

2022 IAI ROBOT LINEUP GUIDE

Product Lineup Catalog

ELECYLINDER®
ROBO Cylinder®
Industrial robots

Available now!

ELECYLINDER®
EC-S□(X)



Robo Cylinder®
Pulse press



IXA-4NHN
High payload

Coming soon!

IFA series
High-speed belt driven actuator



IXA-4NSC series
Cleanroom specification

ELECYLINDER can be operated only by ON/OFF signals like solenoid valves. It's easy to operate for beginners. You can adjust A (Acceleration), V (Velocity) and D (Deceleration) individually by input percentage. It can start/stop smoothly at high speed.



Digital Speed Controller

Electric actuator can change speed by entering numeric values directly.

No need to connect a PC or a teaching pendant. Setting and trial operations can be performed by the ELECYLINDER alone.



Equipped with battery-less absolute encoder

Built-in controller type

Standard

Rod type	Slider type	Side-mounted motor	Small type	Small, side-mounted motor	Wide type
Body width (mm): 63-73 Stroke (mm): 50-300 Max. payload (kg): Horizontal 80/Vertical 19	Body width (mm): 63-73 Stroke (mm): 50-500 Maximum payload (kg): Horizontal 51/Vertical 19	Body width (mm): 63-73 Stroke (mm): 50-500 Maximum payload (kg): Horizontal 51/Vertical 19	Body width (mm): 35-44 Stroke (mm): 50-300 Max. payload (kg): Horizontal 18/Vertical 6.5	Body width (mm): 35-44 Stroke (mm): 50-300 Maximum payload (kg): Horizontal 18/Vertical 6.5	Body width (mm): 100, 120 Stroke (mm): 50-800 Maximum payload (kg): Horizontal 62/Vertical 13.5
EC-R□ EC-DR□	EC-S□ EC-DS□	EC-S□□R EC-DS□□R	EC-S□ EC-DS□	EC-S□R EC-DS□R	EC-WS□ EC-DWS□

Radial Cylinder

Radial Cylinder®	High-rigidity Radial Cylinder®	Small type Radial Cylinder®	High-rigidity slider type	Side-mounted motor
Body width (mm): 63-73 Stroke (mm): 65-315 Maximum payload (kg): Horizontal 80/Vertical 19	Body width (mm): 63-75 Stroke (mm): 50-1000 Maximum payload (kg): Horizontal 80/Vertical 28	Body width (mm): 35-44 Stroke (mm): 50-300 Maximum payload (kg): Horizontal 35/Vertical 6.5	Body width (mm): 63-75 Stroke (mm): 50-800 Maximum payload (kg): Horizontal 51/Vertical 25	Body width (mm): 63-75 Stroke (mm): 50-800 Maximum payload (kg): Horizontal 51/Vertical 25
EC-RR EC-DRR	EC-RR□AH EC-RR□AHR EC-RR□XAH	EC-RR□ EC-DRR□	EC-S□AH	EC-S□AHR

High rigidity radial cylinder

High Rigidity Radial Cylinder

Body width (mm): 60-70
Stroke (mm): 550-1000



EC-RR□AH
EC-DRR□AH
EC-RR□x□AH
EC-DRR□x□AH

Belt drive

Long stroke

Body width (mm): 60-73
Stroke (mm): 300-2600
Maximum payload (kg):
Horizontal 20



EC-B□S
EC-B□SU
EC-DB□S
EC-DB□SU

Cleanroom specification

Slider type

Body width (mm): 35-75
Stroke (mm): 50-800
Maximum payload (kg):
Horizontal 51/Vertical 25



NEW

EC-S□CR
EC-S□AHR

ELECYLINDER can be operated only by ON/OFF signals like solenoid valves. It's easy to operate for beginners. You can adjust A (Acceleration), V (Velocity) and D (Deceleration) individually by input percentage. It can start/stop smoothly at high speed.





Compact

Rod type			Table type	
<p>Body width (mm): 60 Stroke (mm): 30, 50 Max. payload (kg): Horizontal 8/Vertical 2.5</p>  <p>EC-GS4</p>	<p>Body width (mm): 30-50 Stroke (mm): 30, 50, 150 Max. payload (kg): Horizontal 8-35/Vertical 2.5-6.5</p>  <p>EC-RP□</p>	<p>Body width (mm): 80-110 Stroke (mm): 50, 150 Max. payload (kg): Horizontal 8-35/Vertical 2.5-6.5</p>  <p>EC-GD□</p>	<p>Body width (mm): 30-40 Stroke (mm): 30, 50, 150 Max. payload (kg): Horizontal 8-12.5/Vertical 2.5-6.5</p>  <p>EC-TC□</p>	<p>Body width (mm): 78-88 Stroke (mm): 30, 50, 100, 150 Max. payload (kg): Horizontal 20/Vertical 6.5</p>  <p>EC-TW□</p>

