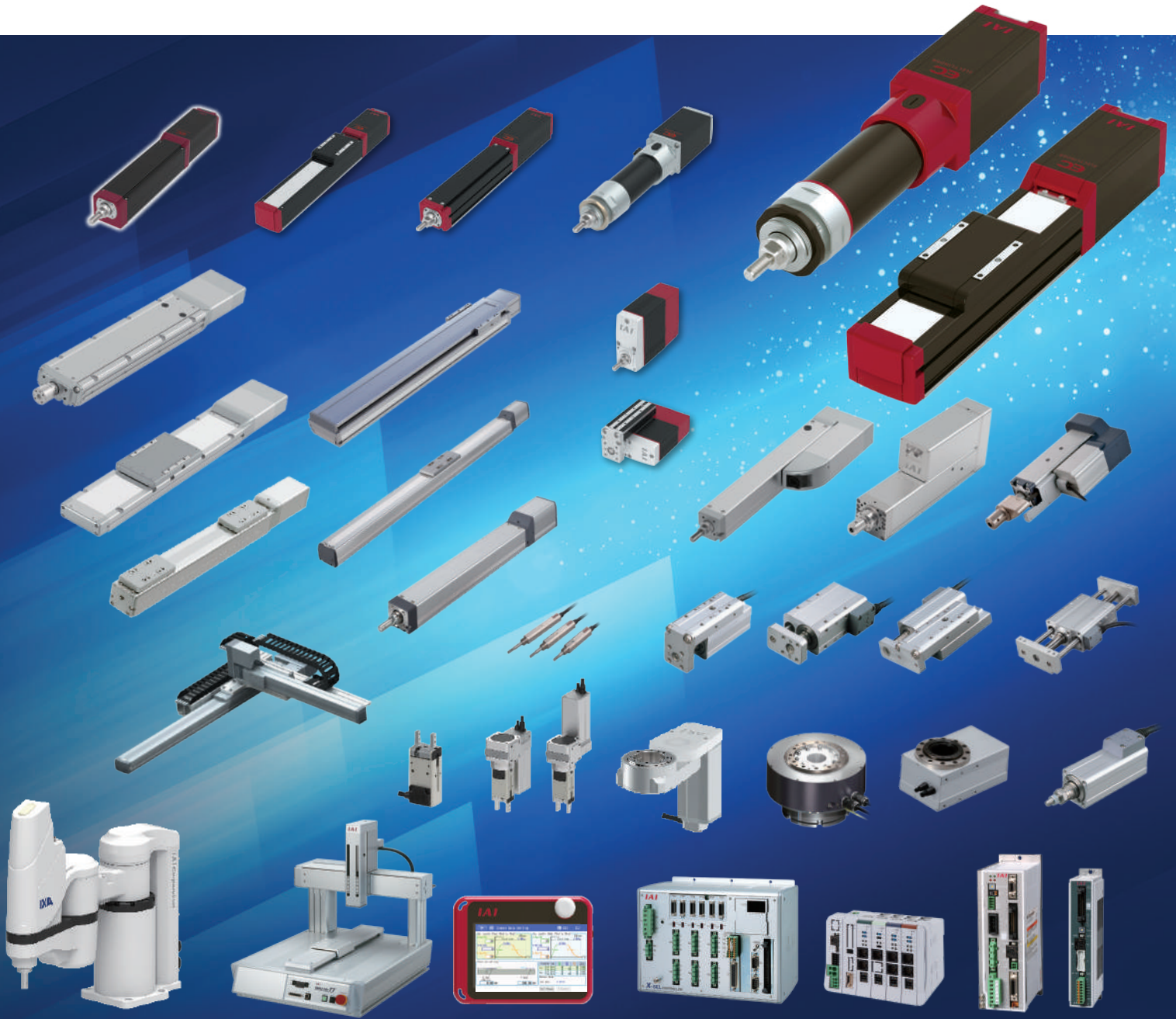


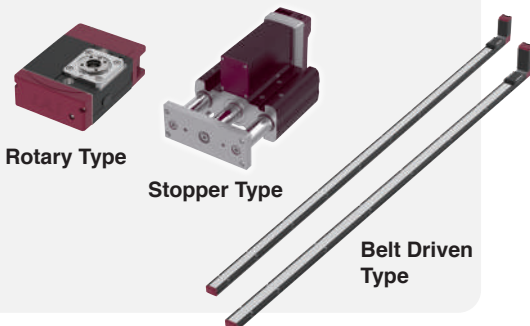
# IAI ROBOT LINEUP GUIDE

A simplified guide that summarizes the IAI Products Lineup. It presents the main products categorized by actuator type.



