



Mini ROBO Cylinder



Next-generation electric actuators, the solution for space constrained applications

RCP3 MINI SLIDER TYPE



Motor Coupled Type



Side-Mounted Motor Type





Motor Coupled Type

RCA2/RCS2 MINI ROD TYPI

Side-Mounted Motor Type

- The coupled motor makes replacement easy.
- The straight type (motor coupled type) and the side-mounted motor type are also available.





Side-Mounted Motor Type

Short Tapped-Hole Mounting Type







Side-Mounted Motor Type



Short Nut-Mounting Type





Short Free Mounting Type with Double Guides



Short Slide Unit Type with Double Guides

- The unitized motor type has significantly reduced in length.
- If an application requires extra rigidity and linearity, you can choose from single and double built-in guides. The non-guide types allow external guide(s) to be attached, which help significantly reduce the actuator size.

RCA2/RCS2 MINI TABLE TYPE









Short Flat Type

RCP3/RCA2 MINI TABLE TYPE





Motor Coupled Type

Side-Mounted Motor Type

- The built-in guide allows the actuator to receive overhung loads.
- Actuators with long strokes are also available.

RCD MINI CYLINDER



Ultra-Compact Type

- The smallest in the industry with a cross-section size of 12mm.
- The built-in encoder allows position control.

RCL MINI LINEAR SERVO TYPE







Micro Slider Slim Type

Micro Slider Long Stroke Type

Micro Cylinder Slim Type

- With the use of linear motors, these actuators can operate at high speeds and high acceleration/deceleration with G-forces up to 2G.
- Slider and rod types are available. The slider type is classified into six subtypes according to size and stroke.
- The multi-slider type has two sliders installed on one axis, where both sliders can be operated separately.

ROBO Cylinder®



The affordable high-precision electric actuators reduce your running costs to 1/5 of a pneumatic system ROBO Cylinders are high-performance electric actuators with a ball screw or belt, linear guide, and AC servo motor or DC servo/stepper motor. These next-generation actuators offer multi-point positioning capability and speed/acceleration change function unseen with air cylinders.



- Battery-less absolute encoder as standard equipment
- 1.5 times higher maximum speed and double the payload when combined with a Power CON.



1.5 times higher maximum speed and double the payload when combined with a Power CON.



- High push force is achieved with the use of stepper motors.
- Many different sizes and variations are available to meet a wide range of applications.



- Shaped similar to a rod-type air cylinder, these actuators accept various mounting brackets that are used on air cylinders.
- Three motor installation methods are available to choose from.
- An optional home check sensor can be set.

ERC3 SERIES CONTROLLER INTEGRATED TYPE



- The ERC3 Series have built-in controllers which simplify set up and use.
- High-precision, performance and rigidity all in an affordable package.





- Equipped with a servo motor, these actuators support high loads and long strokes.
- When an XSEL controller is used, you can combine three or more axes.
- Connectable to DeviceNet, Profibus, Modbus and CC-Link.

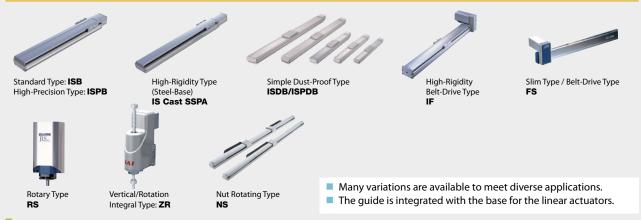
RCS3 SERIES



Single Axis Robot



Intelligent actuators with high-speed, high-transfer capabilities



Cleanroom Type

Dedicated cleanroom types conforming to cleanliness class 10



- The highly sealed structure achieves operation in conformance with cleanliness class 10.
- Wide variations are available, including ROBO Cylinders and single-axis/SCARA robots.

Splash-Proof/Dust-Proof Type

Protection conforming to IP54–IP67, these actuators are the solution when the environment is less than desirable



- These actuators handle environments with extreme dust or water splashes.
- Many variations are available to meet diverse applications.



TTA Table Top Type Robot

Improved table top robots for cell productions and R&D applications

Gate Type













2-axis Specification

3-axis Specification

4-axis Specification

- Cantilever type is added to the series.
- Maximum payload Gate type: X-axis 20kg, Y-axis 10kg, Z-axis 6kg

Cantilever type: Y-axis 10kg, Z-axis 6kg, R-axis 0.01kg·m²

X·Y-axis 800mm/s, Z-axis 400mm/s, R-axis 1,000deg/sec



High Speed Cartesian Robot CT4 mission

High-speed cartesian robot that shortens assembly/ inspection cycle times by operating at high speed, ensuring high rigidity and demonstrating excellent straight moving performance.