Others

Rotary	Stopper cylinder	Large Slider type		Gripper
<p>Body width (mm): 90-120 Max. swaying angle (degree): 330 Max. speed (degree/s): 600</p>  <p>EC-RTC□</p>	<p>Body width (mm): 150 Stroke (mm): 50</p>  <p>EC-ST15</p>	<p>Body width (mm): 130-160 Stroke (mm): 1100-2500 Max. payload (kg): Horizontal 27-108/Vertical 5.4-36</p>  <p>EC-S□/S□X</p>	<p>200V power supply for Large sliders</p>  <p>PSA-200</p>	<p>Body width (mm): 80-130 Max. Stroke (mm) One side: 10-20 Max. Grip force (N) One side: 28-360</p>  <p>EC-GRB□</p>

Splash -proof specification

Rod type	Radial Cylinder®
<p>Body width (mm): 63-73 Stroke (mm): 50-300 Maximum payload (kg): Horizontal 80/Vertical 19</p>  <p>EC-R□W</p>	<p>Body width (mm): 63-73 Stroke (mm): 65-315 Maximum payload (kg): Horizontal 80/Vertical 19</p>  <p>EC-RR□W</p>

Field network connection unit

Field network compatible remote I/O



Teaching pendant

Teaching pendant with dedicated power supply unit



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

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

Standard type

Equipped standard with battery-less absolute encoder
Built-in controller available

24v Stepper motor



RCP6(S)-SA□C

Side-mounted motor

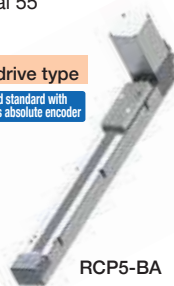
Equipped standard with battery-less absolute encoder
Built-in controller available



RCP6(S)-WSA□R

Belt-drive type

Equipped standard with battery-less absolute encoder



RCP5-BA

Standard type

Equipped standard with battery-less absolute encoder

24v AC servo motor

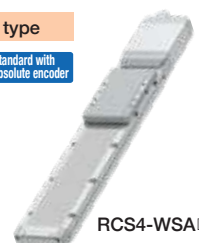


RCA-SA□C

Wide type

Equipped standard with battery-less absolute encoder

200v AC servo motor



RCS4-WSA□C

Rod Type

Use rod type when moving workpieces vertically or carrying them with a chuck.

It is also suitable for pushing operations and press-fitting operations.

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

Standard type

Equipped standard with battery-less absolute encoder
Radial cylinder available
Built-in controller available

24v Stepper motor



RCP6(S)-R(R)A□C

Wide side-mounted motor

Equipped standard with battery-less absolute encoder
Radial cylinder
Built-in controller available



RCP6(S)-WRA□R

Standard side-mounted motor

Equipped standard with battery-less absolute encoder
Radial cylinder available

200v AC servo motor



RCS4-R(R)A□R

Wide type

Equipped standard with battery-less absolute encoder
Radial cylinder



RCS4-WRA□C

Compact type

24v DC brush-less motor



RCD-RA1DA

Compact type

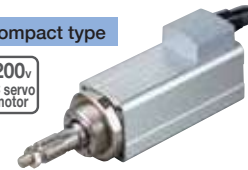
24v AC servo motor



RCA2-RN/GS/SD

Compact type

200v AC servo motor



RCS2-RN/GS/SD

Servo press

Rod type actuators are equipped with a load cell at the rod tip. High-precision pushing (pressurizing) operations are possible.

Body width (mm): 40-200, Stroke (mm): 100-520, Max. pushing force (N): 50000

Equipped standard with battery-less absolute encoder

200v AC servo motor



RCS3-RA□R



RCS2-RA13R

Pulse Press

A pulse press is an actuator combining a stepper motor and load cell.

Max stroke (mm): 310~320, Max. push force (N): 300~2000



RCP6-RRR□R

Table type

Use this type when moving workpieces vertically and when moment loads are applied.

Body width (mm): 32-95, Stroke (mm): 20-390, Max. payload (kg): horizontal 30 / vertical 24.

