

IAI
Quality and Innovation

2023 IAI ROBOT LINEUP GUIDE

Product Lineup Catalog

ELECYLINDER®
ROBO Cylinder®
Industrial robots

www.intelligentactuator.com

Available now!

EC-SRG11/15 Rod type with a double guide



Body width (mm): 110-150
Stroke (mm): 50-300
Max payload horizontal (kg): 60
Max payload vertical (kg): 12.5
Max push force (N): 449

Coming soon!

CCM Conveyor Control Motor



Equipped with battery-less absolute encoder

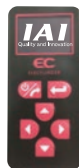
Built-in controller type



ELECYLINDER can be operated only by ON/OFF signals like solenoid valves. It's easy to operate for **2 positions**. You can adjust A (Acceleration), V (Velocity) and D (Deceleration) individually by input percentage. It can start/stop smoothly at high speed.

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

Built-in Digital Speed Controller Available



Wired Teaching Controller TBD-1



Wireless Teaching Controller TBD-1WL



Standard, Small, Ultra Mini

Rod Type	Slider Type	Side-mounted motor	Small Type	Small, side-mounted motor	Ultra Mini
Body width (mm): 60-70 Stroke (mm): 50-300 Max. payload (kg): Horizontal 80/Vertical 19 Max push force (N): 1094	Body width (mm): 30-90 Stroke (mm): 50-1500 Maximum payload (kg): Horizontal 80/Vertical 55	Body width (mm): 30-90 Stroke (mm): 50-1500 Maximum payload (kg): Horizontal 80/Vertical 55	Body width (mm): 40 Stroke (mm): 50-450 Max. payload (kg): Horizontal 18/Vertical 6.5	Body width (mm): 40 Stroke (mm): 50-450 Maximum payload (kg): Horizontal 18/Vertical 6.5	Body width (mm): 30 Stroke (mm): 50-200 Max. payload (kg): Horizontal 2/Vertical 0.7
EC-(D)R□	EC-(D)S□(X)(□A)	EC-(D)S□(X)(□A)R	EC-(D)S(□A)	EC-(D)S□(X)□(A)R	EC-SL3

Standard (Wide Type)

Wide Type	Wide, side-mounted motor
Body width (mm): 100, 120 Stroke (mm): 50-500, 50-800 Maximum payload (kg): Horizontal 44, 62/Vertical 7, 13.5	Body width (mm): 100, 120 Stroke (mm): 50-500, 50-800 Maximum payload (kg): Horizontal 44, 62/Vertical 7, 13.5
EC-(D)WS□	EC-(D)WS□□R

High-rigidity

High-rigidity Slider Type	Side-mounted motor
Body width (mm): 60-80 Stroke (mm): 450-1500 Maximum payload (kg): Horizontal 51/Vertical 25	Body width (mm): 60-80 Stroke (mm): 450-1500 Maximum payload (kg): Horizontal 51/Vertical 25
EC-(D)S□(X)□AH	EC-(D)S□(X)□AHR

Belt drive

Long Stroke
Body width (mm): 90 Stroke (mm): 300-2600 Maximum payload (kg): Horizontal 25
EC-(D)B□S(U) 24v Stepper Motor EC-B8SS(U) 200v AC Servo Motor

Ultra Large

Large Slider Type
Body width (mm): 100-190 Stroke (mm): 100-2800 Max. payload (kg): Horizontal 400/Vertical 80
EC-S□(X)
200V power supply for Large sliders
PSA-200

Radial Cylinder®

Radial Cylinder®
Body width (mm): 40-110 Stroke (mm): 50-800 Maximum payload (kg): Horizontal 35, 80, 300/Vertical 6.5, 19, 150 Max push force (N): 263, 1094, 6000
EC-(D)RR□ EC-(D)RR□□R

High-rigidity Radial Cylinder®

High-rigidity Radial Cylinder®
Body width (mm): 60-70 Stroke (mm): 600-1000 Maximum payload (kg): Horizontal 80/Vertical 28 Max push force (N): 1094
EC-(D)RR□X□AH EC-(D)RR□□AHR