- Maximum speed 2.5m/s, maximum acceleration/deceleration 3.2G
- The standard cycle time is 32% less than a conventional cartesian
- Rotational axis specification and pick-and-rotate specification are added to the series

Direct Drive Motor DD Series

Hi speed, high accuracy, easy adjustment and compact High cost-performance direct drive motor



- Maximum speed of 1800°/s and acceleration/deceleration of 6.0G can make faster positioning time possible
- Positioning repeatability ± 0.0055 degree
- Newest additions to the series: High torque type, Large hollow bore type, high resolution type
- Index absolute type or multi-rotation absolute type can be selected

Cartesian Robots

Pre-configured cartesian robots that reduce installation and setup times



ICSB2/ICSPB2 2-AXIS CONFIGURATION



Y-axis Base Mount



Y-axis Slider Mount



Z-axis Base Mount



Y-axis Base Mount



Y-axis Slider Mount





ICSB3/ICSPB3 3-AXIS CONFIGURATION



XYB + Z-axis Type



XYG + Z-axis Type



X-axis Nut Rotation Type X-axis Linear Servo Type





X-axis Nut Rotation, Multi-Slider Type X-axis Linear Servo, Multi-Slider Type

IK SERIES MULTI-AXIS ROBO CYLINDER KITS



ZR UNIT



- Many variations are available to support 2 to 6-axis configurations.
- The multi-slider types (ICSPA4/ICSPA6) let you reduce space and cycle time.
- We can also design specifications with rotational
- We can also customize the optimum model that suits your specific needs.

LSA Series Linear Servo Actuator

A full lineup of linear servo actuators to meet your needs Maximum load capacities of up to 120kg and maximum strokes of up to 4m





PowerCON SCARA Robot IXP Series

All models come standard with battery-less absolute encoders





- All models come standard with battery-less absolute encoders.
- The IXP costs around 1/2 conventional models.
- Lighter than conventional models.
- The regular cycle time is about 60% shorter than conventional cartesian robots.
- Added 3-axis specification and 4-axis gripper specification.
- Equipped with optimal speed and acceleration/deceleration settings.

SCARA Robots IX Series

The IX SCARA robots feature high performance and functionality



SCARA ROBOT ARM LENGTH 250/350/500/600/700/800 MM



Standard Compact



Standard Medium



Standard Large



High-Speed



Wall Type



Ceiling Type

- Achieves high speeds and repeatability.
- Easy programming makes these actuators much more user-friendly.
- Many variations are available to support arm lengths of 250 to 800mm.

ULTRA-COMPACT SCARA ARM LENGTH 120/150/180 MM



- The compact size of the robot allows you to reduce the size of your production facility.
- The rated loading capacity is 0.2 kg, and can be increased to 1 kg.
- High-speed performance with a cycle time of 0.35 sec.

SUPER-LARGE SCARA ROBOT ARM LENGTH 1000/1200 MM



- Achieves high speed, high payload and repeatability.
- Each arm length type can carry up to 50 kg.
- All high-speed performance with a cycle time of 0.66 sec.

Controller

Wide variety of operation patterns for your specific needs

POSITION CONTROLLER

PMEC AMEC



- Power supply, accelertion/speed change function included.
- Operation as easy as any air-cylinder system.





RCP3



For RCD

RCA2/RCL

- 3-position controllers
- Use the same signals as air-cylinder solenoid valves.
- Standard and dust-proof specifications are available.
- The dust-proof specification has a protective structure conforming to IP53, allowing it to be installed outside the control panel.





- PowerCON achieved 150% output than a conventional model. Supporting RCP5 with battery-less absolute encoder.
- Up to 512 positions can be set.
- DeviceNet, CC-Link and other field networks can be supported.
- SCON-CA comes with force control and vibration control functions.









ROBO Cylinder Position Controller, 8-axis Type

Cartesian-Linear Servo



- Added PLC function (MSEP-LC)
- Supporting RCP5 with battery-less absolute encoder (MSEP-LC/C)
- Supporting PowerCON (High output driver), and Mini Cylinder (MSEP-LC/C)

■ For RCS2/3, Combined 6 controllers into 1 controller.

Supporting various field networks.

PROGRAM CONTROLLER



6-axis Type

For RCP2/RCP3 (1-2 axes)



For RCA/RCA2/RCL (1-2 axes)



For RCS2/RCS3-



1-8 axe



For PowerCon **SCARA**

- PSEL/ASEL/SSEL controllers support interpolated operation and are used to set 1 or 2 axes.
- XSEL controllers can operate up to 8 axes.
- All controllers support DeviceNet, CC-Link and other field networks.

Power supply

Low-cost 24VDC power supply ideal for powering actuators



- Accelerate an actuator with maximum momentary current output of 17A.
- Up to 5 units can be operated in parallel.
- The load factor detection function lets you monitor the load condition of the unit.

Teaching Pendant

Programming points have never been easier (ANSI type offering enhanced safety is available)



Power Supply Built-in Teaching Pendant for ERC3 RCM-PST (Quick Teach)



Touch Panel Teaching Pendant for Position Controllers and Program Controllers.

TB-01