Standard type

Equipped standard with battery-less absolute encoder
Built-in controller available

24v Stepper motor



RCP6(S)-TA□C

Side-mounted motor type

Equipped standard with battery-less absolute encoder
Built-in controller available



RCP6(S)-TA□R

Compact type

24v AC servo motor



RCA2-TCA/TWA/TFA

Standard type

Equipped standard with battery-less absolute encoder

200v AC servo motor



RCS4-TA□C

Side-mounted motor type

Equipped standard with battery-less absolute encoder



RCS4-TA□R

Compact type



RCS2-TCA/TWA/TFA

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

Hollow type

Equipped standard with battery-less absolute encoder

24v Stepper motor



RCP6-RTFML

Flat type



RCP2-RTC

Vertical type



RCP2-RTB

Rotary type

200v AC servo motor



RCS2-RTC□L

Direct drive motor

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



DDA-LT/LH

Gripper type

Suitable for gripping and lifting up workpieces.

Stroke (mm): 2-finger 4-260, 3-finger 10, 14 (dgree): 2-finger 180, 3-finger 19

Solenoid type



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

Ultra compact slide type

24v DC brushless motor



RCD-GRSNA

Long stroke: Coupling type

Equipped standard with battery-less absolute encoder
Built-in controller available

24v Stepper motor



RCP6(S)-GRST□C

Long stroke: Side-mounted motor type

Equipped standard with battery-less absolute encoder
Built-in controller available



RCP6(S)-GRST□R

Thin slide type

Equipped standard with battery-less absolute encoder

24v Stepper motor



RCP6-GRT

Slide type

24v Stepper motor



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

Stopper cylinder

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

24v Stepper motor



RCP4-ST

ZR Unit (vertical/rotation integrated type)

Body width (mm): 2/122, M/138
Max. payload (kg): S/3, M/6

200v AC servo motor



ZR-S/M

Wrist unit

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

Equipped standard with battery-less absolute encoder

24v Stepper motor



WU-S/M

Single-axis Robot

Intelligent actuator with high speed and high transfer capabilities

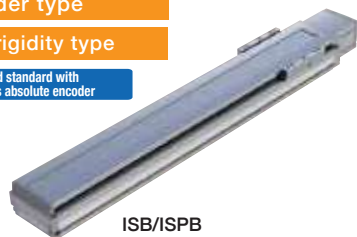
The single-axis robot is a high-precision indexing device, which is equipped with a base, linear guide, ball screw and servo motor integrated into one unit. It reduces designing and adjustment times, achieving lower costs.

Slider type

High rigidity type

Equipped standard with battery-less absolute encoder

200V AC servo motor



ISB/ISPB

High rigidity type (iron-base)



SSPA

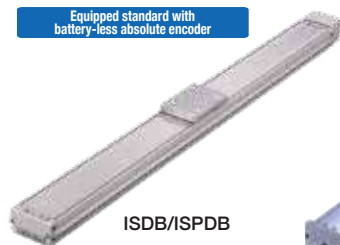
Ball screw type (standard)



ISA/ISPA

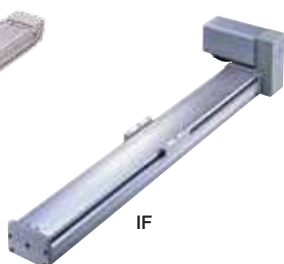
Simple dust-proof type

Equipped standard with battery-less absolute encoder



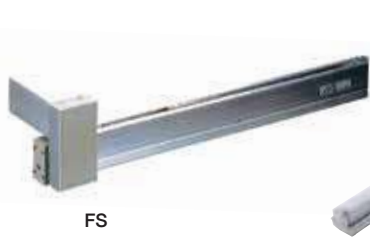
ISDB/ISPDB

Belt-drive, high rigidity type



IF

Belt-drive, slim type



FS

Nut-rotation type



NS

NSA

Cleanroom Specification

Suitable for transfer and indexing in the cleanroom.

Electric actuators for cleanroom applications, compliant with Class 10 or Class 100.

Slider type

Equipped standard 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 standard with battery-less absolute encoder



IXP-□C

Dust- and Splash-proof Specification

Operations with extreme dust or water splashes.

Degree of protection conforms to IP50-67.