ELECYLINDER can be operated only by ON/OFF signals like solenoid valves. It's easy to operate for **2 positions**. 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			Ultra Mini Rod Type	Ultra Mini Table Type
Body width (mm): 60 Stroke (mm): 30, 50 Max. payload (kg): Horizontal 8/Vertical 2.5 Max push force (N): 90	Body width (mm): 30-50 Stroke (mm): 30, 50, 100, 150 Max. payload (kg): Horizontal 8-35/Vertical 2.5-6.5 Max push force (N): 90-310	Body width (mm): 80-110 Stroke (mm): 30, 50, 100, 150 Max. payload (kg): Horizontal 8-35/Vertical 2.5-6.5 Max push force (N): 90-310	Body width (mm): 40 Stroke (mm): 10-50 Max. payload (kg): Horizontal 2/Vertical 0.8 Max. push force (N): 17	Body width (mm): 30 Stroke (mm): 10-50 Max. payload (kg): Horizontal 2/Vertical 0.8 Max. push force (N): 17
EC-GS4	EC-RP□	EC-GD□	EC-GD□3	EC-T3

Others

Stopper Cylinder	Table Type		Rotary	Gripper
Body width (mm): 110, 150 Stroke (mm): 50	Body width (mm): 30-40 Stroke (mm): 30, 50, 100, 150 Max. payload (kg): Horizontal 8-12.5/Vertical 2.5-6.5 Max. push force (N): 90-310	Body width (mm): 80-90 Stroke (mm): 30, 50, 100, 150 Max. payload (kg): Horizontal 8-20/Vertical 2.5-6.5 Max. push force (N): 90-310	Body width (mm): 90-190 Max. swaying angle (degree): 330 Max. speed (degree/s): 600 Max. push force (N): 25.2 Allowable moment of inertia: 0.49	Body width (mm): 80-130 Max. Stroke (mm) One side: 10-20 Max. Grip force (N) both side: 28-360
EC-ST15□(L/M/ME)	EC-TC□	EC-TW□	EC-RTC□	EC-GRB□(M/L)

Dust/Splash-proof specification

Cleanroom specification

Rod type & Radial Cylinder®	Slider Type		Slider Type		
Body width (mm): 60-70 Stroke (mm): 50-300 Maximum payload (kg): Horizontal 80/Vertical 19 Max. push force (N): 1094	Body width (mm): 60-70 Stroke (mm): 50-800 Maximum payload (kg): Horizontal 51/Vertical 19	Body width (mm): 40-90 Stroke (mm): 50-1500 Maximum payload (kg): Horizontal 80/Vertical 55	Body width (mm): 60-80 Stroke (mm): 50-800 Maximum payload (kg): Horizontal 51/Vertical 25	Body width (mm): 100, 120 Stroke (mm): 50-800 Maximum payload (kg): Horizontal 62/Vertical 13.5	
EC-R□W	EC-S□□D	EC-(D)S□(X)□(A)CR	EC-(D)S□(X)□AHCR	EC-(D)WS□□CR	
Body width (mm): 60-70 Stroke (mm): 65-315 Maximum payload (kg): Horizontal 80/Vertical 19 Max. push force (N): 1094					
EC-RR□□W	EC-S□□W				

Field network connection unit

Field network compatible remote I/O



REC

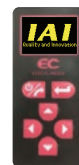
Controllers

Teaching pendant with dedicated power supply unit



TB-03E

Built-in Digital Speed Controller



Wired Teaching Controller



TBD-1

Wireless Teaching Controller



TBD-1WL

ROBO Cylinder®






These affordable, highly precise and high rigidity actuators have 1/5th the running cost of a pneumatic system.

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.









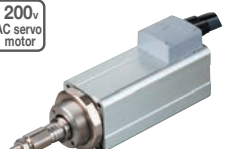
Slider Type

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

<p>Standard type</p> <p>Equipped standard with battery-less absolute encoder Built-in controller available</p> <p>24v Stepper motor</p>  <p>RCP6(S)-SA□C</p> <p>Also available:</p> <p>High Rigidity RCP6(H)-SA□C Small RCP3(S)-SA□C</p>	<p>Side-mounted motor</p> <p>Equipped standard with battery-less absolute encoder Built-in controller available</p>  <p>RCP6(S)-WSA□R RCP6(S)-SA□R</p>	<p>Belt-drive type</p> <p>Equipped standard with battery-less absolute encoder</p>  <p>RCP5-BA□</p>	<p>Standard type</p> <p>Equipped standard with battery-less absolute encoder</p> <p>24v AC servo motor</p>  <p>RCA-SA□C</p>	<p>Standard type</p> <p>Wide type</p> <p>Equipped standard with battery-less absolute encoder</p> <p>200v AC servo motor</p>  <p>RCS4-WSA□C</p> <p>Also available:</p> <p>Standard Type RCS4-SA□C High Rigidity RCS4-HSA□C</p>
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Rod Type

