

ACCU TECH USA

Automation and Motion Solutions



TOYO

TOYO ACTUATORS

accu-techusa.com

sales@accu-techusa.com

919.863.0837

AUTOMATION & MOTION SOLUTIONS

COMPANY MISSION

Accu Tech USA is the largest provider of automation and motion solutions in North America specializing in healthcare, packaging and converting, and factory automation. With a history spanning more than a decade, Accu Tech USA provides state-of-the-art actuators, collaborative robots, linear guides, ball screws, and full-service applications engineering and support for customers in all 50 states. Accu Tech USA is headquartered in Wake Forest, North Carolina.

MARKETS SERVED

Our technology can be seen in all types of manufacturing processes. We work to provide modern linear drive automatic robots that streamline production and reduce overhead costs to increase customer ROI.

- Medical Life Sciences
- Automotive
- Food Products
- Information Technology
- Semi Conductor
- Machine Tool



WE MAKE THINGS SIMPLE



At Accu Tech USA, our focus is simple. Our customer's success is our priority. Our team stands ready to support you through product selection, sales and support.



NEVER COMPROMISE ON QUALITY



We work with our partners to provide quality products that perform as expected to ensure we exceed your expectations.



ON TIME. ON BUDGET.



Accu Tech USA is the value leader for automation solutions in North America. We deliver products on time and on budget to increase your ROI.

Stage Type Actuator Ball Screw Type

ETH 13 ETH 22
ETH 14 ETH 17M
ETH 17 ETH 22M



DESCRIPTION

The ETH standard ball screw actuator is assembled with a class C7 rolled ball screw for high accuracy and repeatability. It is supported by precision grade recirculating Linear Guides for smooth accurate motion. Featuring durable aluminum construction which provides a strong and stable mounting surface for ease of assembly.

FEATURES

- Both tapped holes in the mounting base as well as thru holes to mount from the top
- All our actuators come complete with Motor Adaptor single grease port (ball screw/linear bearings) and Coupling
- We offer limit switches that can be mounted on the unit for precise motion control.
- Clean room series available. Class10/ISO14644 certified
- Stroke lengths available in standard 50mm increments.

APPLICATIONS

Common application types for ETH series actuators include positioning, pick and place, dispensing, automation part shuttles and press-fitting. ETH actuators have been highly utilized in the Semiconductor and LED manufacturing industries. Accu Tech USA has had great success applying ETH products to the aerospace and gas turbine engine industries, specifically for EDM machines, abrasive grinding, welding, and airflow testing.

SPECIFICATIONS

- Repeatability: ± 0.005 (mm)
 - Horizontal Range from 13 kg up to 159kg
 - Vertical Range from 6kg to 55kg
 - Max Speed: 2,000mm/s (w/ 40mm lead)
 - Available Stroke Lengths: 50-2400mm
- * All ratings based on 10,000km travel life

Integrated Linear Bearing Ball Screw Type

GTH 3

GTH 8

GTH 4

GTH12

GTH 5



DESCRIPTION

The GTH Series is the next generation of the well known and widely used ETH Series. The GTH Series 3, 4, 5, 8, and 12 replaces the ETH 5, 6, 10 and 12 and offers improved features and upgrades in a smaller frame size for equal load ratings.

In addition, the GTH is easy to assemble and can be fixed from the top and bottom without removing cover.

FEATURES

- Single grease port for ball screw and linear bearings, straightness and flatness are highly improved to $\pm 0.02\text{mm}$
- Actuator body and carriage are made from steel to improve system rigidity
- Standard steel sealing strip prevents ingress and egress of dust, debris, and other foreign objects

APPLICATIONS

The GTH series can be applied to the same functions and industries as ETH type. However, with an improved integrated guideway design, the improved rigidity, straightness, and flatness leads to higher performance in these applications. This means the GTH can excel in higher precision applications like metrology and laser scanning systems. The improved design also accommodates better ease of installation and maintenance.

