

2025 IAI ROBOT LINEUP GUIDE

Product Lineup Catalog

ELECYLINDER®
ROBO Cylinder®
Industrial robots

www.intelligentactuator.com

Available now!

Programmable Multi-axis Controller XSEL2



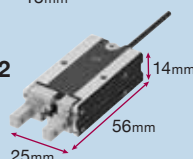
- CODESYS - PLC is not required
- OPC UA server standard
- EtherNet/IP scanner as standard
- Predictive & Preventive Maint. Functions
- Function blocks supported
- ELECYLINDER connection supported
- Tool function extended

Available now!

Rod Type EC-WER1



Gripper Type EC-WGR2



ELECYLINDER® Wire Cylinder

01 Motorized and yet tiny

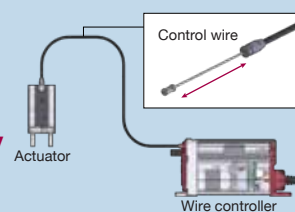
Size/specs equivalent to small-diameter air cylinder.

02 An industry first! New drive system [Patented]

Because the actuator and wire controller are separate...
The heat source can be separated.
→ Less likely to be affected by heat.

03 What motorization can do

Numerical setting is possible: simple & accurate



**Small &
Lightweight**



ELECYLINDER®

- ELECYLINDER can be **operated only by ON/OFF signals** like solenoid valves.
- It's easy to operate for **2-point / 3-point positioning**.
*A new "3 position mode specification" option is now available.
- You can adjust **A (Acceleration)**, **V (Velocity)** and **D (Deceleration)** individually by input percentage. It can start/stop smoothly at high speed.

Equipped with battery-less absolute encoder

Built-in controller type

Slider Type

Slider Type	Wide Type	Small Type	Ultra Compact
Body width (mm): 20-188 Stroke (mm): 25-2800 Max. payload (kg): Horizontal 400 / Vertical 80	Body width (mm): 100, 120 Stroke (mm): 50-500, 50-800 Max. payload (kg): Horizontal 44, 62 / Vertical 7, 13.5	Body width (mm): 20-44 Stroke (mm): 25-500 Max. 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)S□(X)(□A) EC-(D)S□(X)(□A)R	EC-(D)WS□ EC-(D)WS□□R	EC-(D)S(□A) EC-(D)S□(X)(□A)R	EC-SL3

Ultra Large

Belt Drive

High-Rigidity

Large Slider Type	Long Stroke	High-Rigidity Slider Type	Side-Mounted motor
Body width (mm): 100-188 Stroke (mm): 100-2800 Max. payload (kg): Horizontal 400 / Vertical 80	Body width (mm): 63-89 Stroke (mm): 300-2600 Max. payload (kg): Horizontal 25	Body width (mm): 60-80 Stroke (mm): 450-1500 Max. payload (kg): Horizontal 51 / Vertical 25	Body width (mm): 60-80 Stroke (mm): 450-1500 Max. payload (kg): Horizontal 51 / Vertical 25
			
EC-S□(X)	EC-(D)B□S(U) 24v Stepper Motor EC-B8SS(U) 200v AC Servo Motor	EC-(D)S□(X)□AH	EC-(D)S□(X)□AHR
PSA-200 200V power supply for Large sliders			

Rod Type

Rod Type	Radial Cylinder®	High-Rigidity Radial Cylinder®	Rod Type with Double Guide
Body width (mm): 60-70 Stroke (mm): 50-300 Max. payload (kg): Horizontal 80 / Vertical 19 Max. push force (N): 1094	Body width (mm): 40-110 Stroke (mm): 50-800 Max. payload (kg): Horizontal 35, 80, 300 Vertical 6.5, 19, 150 Max. push force (N): 263, 1094, 6000	Body width (mm): 60-70 Stroke (mm): 600-1000 Max. payload (kg): Horizontal 80 / Vertical 28 Max. push force (N): 1094	Body width (mm): 110-150 Stroke (mm): 50-300 Max. payload (kg): Horizontal 60 / Vertical 12.5 Max. push force (N): 449
			
EC-(D)R□	EC-(D)RR□ EC-(D)RR□□R	EC-(D)RR□X□AH	EC-(D)RR□□AH EC-(D)RR□□AHR
	Side-mounted motor available		Side-mounted motor available
			EC-SRG11 EC-SRG15

