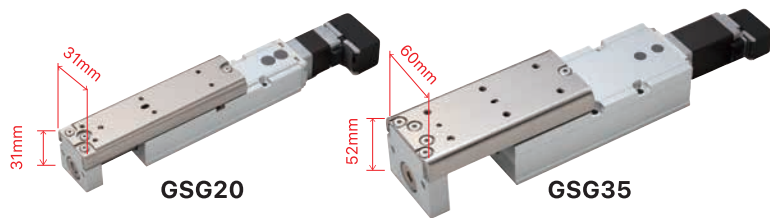
Due to the low rigidity of the belt, it is difficult to adjust the gain, hence the addition of a gearbox.

- The AZ series offers advantages such as "no gain adjustment required", "high permissible inertia", and "unaffected by mechanical rigidity", eliminating the need for a gearbox. It is more suitable for long-stroke, high-speed positioning with belt-driven actuator.



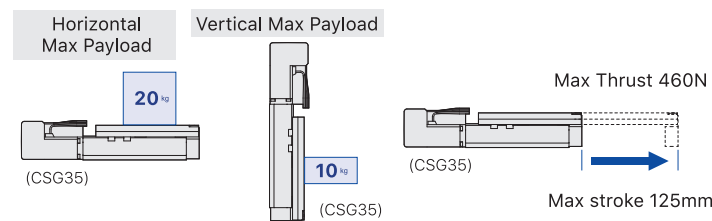
MINIATURE SERVO CYLINDER

CSG series (AZ motor, Ball screw)



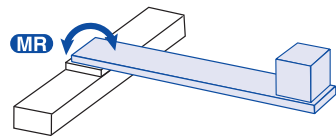
[High payload, Long stroke]

- Leveraging the characteristics of low-speed high-torque AZ motors, enables micro electric cylinders to achieve maximum load capacity and thrust.

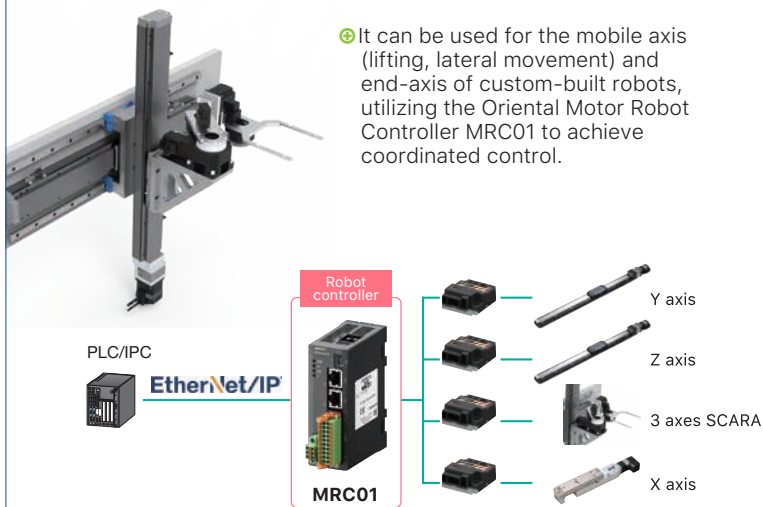


- When using products from other brands, encountering issues such as insufficient rigidity or load-bearing capacity.

- The embedded track significantly increases rigidity, allowing it to easily handle situations with high center of gravity or eccentricity.
- The AZ series motors are compact and feature high torque characteristics, further enhancing the load capacity (while saving space).

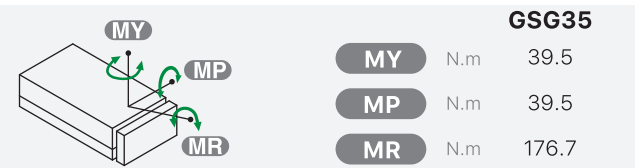


- When building a custom robot, enhancing automation efficiency requires improving the mobility axis.



		CSG20AZK		CSG35AZK		
Motor		AZM14AK		AZM26AK		
Lead	mm	2	4	2	6	12
Vmax	mm/s	100	200	100	300	600
Horizontal Payload	kg	6	4	20	15	10
Vertical Payload	kg	3	1.5	10	8	5
Rated Thrust	N	60	30	460	200	90
Repeatability	mm	±0.01				
Stroke	mm	30/50/75		30/50/75/100/125		

[Great moment load capacity]



[Miniaturization-Space Saving]

- AZ motors retain the advantages of compact size and high torque of stepper motors. When in-line mounted, they can effectively reduce length.