## ELECYLINDER®

**Coming soon!**



## Newest Additions to the ELECYLINDER Series

Small, High rigidity, Side-mounted motor, Splash-proof type

**Available now!**



## Advancing into a NEW ERA switching Air to ELECYLINDER

Elecyylinder can be operated only by ON/OFF signal like solenoid valve. It's easy to operate for beginners. You can adjust A(Acceleration), V(Velocity), D(Deceleration) individually by input percentage. It can start / stop at high speed smoothly. Cycle time and trouble recovery time will be reduced.

Equipped with Battery-less Absolute Encoder

Built-in controller available

### Slider Type

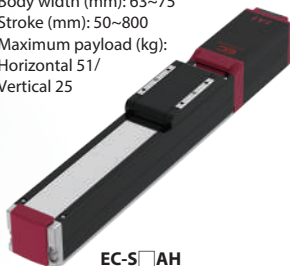
Body width (mm): 63~73  
Stroke (mm): 50~500  
Maximum payload (kg):  
Horizontal 51/Vertical 19



EC-S

### High Rigidity Slider Type

Body width (mm): 63~75  
Stroke (mm): 50~800  
Maximum payload (kg):  
Horizontal 51/  
Vertical 25



EC-S□AH

### Rod Type

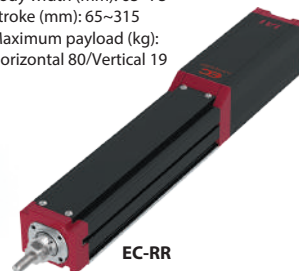
Body width (mm): 63~73  
Stroke (mm): 50~300  
Maximum payload (kg):  
Horizontal 80/Vertical 19



EC-R

### Radial Cylinder\*

Body width (mm): 63~73  
Stroke (mm): 65~315  
Maximum payload (kg):  
Horizontal 80/Vertical 19



EC-RR

### Table Type

Body width (mm): 78  
Stroke (mm): 30, 50  
Maximum payload (kg):  
Horizontal 8/  
Vertical 2.5



EC-TC/TW

### Rod Type with Guide

Body width (mm): 55~76  
Stroke (mm): 30, 50  
Maximum payload (kg):  
Horizontal 8/Vertical 2.5



EC-GS/GD

### Waterproof Specification (Rod Type)

Body width (mm): 63~73  
Stroke (mm): 50~300  
Maximum payload (kg):  
Horizontal 80/Vertical 19



EC-R□W

IP67

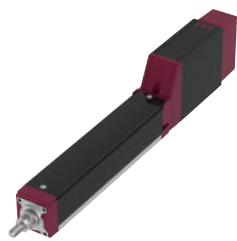
### High Rigidity Radial Cylinder\*

Body width (mm): 63~75  
Stroke (mm): 50~500  
Maximum payload (kg):  
Horizontal 80/Vertical 28



EC-RR□AH

## Newest Additions to the Series



Small type (Radial Cylinder)  
EC-RR3  
EC-RR4



Small type  
EC-S3  
EC-S4



High rigidity (Radial Cylinder)  
EC-RR6□AH  
EC-RR7□AH



High rigidity (Slider type)  
EC-S6□AH  
EC-S7□AH



Splash-proof type (Radial Cylinder)  
EC-RR6□W  
EC-RR7□W



Side-mounted motor  
EC-S6□R  
EC-S7□R



Side-mounted motor  
EC-RR6□W EC-RR6□R  
EC-RR7□W EC-RR7□R  
EC-RR6□AHR  
EC-RR7□AHR

Robo Cylinder is high-performance electric actuator equipped with a ball screw, linear guide, and servo motor. These next-generation actuators has multi-point positioning capability as well as the ability to change speed and acceleration, unlike anything seen with air cylinder.

