Mini ROBO Cylinder

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

**RCP3 MINI SLIDER TYPE**
- Motor Coupled Type
- Side-Mounted Motor Type

**RCP3 MINI ROD TYPE**
- Motor Coupled Type
- 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.

**RCA2 MINI ROD TYPE**
- Short Nut-Mounting Type
- Short Tapped-Hole Mounting Type
- Short Slide Unit Type with Single Guide
- 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 MINI TABLE TYPE**
- Short Compact Type
- Short Wide Type
- Short Flat Type

**RCP3/RCA2 MINI TABLE TYPE**
- Motor Coupled Type
- Motor Coupled Type with Side-Mounted Motor

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

**RCL MINI LINEAR SERVO**
- Micro Slider Slim Type
- Micro Slider Long Stroke Type
- Micro Cylinder

- 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 sub-types 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, 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.

**ERC2 SERIES CONTROLLER INTEGRATED TYPE**

- The ERC2 Series have built-in controllers which simplify set up and use.
- High-precision, performance and rigidity all in an affordable package.

**RCP2 SERIES PULSE MOTOR TYPE**

- 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.

**RCA SERIES 24V SERVO MOTOR TYPE**

- 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.

**RCS2 SERIES 100V/200V SERVO MOTOR TYPE**

- 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, Profinet, Modbus and CC-Link.
**Single Axis Robot**

Intelligent actuators with high-speed, high-transfer capabilities

- Standard Type: ISB
- High-Precision Type: ISPB
- High-Rigidity Type (Steel-Base): SSPA
- Simple Dust-proof Type: ISDA/ISPDA
- High-Rigidity Belt-Drive Type: IF
- Slim Type / Belt-Drive Type: FS

- Many variations are available to meet diverse applications. 
- The guide is integrated with the base. 
- Speeds of up to 2400mm/s and 150kg payload. 
- Strokes go as long as 3000mm with the NS series actuators.

**Cleanroom Type**

Dedicated cleanroom types conforming to cleanliness class 10

- 24V Pulse Motor: RCP2CR
- 24V Servo Motor: RCACR
- 200V Servo Motor: RCS2CR/RCS3CR
- Standard Type: ISDACR
- High-Precision Type: ISPDACR
- Anti-Static Type: ISDACR-ESD
- SM2CR-GR
- SCARA Robot: IX-NNC
- Ultra-Compact SCARA Robot: IX-NNC

- 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

- Slider Type: RCP2W-SA16C
- Slider Type: ISWA/ISPWA
- Pulse Motor Rod Type: RCP2W-RA4C/RA6C
- High-Thrust Rod Type: RCP2W-RA10C
- 24V Servo Motor: RCS2CR/RA6C
- 200V Servo Motor: RCP2W-RA10C

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

- These all-in-one actuators are ideal for cell production and R&D applications. The 200mm x 200mm and 400mm x 400mm type are available as standard products.
- The TT is equipped with a rigid base, servo control motor and an encoder to prevent mis-stepping.
- All models come with a built-in XSEL controller which is popular for its ability to achieve high tracing precision and constant speed operation.

**Cartesian Robots**

Get your ROI quickly with pre-configured cartesian robots that reduce installation and setup times.

**ICSA2/ICSPA2 2-AXIS COMBINATION**
- Y-axis Base Fixed Type
  - XYB
- Y-axis Slider Fixed Type
  - XYS
- Z-axis Base Fixed Type
  - XZ
- Z-axis Slider Fixed Type
  - YZ
- Gantry Type
  - XYG

**ICSA3/ICSP3 3-AXIS COMBINATION**
- 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

**ICSPA6 6-AXIS COMBINATION**

- 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 axis(es).
- Customize the optimum model that suits your specific needs.
**LSA Series Linear Servo Actuator**
A full lineup of linear servo actuators to meet your need
Max load capacities of up to 120kg and max strokes of up to 4m

- High-speed and high-precision is kept even at long strokes.
- Supports high accelerations of up to 3G and high speeds up to 2.5m/s.
- Multi-slider types supporting synchronized operation are also available.

**IX Series SCARA Robots**
The IX SCARA robots feature high performance and functionality

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

- 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.

**Z-axis Push Function**
Enables you to easily apply compression force and torque.

**3D Path Capability**
Faster CPU speed and rigid robot construction, along with 3D arc motion & path control, allow for easy, accurate path tracing.

**Interference Check Zones**
A maximum of 10 user-defined check zones can be set inside the robot’s operation range.
Controller
Wide operation patterns for your specific needs

3-POSITION CONTROLLER

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

PCON/ACON/SCON/ROBONET/PSEP/ASEP/PMEC/AMEC

RCP2/RCP3 RCA/RCA2/RCL

PROGRAM CONTROLLER

- The simple absolute unit is an encoder backup that connects to a PCON/ACON controller to eliminate the need for home return.
- ROBONET minimizes wires and operates on DeviceNet, CC-Link or other field networks.
- Link and operate up to 16 axes.

RCP2/RCP3/RCA/RCA2/RCL

Position Controller

RCA/RCA2/RCL

Position Controller

SCL2/SCL3

- Cartesian - Linear Servo Position Controller

ROBO NET

RCP2/RCP3/RCA/RCA2/RCL

Network Controller

Simple Absolute

Expansion Unit

Position Controllers & Program Controllers

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)