SPECIFICATIONS

- Repeatability: ± 0.01 (mm)
 - Horizontal Range 12kg to 110kg
 - Vertical Range 2kg to 33kg
 - Maximum Speed: 1600mm/s (w/ 32mm lead)
 - Available Stroke Lengths: 50-1250 mm
- * All ratings based on 10,000km travel life

SIGN UP TO RECEIVE THE
LATEST NEWS AND SPECIALS!

Rod Type Built-In Guideway Ball Screw Type

GTY 4

GTY 8

GTY 5

GTH 12



DESCRIPTION

The GTY series builds upon the design improvements of the GTH model, and completely replaces the previous Y series from Toyo. By introducing a rod style actuator, or electric cylinder, with integrated linear bearing, this unit is suitable for many cylinder thrust applications without the need for external guidance. The GTY offers all of the same features of the GTH in a rod style package.

FEATURES

- Built-in linear rail design, straightness and flatness are highly improved to $\pm 0.02\text{mm}$
- Actuator body and carriage are made from steel to improve system rigidity
- Standard rod seal design prevents ingress and egress of dust, debris, and other foreign objects
- Single exterior grease port for ball screw and linear guide

APPLICATIONS

Like many electric cylinders, this product can facilitate a system change from a pneumatic solution to an electromechanical one. Electromechanical systems have many advantages over pneumatics, including ease of maintenance, programmable speed, position, and force control, as well as cost savings over the life of the unit. In thrust applications where radial loading is minimal, the GTY can completely eliminate the need for external guidance, thereby providing an extremely compact package.

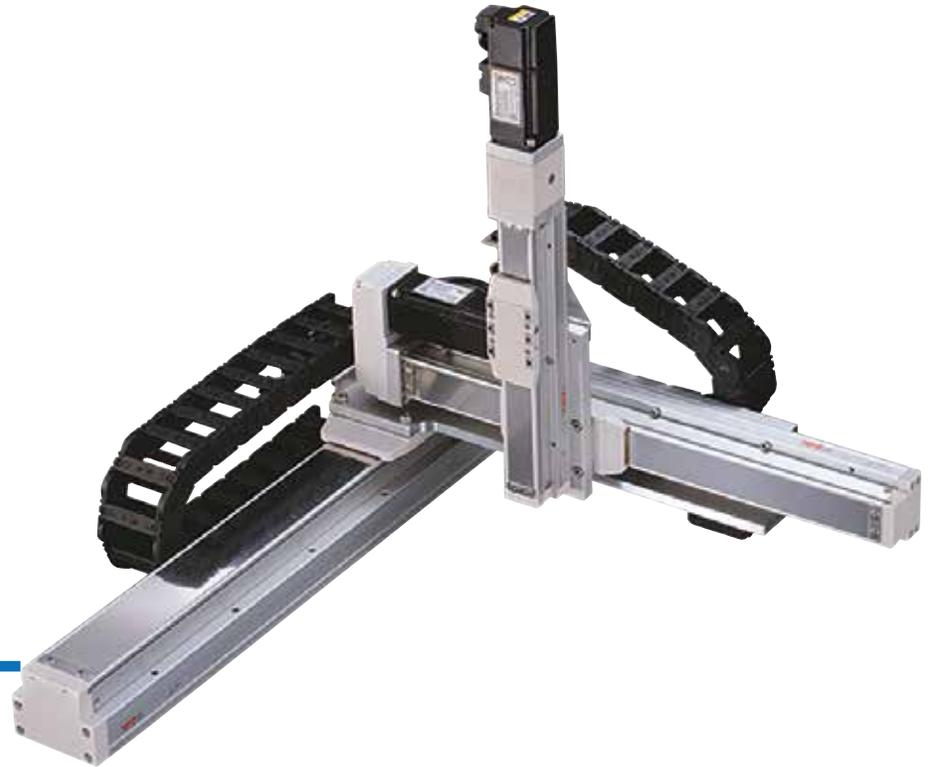
SPECIFICATIONS

- Repeatability: ± 0.01 (mm)
 - Horizontal Range 12kg to 110kg
 - Vertical Range 2kg to 33kg
 - Maximum Speed: 1600mm/s (w/ 32mm lead)
 - Available Stroke Lengths: 50-800 mm
 - Max Thrust: 1388N
- * All ratings based on 10,000km travel life

MULTI-AXIS SYSTEM

CUSTOM ENGINEERED SOLUTIONS

Multi-Axis Cartesian System



DESCRIPTION

Toyo offers a line of standard multi-axis configurations with their XYTH, XYTB, and XYGT series cartesian robots, constructed with ballscrew actuators, belt actuators, and built-in guideway units respectively.