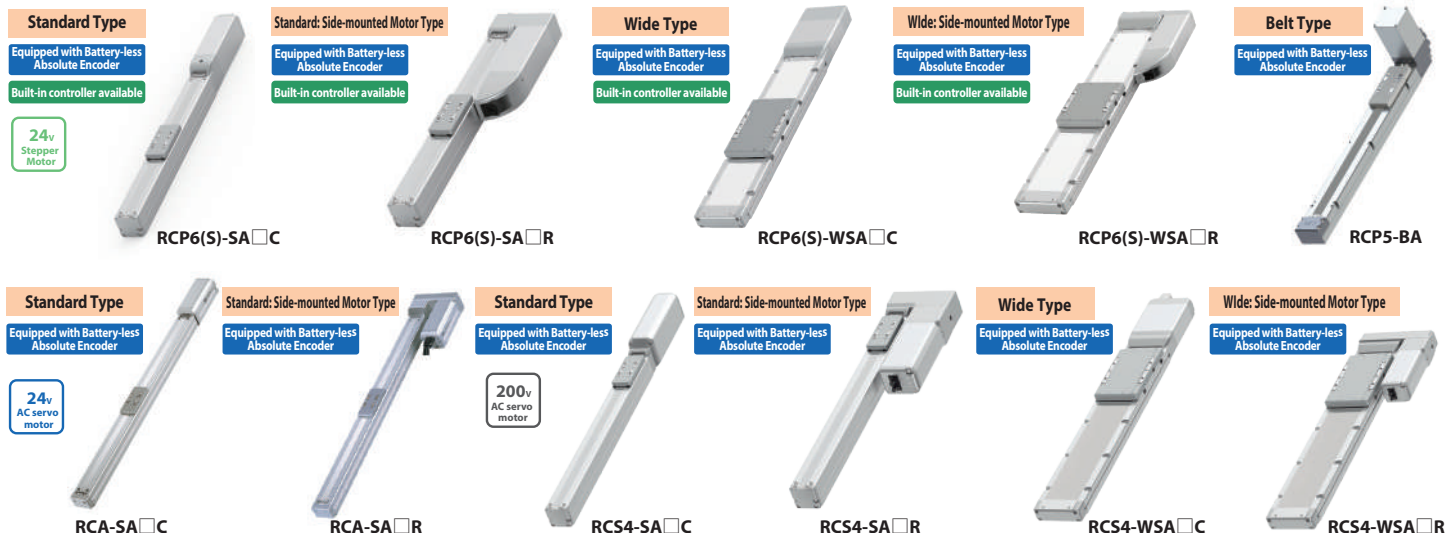


Battery-less Absolute Encoder Available

## Slider Type

**Suitable for moving something horizontally and for a long distance.**

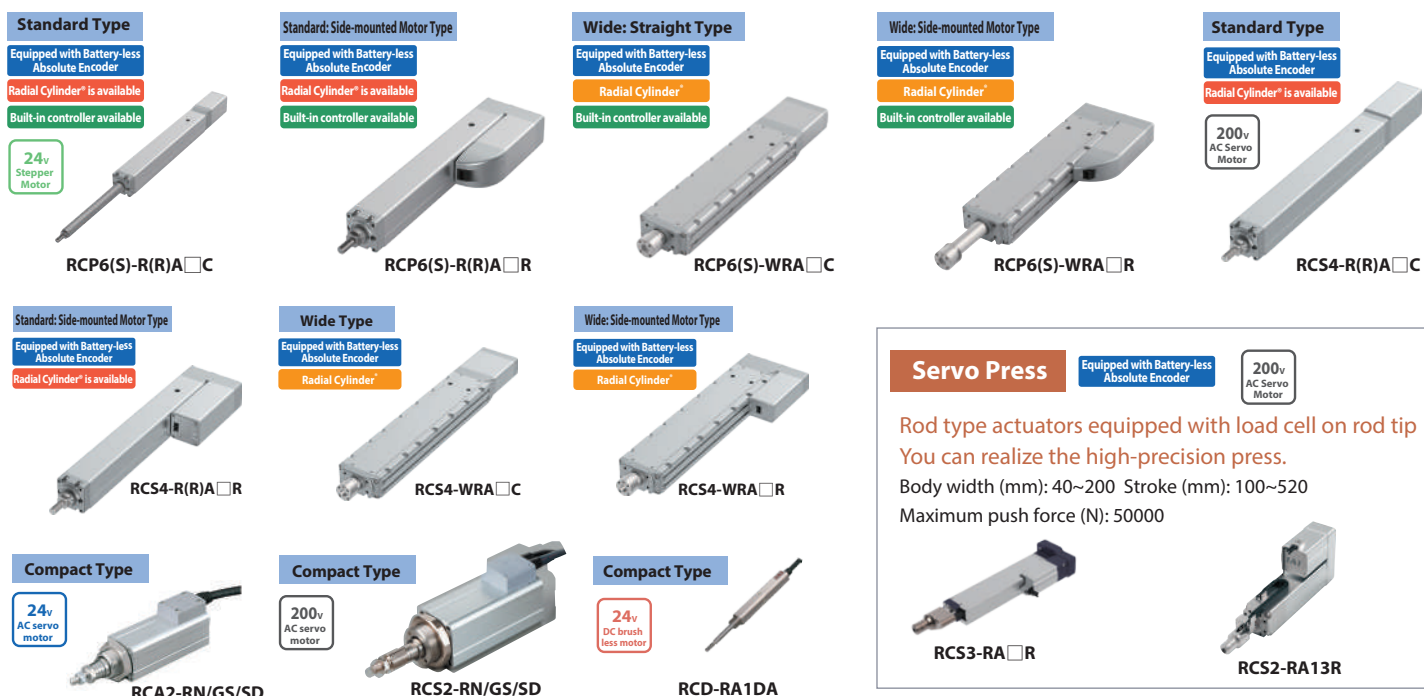
Body width (mm): 22~160 Stroke (mm): 25~2600 Maximum payload (kg): Horizontal 100 / Vertical 55



## Rod Type

**Please choose this type when moving something vertically or carrying something with chuck etc. It's also suitable for push force or holding a workpiece.**

Body width (mm): 12~200 Stroke (mm): 10~800 Maximum payload (kg): Horizontal 300 / Vertical 150 (Except High payload)



### Servo Press

Equipped with Battery-less Absolute Encoder

200V AC Servo Motor

