

[LINEUP]



Normal Environment

Ball Screw

Standard Guide

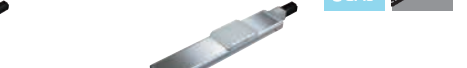
■ ETH2

					
ETH2-14	ETH2-17	ETH2-22	ETH2-30	ETH2-30	
±0.005mm					Repeatability
400W	400W	750W	1500W	750W+Gearbox	Motor
1440 mm/s	2400 mm/s	1500 mm/s	1280 mm/s	640 mm/s	Vmax
110 kg	120 kg	150 kg	250 kg	400 kg	Max Payload
50~1200 mm	50~1500 mm	50~1800 mm	50~2100 mm	50~2100 mm	Stroke

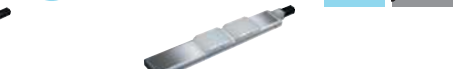
■ ETH2D(Dual Carriage)

					
ETH2-14D	ETH2-17D	ETH2-22D	ETH2-30D	ETH2-30D	
±0.005mm					Repeatability
400W	400W	750W	1500W	750W+Gearbox	Motor
1440 mm/s	2400 mm/s	1500 mm/s	1280 mm/s	640 mm/s	Vmax
110 kg	120 kg	150 kg	250 kg	400 kg	Max Payload
50~1050 mm	50~1300 mm	50~1550 mm	50~1750 mm	50~1750 mm	Stroke

■ ECH2

			
ECH2-14	ECH2-17	ECH2-22	
±0.005mm			Repeatability
400W	400W	750W	Motor
1440 mm/s	2400 mm/s	1500 mm/s	Vmax
110 kg	120 kg	150 kg	Max Payload
50~1200 mm	50~1500 mm	50~1800 mm	Stroke

■ ECH2D(Dual Carriage)

			
ECH2-14D	ECH2-17D	ECH2-22D	
±0.005mm			Repeatability
400W	400W	750W	Motor
1440 mm/s	2400 mm/s	1500 mm/s	Vmax
110 kg	120 kg	150 kg	Max Payload
50~950 mm	50~1250 mm	50~1500 mm	Stroke

Clean Room

Ball Screw

Standard Guide

Standard Guide

ISO 4
(Class10)

TOYO

10~30%



ETH2/ECH2 Series

Economic Heavy Payload Electric Actuator

01

Lower Profile
20%~35%

02

Horizontal/
Vertical
Max Payload
400/200 kg

03

Repeatability
**±0.003~
±0.005mm**

04

Higher Ball
Screw RPM
3600 ↑ rpm

05

New Width
ETH2-30

06

Lower Price
10%~30%

07

All With
Caged Ball
Longer Life

08

Grease
Port Equipped
**Easier
Maintenance**

TOYO

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Ver.202408

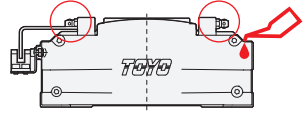
[ETH2/ECH2 Features]

Ball Screw Actuators

2nd Gen, compact design and **lower price!**

Grease Port Equipped

- Improvement from 1st Gen. Greasing from both side.



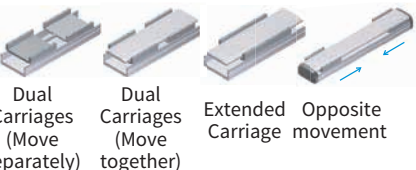
Different Motor Orientation

BC Inline BL Left BR Right BM Bottom



Diverse Custom Options

Dual Carriages (Move separately) Dual Carriages (Move together) Extended Carriage movement Opposite Carriage movement



Caged Ball Bearing

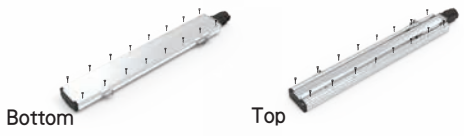
- With no ball collision or friction, it significantly reduces movement noise, extends service life, and decreases maintenance frequency.



Top-down, Bottom-up mount

- Direct mount without removing the cover.

Bottom Top



C5 Ball Screw (Optional)

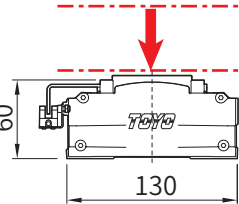
- Standard C7 Ball Screw Repeatability $\pm 5\mu m$
- Optional C5 Ball Screw Repeatability $\pm 3\mu m$

Higher Ball Screw RPM

- Up to **3600~4000rpm** (Depends on the model)

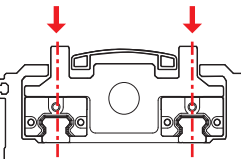
Lower Center of Gravity

- Low profile
- Reduced weight and height. Makes overall design more compact whether use alone or in gantry configuration.



High Strength Structure

- Mounting holes place right on top of the rail. Reduced vibration and increase stability while high speed application.



Reduced Height, Width and Weight

Unit:mm

2nd Gen ETH2	VS	ETH 1st Gen	2nd Gen ECH2	VS	ECH 1st Gen
Weight drop by 50% Width reduced by 5mm Height drop by 18mm		ETH14	Weight drop by 50% Width reduced by 5mm Height drop by 19mm		ECH14
ETH2-14			ECH2-14		
Weight drop by 40% Width reduced by 18mm Height drop by 33mm		ETH17	Weight drop by 40% Width reduced by 18mm Height drop by 34mm		ECH17
ETH2-17			ECH2-17		
Half of the weight Width reduced by 8mm Height drop by 45mm		ETH22	Half of the weight Width reduced by 8mm Height drop by 50mm		ECH22
ETH2-22			ECH2-22		
New High payload		ETH2-30			

TOYO's latest second-generation product features low assembly and lightweight design, significantly improving upon the usability and durability issues of the first generation. As technology advances, this evolved second-generation product will help upgrade your equipment!



ECH2 Clean Room Series Feature (Semi-Conductor Production Ready)

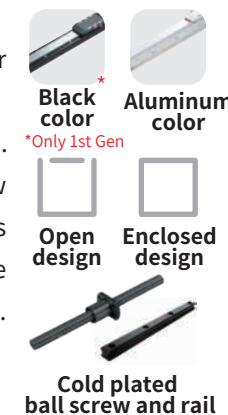
Air Fitting

Meet ISO4(Class 10) with air fitting



Suitable for different environment

- Offering Original and black color option.
- Open and enclose cover options.
- Optional cold plated ball screw and linear guide. Produce less dust, reduced wear, lower noise level, anti acid and no reflection. Only 2% reflection rate.



ISO CLASS Clean Room Certification

All certification are coming from authorized institution examine base on ISO 14644-1.



Clean Room Assembly

TOYO is few linear motion manufacturer in the world (Taiwan only) that can assemble actuators in clean room. Making sure minimized the contamination.