Body width (mm): 12-200, Stroke (mm): 10-800 · Maximum payload (kg): Horizontal 500/ Vertical 300 (*RCS2-RA13R)

<p>Standard type</p> <p>Equipped standard with battery-less absolute encoder Radial cylinder available Built-in controller available</p> <p>24v Stepper motor</p>  <p>RCP6(S)-R(R)A□C</p>	<p>Wide side-mounted motor</p> <p>Equipped standard with battery-less absolute encoder Radial cylinder Built-in controller available</p>  <p>RCP6(S)-WRA□R</p>	<p>Standard side-mounted motor</p> <p>Equipped standard with battery-less absolute encoder Radial cylinder available</p> <p>200v AC servo motor</p>  <p>RCS4-R(R)A□R</p>	<p>Wide type</p> <p>Equipped standard with battery-less absolute encoder Radial cylinder</p>  <p>RCS4-WRA□C</p>
<p>Compact Type</p> <p>24v DC brush-less motor</p>  <p>RCD-RA1DA</p>	<p>Compact Type</p> <p>24v AC servo motor</p>  <p>RCA2-RN/GS/SD</p>	<p>Compact Type</p> <p>200v AC servo motor</p>  <p>RCS2-RN/GS/SD</p>	

Servo Press

Body width (mm): 40-200, Stroke (mm): 110-520
Max. push force (N): 50000

<p>Equipped standard with battery-less absolute encoder</p> <p>200v AC servo motor</p>  <p>RCS3-RA□R</p>	 <p>RCS2-RA13R</p>
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Pulse Press

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

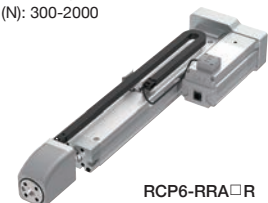








Table Type

Body width (mm): 30-80, Stroke (mm): 25-390 · Max. payload (kg): horizontal 30 / vertical 24.

<p>Standard Type</p> <p>Equipped standard with battery-less absolute encoder Built-in controller available</p> <p>24v Stepper motor</p>  <p>RCP6(S)-TA□C</p>	<p>Side-mounted Motor Type</p> <p>Equipped standard with battery-less absolute encoder Built-in controller available</p>  <p>RCP6(S)-TA□R</p>	<p>Compact Type</p> <p>24v AC servo motor</p>  <p>RCA2-TWA/TFA</p>	<p>Standard Type</p> <p>Equipped standard with battery-less absolute encoder</p> <p>200v AC servo motor</p>  <p>RCS4-TA□C</p>	<p>Side-mounted Motor Type</p> <p>Equipped standard with battery-less absolute encoder</p>  <p>RCS4-TA□R</p>	<p>Server Motor 200V</p> <p>200v AC servo motor</p>  <p>RCS2-TCA</p>
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ROBO Cylinder®

These affordable, highly precise and high rigidity actuators have 1/5th the running cost of a pneumatic system.

Rotary type

Body width (mm): 50-180, Maximum speed (degree/s): 266-1200

Hollow Type

Equipped standard with battery-less absolute encoder

24v Stepper motor



RCP6-RTFML

Flat Type



RCP2-RTC

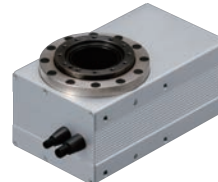
Vertical Type



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

Stroke (mm): 2-finger 4-260, 3-finger 10, 14 (degree): 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 brush-less 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-GRSLL

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

Max. work piece weight: 25~150kg
Stroke (mm): 20-30

24v Stepper motor



RCP4-ST

ZR Unit (Vertical/rotation Integrated Type)

Body width (mm): S/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






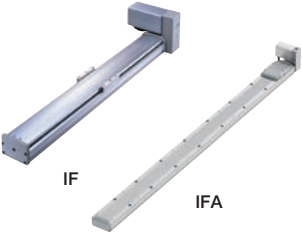

Equipped standard with battery-less absolute encoder

24v Stepper motor









WU-S/M









Single-axis Robot

Slider Type		High Rigidity Type (Iron-base)	Ball Screw Type (Standard)
High Accuracy Type Equipped standard with battery-less absolute encoder 200V AC servo motor  ISB/ISPB	 Large type: IS(P)B-WXM(X)-750	 SSPA	 ISA/ISPA
Simple Dust-proof Type Equipped standard with battery-less absolute encoder  ISDB/ISPDB	Belt-drive, High Rigidity Type  IF IFA	Rotating Nut Type  NS NSA	