Rod type actuators equipped with load cell on rod tip  
You can realize the high-precision press.

Body width (mm): 40~200 Stroke (mm): 100~520  
Maximum push force (N): 50000



RCS3-RA□R

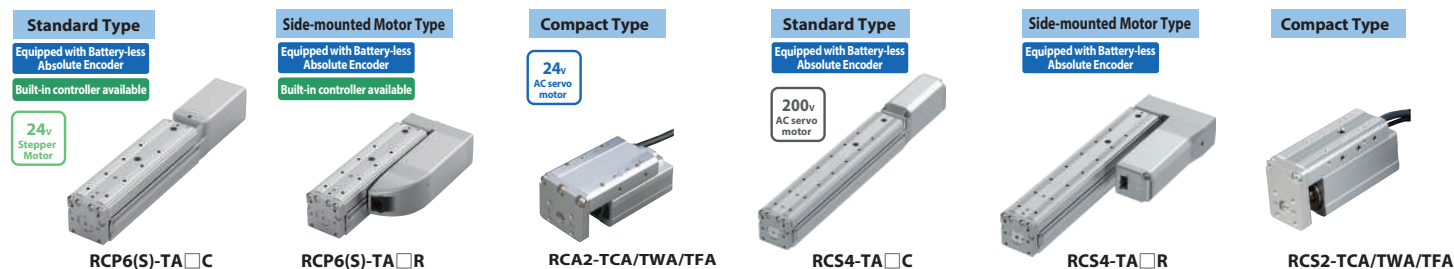


RCS2-RA13R

## Table Type

**Use this type when moving a workpiece in a vertical direction or if a moment load is applied.**

Body width (mm): 32~95 Stroke (mm): 20~390 Maximum payload (kg): Horizontal 30 / Vertical 24





# ROBO Cylinder®

High precision, high rigidity, and low cost with only one-fifth of the running cost of air cylinders

## Rotary Type

Use this type when changing the direction of the workpiece or for precise positioning as an index.

