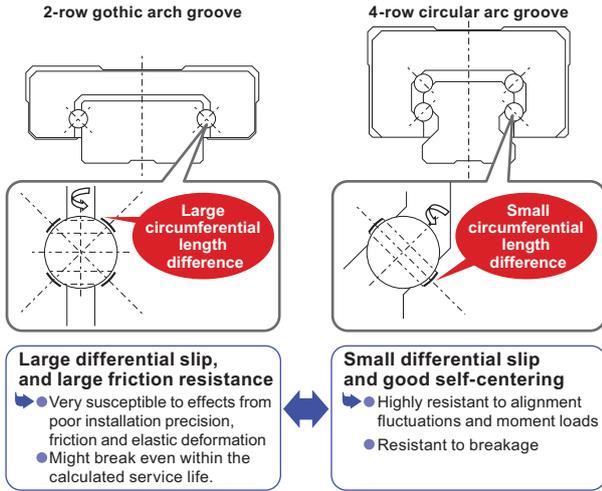


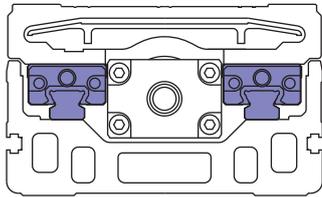
This is why the FLIP-X is terrific!

1 Uses a 4-row 2-point groove guide rail for superb durability! ^{Note 1}

The Flip-X uses 4-row circular arc groove 2-point contact guides having minimal differential ball slip. These yield a stable service life for large static loads when compared to 2-row gothic arch 4-point contact guides.



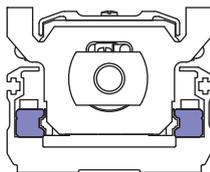
F / N / B type



(F14)

The F type, N type and B type layout utilizes 2 guide rails in a high-strength extruded aluminum frame. ^{Note 2} Each rail has 2 bearing units per rail so there are a total of 4 bearing units each capable of supporting a heavy load. Large moment loads are mainly converted into an upward/downward force so that only a very slight momentum is applied to each bearing unit. The unit also employs 4-row circular arc groove 2-point contact guides whose structure is extremely resistant to breakage and that yield a satisfactory rolling action when a large momentum load is applied.

F8 series



(F8)

The F8 series utilizes a newly developed module guide whose cross sectional area has been drastically reduced (70% compared to F10). The rail extends fully across the frame for a compact and high-strength structure. This series of course uses the 4-row circular arc groove 2-point contact guide.

Note 1. Exclude T4 / T5
 Note 2. Exclude F8 series / F10 / B10

2 Absolute system provides total reliability!

The position detector is a resolver. The resolver has a simple yet strong structure using not electronic components or elements and so has great features such as being extremely tough in harsh environments as well as a low breakdown rate. The resolver structure has none of the detection problems that occur in other detectors such as optical encoders whose electronic components breakdown or suffer from moisture or oil that sticks to the disk. Moreover, **mechanical specifications for both absolute and incremental specifications are common to all controllers** ^{Note 1} so one can switch to either absolute or incremental specifications just by setting a parameter. Also even if the absolute battery is completely worn down, the FLIP-X can operate on incremental specifications so in the unlikely event of trouble one can feel secure knowing that there will be no need to stop the production line. The backup circuit has been completely renovated and now has a backup period extending to 1 year. ^{Note 2}



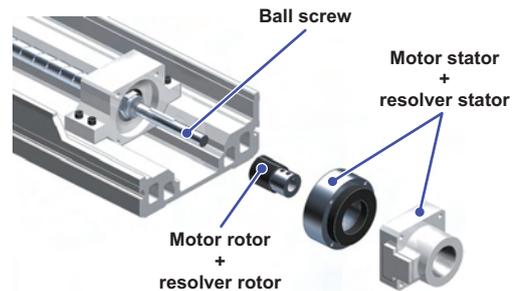
Resolver
(Positioning system)

Note 1. Not including the ERCD and RD series that are only for incremental operation.
 Note 2. Exclude ERCX, DRCX

3 Direct coupling structure

The FLIP-X utilizes a structure where the motor is built directly into the end of the ball screw axis. This structure helps achieve a smaller overall length, better servo rigidity, and lower cost.