Cleanroom Specification

Slider Type	Rod Type	SCARA Robot	Rotary Type
Equipped standard with battery-less absolute encoder Built-in controller available  RCP6(S)CR-SA□C	 RCA2CR-GS	Equipped standard with battery-less absolute encoder IXA-□C is available  IXP-□C	 DDACR  RCP2CR-RT
	Gripper Type  RCP2CR-GRM		

Dust/Splash-proof Specification

Slider Type	Rod Type	SCARA Robot
 RCP4W-SA□C	Equipped standard with battery-less absolute encoder Radial cylinder available Built-in controller available  RCP6(S)W-R(R)A□C	Equipped standard with battery-less absolute encoder  IXA-4NHWS□□□□  IXP-□W
Gripper Type  RCP2W-GRM	Rotary Type  DDW  RCP2W-RT	 IXA-4NSW□□□□

Linear Servo Type

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

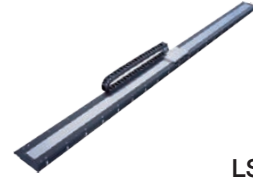
Linear servo motor



LSA-S



LSAS-N



LSA-W

SCARA Robot

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



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

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



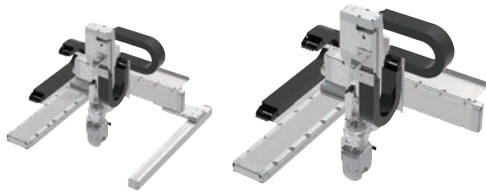
Cartesian Robot

CRS 6-axis Type Robot

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

Equipped standard with battery-less absolute encoder

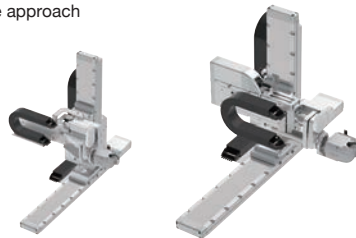
Gantry combination



CRS-XACY/CRS-XADY/CRS-XZEY

Equipped standard with battery-less absolute encoder

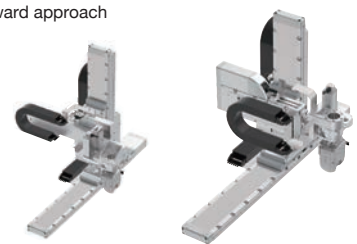
Side approach



CRS-XACY/CRS-XADY/CRS-XZEY

Equipped standard with battery-less absolute encoder

Downward approach

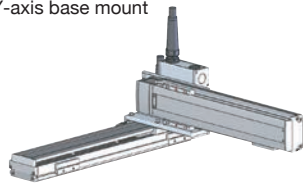


2-axis configuration

XYB type

Equipped standard with battery-less absolute encoder

Y-axis base mount

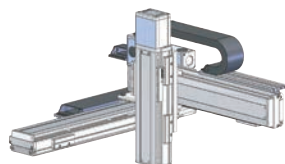


3-axis configuration

XYB+Z base mount

Equipped standard with battery-less absolute encoder

Y-axis base mount
Z-axis base mount



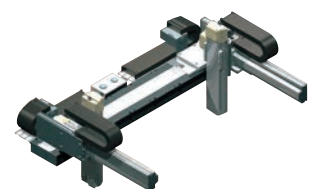
4-axis configuration

ZR axes integrated type



6-axis configuration

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



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

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 Max. 16 axes

Positioner Type



REC Max. 16 axes

ELECYLINDER Drive Unit



RSEL Max. 16 axes

Program Type



Positioner type : Single-axis controller Other Products

Position controller DC24V/AC100V/AC200V types
 Max. dimensions: W35mm x D69.1mm x H190mm
 Small type dimensions: W28mm x D69mm x H80mm

Max. dimensions:
 W40mm x D143mm x H160mm

Max. dimensions:
 W72mm x D121mm x H194mm

Max. dimensions:
 W54mm x D142.5mm x H115mm



For 24v Stepper Motor
 PCON-CB
 PCON-CYB/PLB/POB



For 24v AC Servo Motor
 ACON-CB
 ACON-CYB/PLB/POB



For DC Brushless Motor
 DCON-CB
 DCON-CYB/PLB/POB



SCON2



SCON-CB/CGB



Power Supply for IAI products
 PSA-24(L)

NEW



Brake Release Box
 BKR-01

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

2 axes

for WU/IXP

3-8 axes



For 200v AC Servo Motor
 SSEL



For 24v Stepper Motor
 MSEL



For 200v AC Servo Motor
 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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