Body width (mm): 45~233 Maximum speed (degree/s): 266~1200

24v Stepper Motor

### Hollow Type

Equipped with Battery-less Absolute Encoder



RCP6-RTFML

### Flat Type



RCP2-RTC

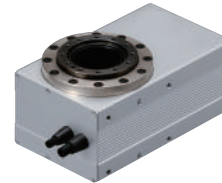
### Vertical Type



RCP2-RTB

200v AC servo motor

### Rotary Type



RCS2-RTC□L

### Direct Drive Motor

Body width (mm): 180  
Maximum speed (degree/s): 1800



DDA-LT/LH

## Gripper Type

Suitable for gripping and lifting up the work.

Stroke (mm): 2-finger 4~260, 3-finger 10,14, 38

### Solenoid Type

24v DC brush less motor



GRM-S/M EG (Outer diameter grip)  
S/M IG (Inner diameter grip)

### Ultra Compact Slide Type



RCD-GRSNA

24v Stepper Motor

### Long Stroke : Coupling Type

Equipped with Battery-less Absolute Encoder  
Built-in controller available



RCP6(S)-GRST□C

### Long stroke: side-mounted Motor Type

Equipped with Battery-less Absolute Encoder  
Built-in controller available



RCP6(S)-GRST□R

24v Stepper Motor

### Thin Slide Type

Equipped with Battery-less Absolute Encoder



RCP6-GRT

24v Stepper Motor

### Slide Type



RCP4-GRS

### Lever Type



RCP4-GRL

### 3-finger Slide Type



RCP2-GR3S

### 3-finger Lever Type



RCP2-GR3L

## Rotary Chuck Type

Rotation capability with the rotary and gripping capability with the gripper are integrated into one unit.

24v Stepper Motor



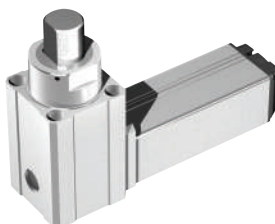
RCP6-RTCK

## Others

24v Stepper Motor

### Stopper Cylinder

Body width (mm): 106.5~108  
Stroke (mm): 20~30



RCP4-ST

200v AC servo motor

### ZR Unit (Vertical/Rotation Integrated Type)

Body width (mm): S/122, M/138  
Maximum payload (kg): S/3, M/6



ZR-S/M

24v Stepper Motor

### Wrist Unit

Body width (mm): S/136.5, M/136.5  
Maximum payload (kg): S/1, M/2

Equipped with Battery-less Absolute Encoder



WU-S/M

# Single-axis Robot

Intelligent actuator with high speed and high transfer capabilities

The single-axis robot is a high-precision positioning system with a built-in base, linear guide, ball screw and servo motor and can be used to help reduce the cost by minimizing the designing and adjusting time.

200V  
AC servo  
motor

Slider Type

High Rigidity Type

Equipped with Battery-less  
Absolute Encoder



ISB/ISPB

High Rigidity Type (Iron-base)



SSPA

Ball Screw Type (Standard)



ISA/ISPA

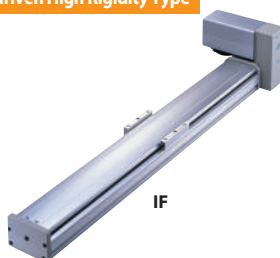
Simple, Dustproof Type

Equipped with Battery-less  
Absolute Encoder



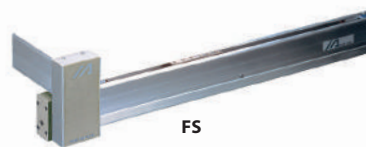
ISDB/ISPDB

Belt-driven High Rigidity Type



IF

Belt-driven Slim Type



FS

Nut-rotation Type



NS

## Cleanroom Specification

You can use them for the carrier and positioning in cleanroom.