Quick Teaching Tools

Built-in Digital Speed Controller model available



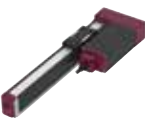
Wired Teaching Controller
TBD-1



Wireless Teaching Controller
TBD-1WL



Compact

20mm Slider Type	20mm Rod Type	Mini Rod / Table Type	Compact Rod / Table Type
Body width (mm): 20 Stroke (mm): 25-300 Max. payload (kg): Horizontal 3/Vertical 1.5	Body width (mm): 20 Stroke (mm): 25-300 Max. payload (kg): Horizontal 4/Vertical 1.25 Max. push force (N): 47	Body width (mm): 30-180 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): 36-110 Stroke (mm): 30, 50 Max. payload (kg): Horizontal 3-16/Vertical 1.5-7 Max. push force (N): 34.2-148.7
 EC-S2	 EC-S2R	 EC-RR2	 EC-RR2R
		 EC-GS4	 EC-RP
		 EC-GD	 EC-CRP
		 EC-CGD	
		 EC-TC	 EC-TW
			 EC-CTC

Compact

Rotary

Gripper

Ultra Mini Rod / Table Type	Rotary Type	2-Finger Slide Type	3-Finger Slide Type
Body width (mm): 30-40 Stroke (mm): 10-50 Max. payload (kg): Horizontal 2/Vertical 0.8 Max. push force (N): 17	Body width (mm): 45-213.5 Max. swaying angle (degree): 330 Max. speed (degree/s): 600 Max. torque (N·m): 25.2 Allowable moment of inertia (kg·m²): 0.49	Body width (mm): 35-130 Max. stroke (mm): both sides: 20-260 Max. grip force (N): both side: 28-1641	Body width (mm): 138 Stroke (mm): 30 Max. grip force (N): 630
 EC-T3	 EC-RTC	 EC-GRB (M/L)	 EC-GRBP
 EC-GD3	 EC-RTB4	 EC-GRST3	 EC-GRC6
*Stopper cylinder model is also available as EC-GDS3.		 EC-GRST7	 EC-GRTR14

Dust / Splash-proof Specification

Cleanroom Specification

Rod Type & Radial Cylinder®	Slider Type	Standard Type	High-Rigidity Type	Wide Type
Body width (mm): 60-70 Stroke (mm): 50-300 Max. payload (kg): Horizontal 80/Vertical 19 Max. push force (N): 1094	Body width (mm): 60-70 Stroke (mm): 50-800 Max. payload (kg): Horizontal 51/Vertical 19	Body width (mm): 35-73 Stroke (mm): 50-800 Max. payload (kg): Horizontal 51 / Vertical 19	Body width (mm): 63-75 Stroke (mm): 50-1500 Max. payload (kg): Horizontal 51 / Vertical 25	Body width (mm): 100, 120 Stroke (mm): 50-800 Max. payload (kg): Horizontal 62 / Vertical 13.5
 EC-R IP67	 EC-S IP40 *Dust-resistant spec.	 EC-(D)S (X) (A)CR	 EC-(D)S (X) AHCR	 EC-(D)WS CR
 EC-RR IP67	 EC-S IP43 / IP44 *Please contact IAI for detailed IP information of this model.			

Stopper Cylinder

ROBO Pump®

Conveyor Control Motor

Body width (mm): 110, 150
Stroke (mm): 50

Vacuum pressure: -50kPa or less
Generated flow volume: 1.8L/min or more
Air suction fitting size: For Ø4x2.5mm tube

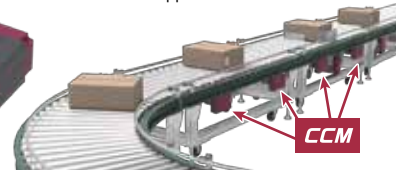
3 types of pulleys: V ribbed belts, V belt and Round belt.
Conveyor motor functions and rollers can be powered by CCM.
Configured by PLC or R-Unit controller. No stopper needed.



RP-VPM
IP20



CCM





- ROBO Cylinder is high-performance electric actuator equipped with a ball screw, linear guide, and servo motor.
- This 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, Max. payload (kg): Horizontal 100 / Vertical 55

Standard Type	Side-Mounted Motor	Belt-Drive Type	Standard Type	Wide Type / Standard Type
Equipped standard with battery-less absolute encoder Built-in controller available 24v Stepper motor RCP6(S)-SA□C	Equipped standard with battery-less absolute encoder Built-in controller available RCP6(S)-WSA□R	Equipped standard with battery-less absolute encoder RCP5-BA□	Equipped standard with battery-less absolute encoder 24v AC servo motor RCA-SA□C	Equipped standard with battery-less absolute encoder 200v AC servo motor RCS4-WSA□C
Also available: High Rigidity RCP6-HSA□(X)(C/R) Small RCP3-SA2□□			Also available: Standard Type RCS4-SA□□ High Rigidity RCS4-HSA□C	