These systems include the actuators for each axis, mounting bracketry, cable carriers, motor adapters, couplings, and sensors all rolled up into one simple package. Simply provide motors and drives of choice and your turn key system will be ready to go.

Toyo's capabilities extend far beyond the standard configurations however. Utilizing their full lineup of products, we can accept the challenge of any multiaxis application. Previous custom applications have included solutions such as synchronization shafts for gantry systems, linear motor axes, manual positioning. The possibilities are nearly endless.

Applications we have developed in the past range anywhere from simple dispensing systems, to large format ultrasonic scanners.



TC - 100

The TC100 controller is specially designed for use with Toyo's servo-type cylinders and electric gripper products. These products include stage type actuators and electric cylinders such as the CGTH and CGTY series respectively. The TC100 can also operate electric gripper units within the CS and CH lines. Coupled with an integrated stepper motor with closed loop feedback, the TC100 empowers the user with easy to implement actuator motion using Toyo's straightforward PC based TC100 software. The controller can perform I/O based control from a PLC, pulse control functions, and can communicate with RS-485 Modbus. This unique controller offers a number of functions such as a dedicated homing signal, electromagnetic braking control, torque and speed limiting, and full servo type position control. Its memory stores up to 127 points. When packaged with a Toyo actuator with integrated motor, the TC100 offers incredible value, allowing customers to quickly and efficiently tackle their motion control applications.

We have a team of engineers that are constantly working to reach even higher standards for the customer experience. Our engineering team can help you with standard configurations and custom designs.

ACCU TECH USA ADVANTAGE

In addition to Toyo's ball screw actuators, Accu Tech USA offers Toyo Automations full suite of automation and motion solutions.



ELECTRIC GRIPPERS

Toyo's force sensitive grippers can be set to be torque limited to ensure parts will not be damaged during handling. Coupled with our TC100 controller, our grippers can be easily programmed to the gripper interface with your PLC or other interface.

BELT DRIVE ACTUATOR

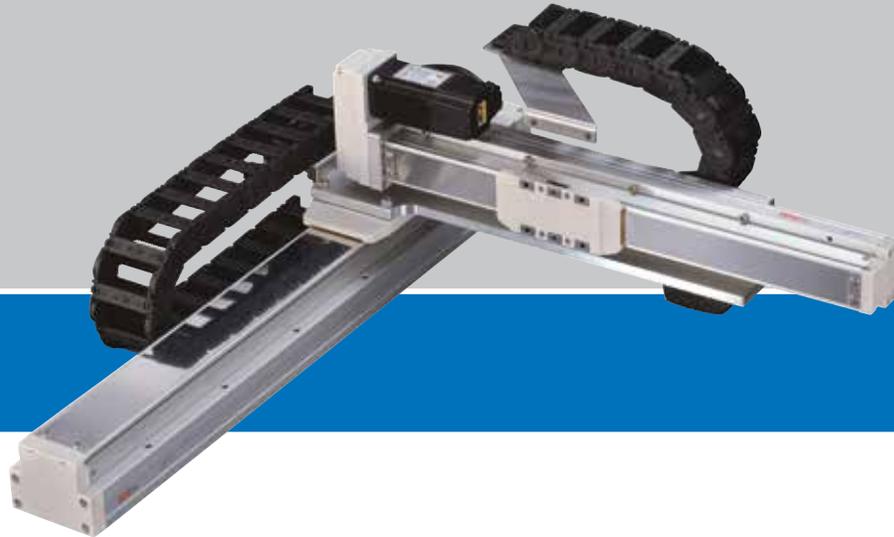
Toyo's highly durable belt driven actuator can be deployed in clean room (ECB Series) or normal environment (ETB Series) applications. The MK series is also available for long stroke and European body style. Featuring a belt adjusting mechanism allowing for tightening or loosening, belt actuators have the advantage over ballscrew actuators in applications with very high speeds and longer strokes.