Slider type



RCP4W-SA□C

Rod type

Equipped standard with battery-less absolute encoder

Radial cylinder available

Built-in controller available



RCP6(S)W-R(R)A□C

Gripper type



RCP2W-GRM

Rotary type



DDW

RCP2W-RT

SCARA robot

Equipped standard with battery-less absolute encoder



IXA-4NSW□□□□



IXP-□W

Linear Servo Type

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

Body width (mm): 60-210
Stroke (mm): 40-4155
Max. payload (kg): 120

Linear servo motor



LSA-S



LSAS-N



LSA-W

SCARA Robot

Horizontal articulated robots suitable for high-speed transfer operations of light workpieces

IXA Arm length (mm): 180-1200
Standard cycle time (S): 0.26-0.61 Max. payload (kg): 1-50

Standard type

High-speed type

Equipped standard with battery-less absolute encoder

200V AC servo motor



IXA-NNN



IXA-NSN

Long arm type

Equipped standard with battery-less absolute encoder

NEW



IXA-NHN

IXP (Power Con type)

Arm length (mm): 180-650
Max. payload (kg): 6

Standard type

Equipped standard with battery-less absolute encoder

24V Stepper motor



IXP-3N

Table Top Robot

All-in-one, table-top type robot equipped with built-in controller and power supply unit

Selectable from stepper motors or servo motors.
Body width (mm): 401-755.8 XY axis stroke (mm): 150-500

24V Stepper motor

24V AC servo motor

A-type [movable workpiece type]

3-axis type

Equipped standard with battery-less absolute encoder

TTA-A3



C-type [fixed workpiece type]

3-axis type

Equipped standard with battery-less absolute encoder

TTA-C3



Cartesian Robot

Many variations are available by combining single-axis robots.

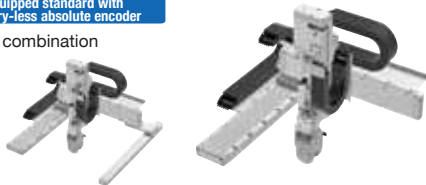
Realizes high rigidity by ingenious mechanical design.
Number of axes: 2-6 Max. payload (kg): 65

CRS 6-axis type robot

CRS-XBA/CRS-XGA/CRS-XBB/CRS-XGB

Equipped standard with battery-less absolute encoder

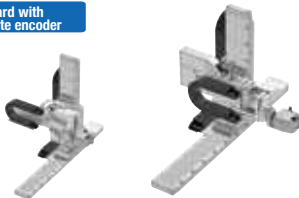
Gantry combination



CRS-XACY/CRS-XADY/CRS-XZEY

Equipped standard with battery-less absolute encoder

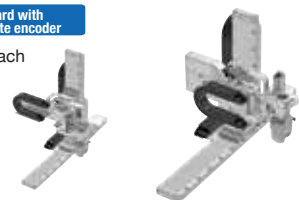
Side approach



CRS-XACY/CRS-XADY/CRS-XZEY

Equipped standard with battery-less absolute encoder

Downward approach

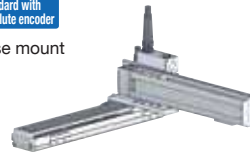


2-axis configuration

XYB type

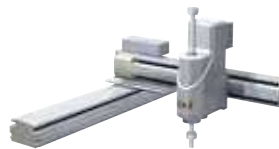
Equipped standard with battery-less absolute encoder

Y-axis base mount



4-axis configuration

ZR axes integrated type



6-axis configuration

Z-axis base mount type (Z-axis slider movable)



3-axis configuration

XYB+Z base mount

Equipped standard with battery-less absolute encoder

Y-axis base mount
Z-axis base mount



High-speed Cartesian type

Cartesian 4 axes + Rotary axis



Controller

Select an operational pattern based on the purpose of use.

IAI's controller series

R-unit

This series of unit-connecting controllers allows you to freely select and combine connected actuators and control methods.



RCON
Positioner Type

Actuator **2** axes connectable



REC
ELECYLINDER Drive Unit

Max. **16** axes



RSEL
Program Type

Max. **8** axes

Positioner type : Single - axis controller

<Small> Position controller
Max. dimensions: W28mm x D69mm x H80mm

Position controller DC24V/AC100V/AC200V types
Max. dimensions: W35mm x D69.1mm x H190mm

Max. dimensions:
W49mm x D116mm x H158mm

Max. dimensions:
W72mm x D121mm x H194mm



PCON-CYB

ACON-CYB

DCON-CYB

PCON-CB

ACON-CB

DCON-CB

SCON-CAL

SCON-CB

Program Type : Multi-axis controller

Touch Panel Teaching Pendant

Max. dimensions:
W100mm x
D126mm x
H177~195mm

Max. dimensions:
W130mm x
D 125mm x
H 195mm

Max. dimensions:
W304mm~372mm x
D125.3mm x H195mm

Position controller /
Program controller
common use
Max. dimensions:
W190mm x D25mm x
H155mm

Position controller /
Program controller
common use
Max. dimensions:
W200mm x D34mm x
H155mm

Teaching pendant
with dedicated for EC
power supply unit
Max size: W250mm x
D57.4mm x H164.4mm



SSEL

MSEL

XSEL

TB-02

TB-03

TB-03E/TB-02E

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

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