Rod Type

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

Standard Type	Wide Side-Mounted Motor	Standard Side-Mounted Motor	Wide Type
Equipped standard with battery-less absolute encoder Radial cylinder available Built-in controller available 24v Stepper motor RCP6(S)-R(R)A□C	Equipped standard with battery-less absolute encoder Radial cylinder Built-in controller available RCP6(S)-WRA□R	Equipped standard with battery-less absolute encoder Radial cylinder available 200v AC servo motor RCS4-R(R)A□R	Equipped standard with battery-less absolute encoder Radial cylinder RCS4-WRA□C

Compact Type

24v DC brushless motor RCD-RA1DA	24v AC servo motor RCA2-RN/GS/SD	200v AC servo motor RCS2-RN/GS/SD
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Servo Press

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

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

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

RCP6-RRR□R

Table Type

Body width (mm): 30-80, Stroke (mm): 25-390, Max. payload (kg): Horizontal 30 / Vertical 24

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

Rotary Type

Body width (mm): 50-180, Max. speed (deg./s): 266-1200

Hollow Type	Flat Type	Vertical Type	Rotary Type	Direct Drive Motor
Equipped standard with battery-less absolute encoder 24v Stepper motor  RCP6-RTFML	 RCP2-RTC	 RCP2-RTB	200v AC servo motor  RCS2-RTC□L	Body width (mm): 180 Max. speed (degree/s): 1800  DDA-LT/LH

Gripper Type

[Slide Type] Stroke (mm): 2-finger 4-260, 3-finger 10/14 [Lever Type] Stroke (deg.): 2-finger 180, 3-finger 19

Solenoid Type	Ultra Compact Slide Type	Long Stroke: Coupling Type	Long Stroke: Side-mounted Motor Type	Thin Slide Type
 GRM-S/M EG (Outer diameter grip) S/M IG (Inner diameter grip)	24v DC brushless motor  RCD-GRSNA	Equipped standard with battery-less absolute encoder Built-in controller available 24v Stepper motor  RCP6(S)-GRST□C	Equipped standard with battery-less absolute encoder Built-in controller available  RCP6(S)-GRST□R	Equipped standard with battery-less absolute encoder 24v Stepper motor  RCP6-GRT
Slide Type	Lever Type	3-Finger Slide Type	3-Finger Lever Type	Rotary Chuck Type
24v Stepper motor  RCP4-GRSLL	 RCP4-GRL	 RCP2-GR3S	 RCP2-GR3L	24v Stepper motor  RCP6-RTCK Rotation capability with the rotary and gripping capability with the gripper are integrated into one unit.

Others

Stopper Cylinder	ZR Unit (Vertical / Rotation Integrated Type)	Wrist Unit
Max. workpiece weight: 25-150kg Stroke (mm): 20-30 24v Stepper motor  RCP4-ST	Body width (mm): S/122, M/138 Max. payload (kg): S/3, M/6 200v AC servo motor  ZR-S/M	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 Accuracy Type

Stroke (mm): 100-3000
Max. speed: 100-2500
Max. payload (kg): Horizontal 400 / Vertical 80

Equipped standard with battery-less absolute encoder

200V AC servo motor



ISB/ISPB



Large type:
IS(P)B-WXM(X)-750

High-Rigidity Type (Iron-base)

Stroke (mm): 100-1500
Max. speed: 200-2500
Max. payload (kg): Horizontal 120 / Vertical 25



SSPA

Ball Screw Type (Standard)

Stroke (mm): 100-1500
Max. speed: 200-2500
Max. payload (kg): Horizontal 120 / Vertical 25



ISA/ISPA

Simple Dust-proof Type

Stroke (mm): 100-1600
Max. speed: 120-1800
Max. payload (kg): Horizontal 120 / Vertical 40

Equipped standard with battery-less absolute encoder



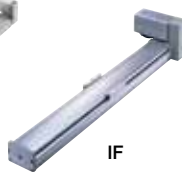
ISDB/ISPDB

Belt-drive, High-Rigidity Type

Stroke (mm): 200-3200
Max. speed: 2000-3000
Max. payload (kg): Horizontal 40



IFA



IF

Rotating Nut Type

Stroke (mm): 300-3000
Max. speed: 1200-2500
Max. payload (kg): Horizontal 120



NSA



NS

Cleanroom Specification

Slider Type

Equipped standard with battery-less absolute encoder

Built-in controller available



RCP6(S)CR-SA□C
RCP6CR-HSA□(X)C

Rod Type



RCA2CR-GS

Gripper Type



RCP2CR-GRM

SCARA Robot

Equipped standard with battery-less absolute encoder

IXA-□C is available



IXP-□C

Rotary Type



DDACR



RCP2CR-RT

Dust/Splash-proof Specification

Slider Type



RCP4W-SA□C
IP65 (w/air purge)