Dedicated cleanroom types conforming to cleanliness class10.

Slider Type

Equipped with Battery-less  
Absolute Encoder  
Built-in controller available



RCP6(S)CR-SA□C

Rod Type



RCA2CR-GS

Gripper Type



RCP2CR-GRM

Rotary Type



DDACR

RCP2CR-RT

SCARA Robot

Equipped with Battery-less  
Absolute Encoder



IXP-□C

## Dustproof/Splash-proof Specification

These actuators handle environments with extreme dust or water splashes.

They offer protection conforming to IP52~67.

Slider Type



RCP4W-SA□C

Rod Type

Equipped with Battery-less  
Absolute Encoder  
Radial Cylinder\* is available  
Built-in controller available



RCP6(S)W-R(R)A□C

Gripper Type



RCP2W-GRM

Rotary Type



DDW

RCP2W-RT

SCARA Robot

Equipped with Battery-less  
Absolute Encoder



IXP-□W

## LSA series Linear Servo Actuators

Suitable for long stroke with high-speed and high acceleration/deceleration.

Linear Servo motor

Body width (mm): 60~210  
Stroke (mm): 40~4155  
Maximum payload (kg): 120



LSA-S



LSAS-N



LSA-W

## SCARA Robot

SCARA Robot suitable for transferring lightweight work with high-speed.

**IXA** Arm length (mm): 300 to 600 Standard cycle time (S): 0.26 to 0.38 Maximum payload (kg): 3 to 12

200v AC servo motor

**Standard Type**  
Equipped with Battery-less Absolute Encoder



IXA-NNN

**High-speed Type**  
Equipped with Battery-less Absolute Encoder



IXA-NSN

24v Stepper Motor

**Standard Type**  
Equipped with Battery-less Absolute Encoder



IXP-3N

**IX** Arm length (mm): 120~1200 Maximum payload (kg): 20

200v AC servo motor

**Standard Type**



IX-NNN

**High-speed Type**



IX-NSN

**Wall-mount Type**



IX-TNN/UNN

**Ceiling Mount Type**



IX-HNN/INN

## Table Top Robot

Suitable for cell productions, R&D applications, and more.

24v Stepper Motor

24v AC servo motor

You can choose from pulse motor and servo motor specification. Body width (mm): 401~755.8 XY axis Stroke (mm): 150~500

**A-type [Gate Type]**

Equipped with Battery-less Absolute Encoder

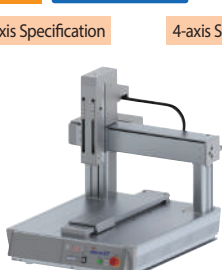
2-axis Specification

3-axis Specification

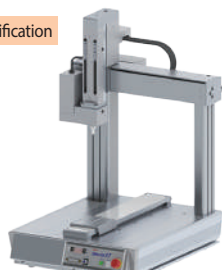
4-axis Specification



TTA-A2



TTA-A3



TTA-A4

**C-type [Cantilever Type]**

Equipped with Battery-less Absolute Encoder

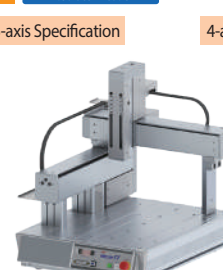
2-axis Specification

3-axis Specification

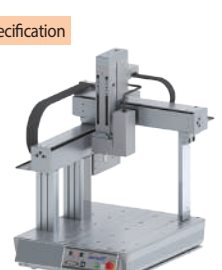
4-axis Specification



TTA-C2



TTA-C3



TTA-C4

# Cartesian Robot

Many variation are available by combining single-axis robots.