This also helps streamline service tasks because the motor can easily be replaced even when in the field.



4 Streamlined maintenance tasks

Even though it uses a built-in structure, components such as the motor and ball screw can be replaced individually so maintenance tasks are smooth and simple.

5 Custom order specifications for each model are OKAY!

We gladly accept special orders for all models such as for double sliders or wide sliders. Please consult with our sales office for more information.

T type **Frame-less structure model**

- ◆ Double appeal of a compact body and low price.
- ◆ Ideal in applications as an actuator directly installed on a mount.



F type **High rigidity frame model**

- ◆ Large inertial moment capacity, easily handles offset loads.
- ◆ Ideal for Cartesian robots requiring arm strength, and for moving arms that shift the entire axis.



R type **Rotation axis type model**

- ◆ Position repeatability accuracy of ± 30 seconds (0.0083°).
- ◆ The R type can be used as the rotation axis when combined with other robots, or utilized for a wide range of applications such as index tables.
- ◆ Harmonic drive delivers high-strength and high-accuracy.



YMS type **Rod type model**

- ◆ Combined with an AC servomotor and ball screw allows a rod to extend and contract from the structure.
- ◆ Usable in diverse applications including where a tool is attached to the rod tip for conveying work, or tasks where the rod pushes the work for clamping.



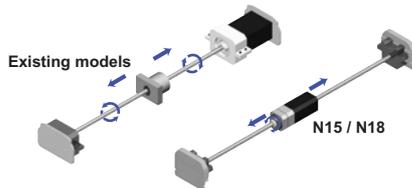
B type **Timing belt drive model**

- ◆ Maximum stroke length of 3050mm. Allows long distance transport between job processes.

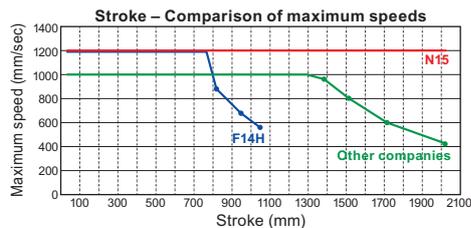


N type **Nut rotation type model**

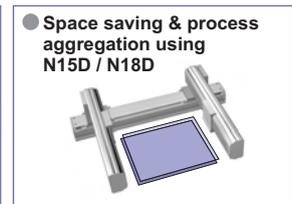
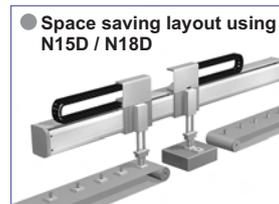
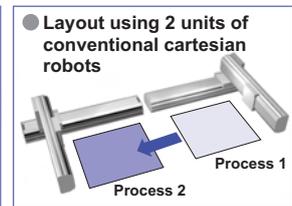
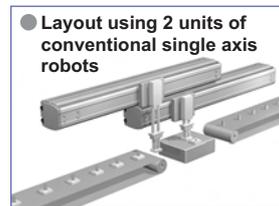
- ◆ In this structure, movement is via a nut that rotates while clamped to a screw shaft, the ball screw nut is linked to the hollow motor.



- ◆ High-speed conveyance with no speed hazard restrictions. Stroke 2500mm Maximum speed 1200mm/sec.



- ◆ Repeated positioning accuracy ± 0.01 mm
- ◆ Maximum carrying weight 80kg
- ◆ Double carrier available as a standard



The ideal controller to match your application!

Besides operation by robot programs and pulse train control, this new controller lineup includes positioners that operate by specifying a point No. These also support multi-spec operation where 1 controller unit operates multiple robots. Select the optimal controller to match your application.

Programs			I/O point trace (positioner)	Pulse string
SR1-X	RCX222	RCX240	TS-X	RDX
P.377	P.395	P.402	P.354	P.365