LINEAR MOTORS

Toyo offers a variety of iron core and core-less linear motor designs to meet performance and budgetary needs. Linear motors provide a smooth and quiet motion in applications demanding the highest accuracy and speeds. Linear motor actuators include the rotor and stator housed in an aluminum body with linear guide supports, allowing the customer to utilize their driver of choice.

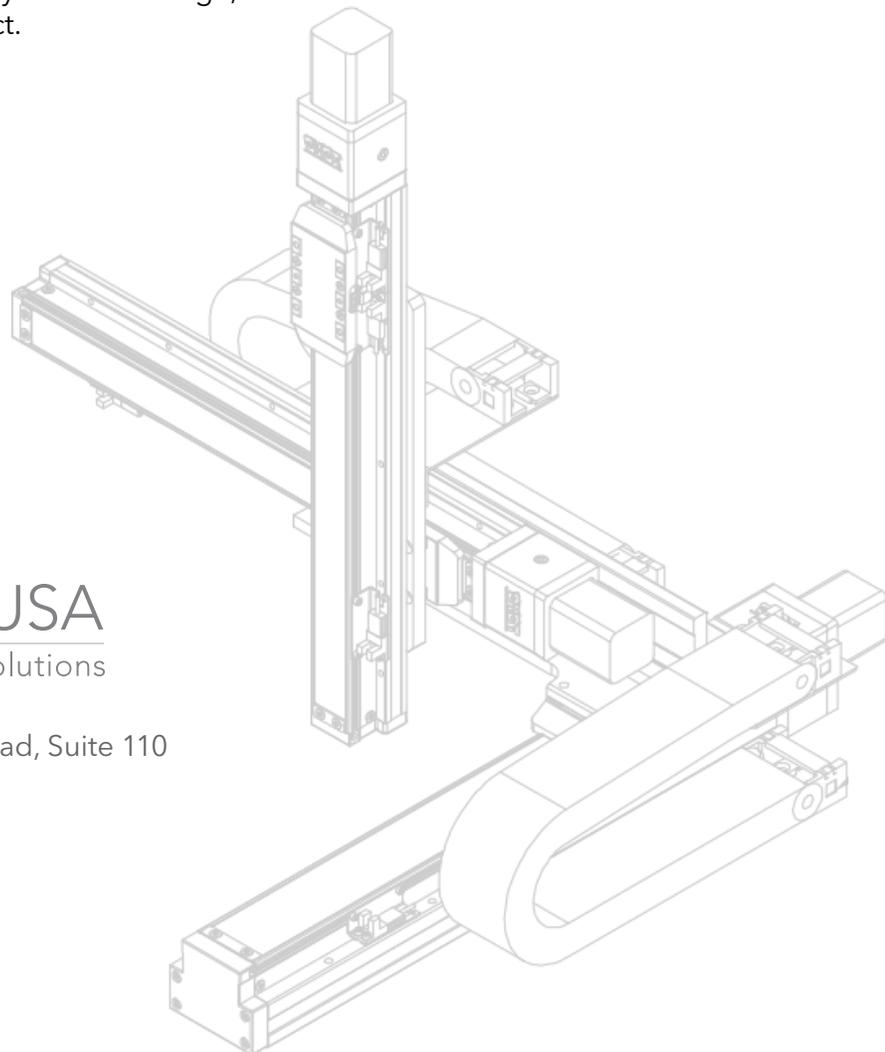
REQUEST
A QUOTE





Contact Us Today

Need help with an active project? Do you need Sizing/Selection Tools to quickly size the right product? Our team of experienced design engineering, application engineering and custom machining technicians are ready to assist you in the design, selection and implementation of your project.



ACCU TECH USA

Automation and Motion Solutions

12339 Wake Union Church Road, Suite 110
Wake Forest, NC 27587
919.863.0837
sales@accu-techusa.com

www.accu-techusa.com