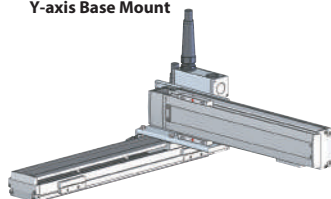
Realize high rigidity by ingenious mechanical design. Number of Axis: 2~6 Maximum payload (kg): 65

## 2-axis Configuration

Equipped with Battery-less Absolute Encoder

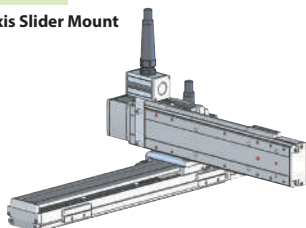
### XYB

Y-axis Base Mount



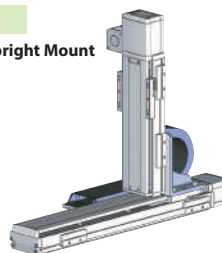
### XYS

Y-axis Slider Mount



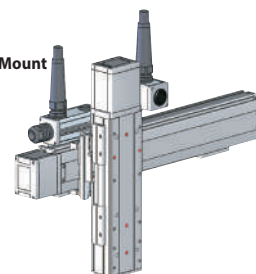
### XZ

Z-axis Upright Mount



### YZS

Z-axis Slider Mount



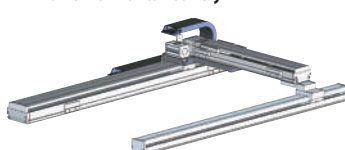
### YZB

Z-axis Base Mount



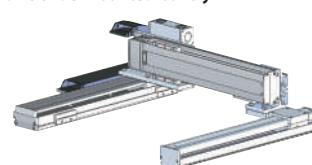
### XYG

Y-axis Horizontal Gantry



### XYBG

Y-axis Slide-mounted Gantry

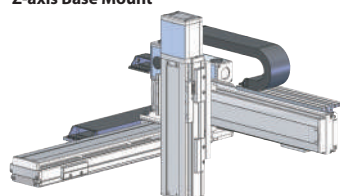


## 3-axis Configuration

Equipped with Battery-less Absolute Encoder

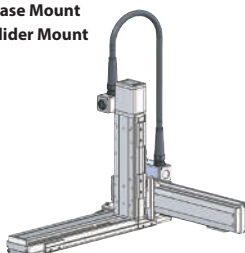
### XYB+ZB

Y-axis Base Mount  
Z-axis Base Mount



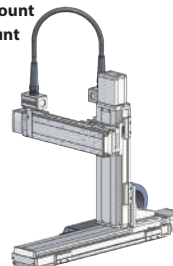
### XYB+ZS

Y-axis Base Mount  
Z-axis Slider Mount



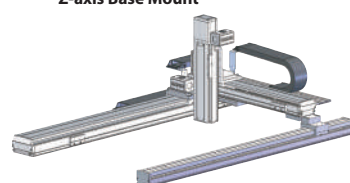
### XZ+YS

Z-axis Upright Mount  
Y-axis Slider Mount



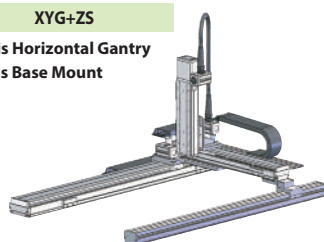
### XYG+ZB

Y-axis Horizontal Gantry  
Z-axis Base Mount



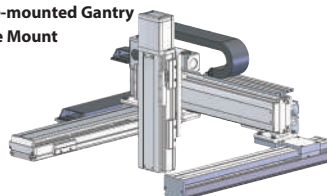
### XYG+ZS

Y-axis Horizontal Gantry  
Z-axis Base Mount



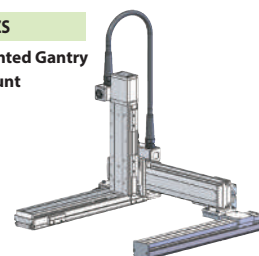
### XYBG+ZB

Y-axis Side-mounted Gantry  
Z-axis Base Mount



### XYBG+ZS

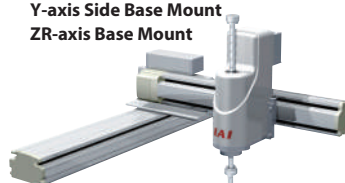
Y-axis Side-mounted Gantry  
Z-axis Slider Mount



## 4-axis Configuration

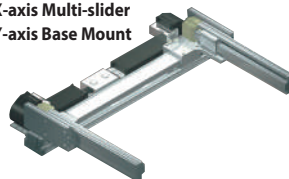
### XYB-ZRB

Y-axis Side Base Mount  
ZR-axis Base Mount



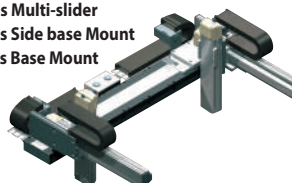
### XMYB

X-axis Multi-slider  
Y-axis Base Mount



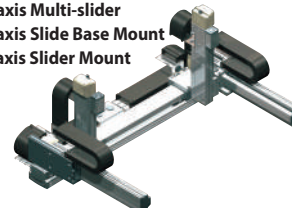
### XMYB+ZB

X-axis Multi-slider  
Y-axis Side base Mount  
Z-axis Base Mount



### XMYB+ZS

X-axis Multi-slider  
Y-axis Slide Base Mount  
Z-axis Slider Mount



## High-speed Cartesian Type

### 4-axis Cartesian with Rotational Axis Specification



### 4-axis Cartesian + Pick & Rotate Specification
















### 4-axis Cartesian Specification






# Controller

Select the operational pattern based on the purpose of use.

|                               |             | DC Brushless Servo<br>(24VDC)  | 24V Servo<br>(24VDC)   | Stepper<br>(24VDC)  | 120 / 240 VAC Servo<br>(120 / 240VAC)  |
|-------------------------------|-------------|--|--|---|--|
| CON<br>(Position to Position) | Single Axis | D CON-CB<br>  | A CON-CB<br>                  | P CON-CB<br>   | S CON-CB<br> Note4          |
|                               | Multi Axes  | M CON<br> (1~8 axes) Note4  | RCP6S Gateway<br> (1~16 axes) |   | M SCON<br> (1~6 axes) Note1 |
|                               |             | R CON<br> (1~16 axes) +<br>S CON-CB<br> RC Option Note2 |  |   |  |
| SEL<br>(Programmable)         | Multi Axes  | —  |  |   |  |
|                               |             | A SEL<br> (1~2 axes)   | M SEL<br> (1~4 axes) Note3   | X-SEL<br> (1~8 axes)<br>S SEL<br> (1~2 axes) |  |

Note1: SSEL (1~2 axes) has Positioner Mode. Note2: Additional SCON-CB RC Option required per axis. Note3: PSEL (1~2 axes) only supports RCP2 / RCP3  
 Note4:  LC-LADDER Free Ladder Programming Software is available for our controller with PLC function. Available with MCON-LC and SCON-LC

## FIELD NETWORKS

Note: The type of compatible networks may vary depending on the controller.

EtherNet/IP CompoNet DeviceNet CC-Link PROFIBUS PROFINET MECHATROLINK EtherCAT SSCNET III/H

## Power Supply

Low-cost DC24V power supply ideal for powering actuators

### PS-24



- Safely accelerate an output actuator at a maximum momentary current of 17A.
- Up to five units can be operated parallel to one another.
- The load factor detection function lets you monitor the load condition of the unit.

Available now!

PSA-24/24L



- Power source: Universal AC100V ~230V
- Continuous rated output: 240W/330W
- Peak output: 408W (17A)
- Compact size, smaller than PS-24

## Teaching Pendants

Programming points have never been easier  
Compatible with Safety Category



Touch Panel Teaching Pendant for Controllers  
**TB-02**



Touch Panel Teaching Pendant with wireless data setting function for EC  
**TB-03**

\*screen image



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[www.intelligentactuator.com](http://www.intelligentactuator.com)

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 The information contained in this product brochure may change without prior notice due to product improvements.

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