ISWA/ISPWA
IP65

Rod Type

Equipped standard with battery-less absolute encoder

Radial cylinder available

Built-in controller available



RCP6(S)W-R(R)A□C
IP65

SCARA Robot

Equipped standard with battery-less absolute encoder



IXA-4NHWS
IP65 (except bellows parts)



IXP-□W
IP65 (except bellows parts)

Gripper Type



RCP2W-GR
IP50



RCP2W-GR3
IP50

Rotary Type



DDW
IP66M



RCP2W-RT
IP54



IXA-4NSW
IP65 (except bellows parts)

Linear Servo Type

Body width (mm): 60-210
Stroke (mm): 40-4155
Max. speed (mm/s): 2500
Max. payload (kg): Horizontal 120
Max. rated thrust (N): 80, 400
*Horizontal mount only



LSA-S



LSAS-N



LSA-W

Linear
servo
motor

SCARA Robot

IXA

Standard Type / High-Speed Type

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

Equipped standard
with battery-less
absolute encoder

200V
AC servo
motor



IXA-NNN



IXA-NSN

Equipped standard
with battery-less
absolute encoder



IXA-NHN

Long Arm Type

IXP (Power Con Type)

Standard Type

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

Equipped standard
with battery-less
absolute encoder

24V
Stepper
motor



IXP-3N

Table Top Robot

Selectable from stepper motors or servo motors

A-Type [Movable Workpiece Type]

X-axis stroke (mm): 200-500
Y-axis stroke (mm): 200-500
Z-axis stroke (mm): 100-150

Equipped standard
with battery-less
absolute encoder

24V
Stepper
motor

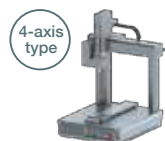
24V
AC servo
motor



TTA-A2



TTA-A3



TTA-A4

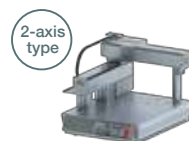
C-Type [Fixed Workpiece Type]

X-axis stroke (mm): 200-500
Y-axis stroke (mm): 150-450
Z-axis stroke (mm): 100-150

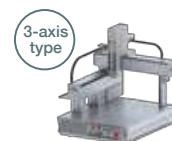
Equipped standard
with battery-less
absolute encoder

24V
Stepper
motor

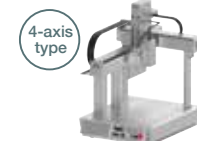
24V
AC servo
motor



TTA-C2



TTA-C3



TTA-C4

Cartesian Robot

CRS 6-axis Robot

- 6 degrees of freedom combining 3 cartesian and 3 rotational axes -

Y-axis Base Mounted

Equipped standard
with battery-less
absolute encoder



CRS-XBA/XBB
*Gantry combination



CRS-XGA-XGB

Z-axis Base Mounted / Y-axis Radial Cylinder

Equipped standard
with battery-less
absolute encoder



CRS-XZCY



CRS-XZCZ

Z-axis Base Mounted / Y-axis Slider Mounted

Equipped standard
with battery-less
absolute encoder



CRS-XZDY/XZEY



CRS-XZDZ/XZYZ

IK2 / IK3 / IK4

Cartesian with stepper motor
Robo Cylinders



IK2
X-Y 2-axis



IK3
X-Y-Z 3-axis



X-Y 2-axis



X-Y (Y Gantry)
2-axis



IK2
Y-Z 2-axis



IK4
X-Y-Z-R 4-axis

ICS(P)B2

Cartesian with servo motor
single axis robots



X-Z 2-axis



Y-Z 2-axis



X-Y-Z 3-axis

ICS(P)B3

Cartesian with servo motor
single axis robots



X-Z-Y 3-axis



X-Y-Z
Y Horizontal
Gantry 3-axis



X-Y-Z
Y Side mounted
Gantry 3-axis

ICS(P)B4 & ICS(P)B6

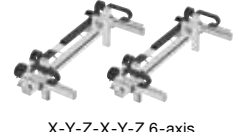
Cartesian with servo motor
single axis robots



X-Y-Z-R (Rotary)
4-axis



X-Y-X-Y
4-axis



X-Y-Z-X-Y-Z 6-axis

Controller & Others

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

**RSEL** Max. 8 axes
(16 axes for EC)

Program Type

**REC** Max. 16 axes

ELECYLINDER Drive Unit



Positioner Type : Single-axis Controller

Position controller 24VDC/100VAC/200VAC types



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

Program Type : Multi-axis Controller

2 axes



For 200v AC Servo Motor

SSEL

for WU/IXP



For 24v Stepper Motor

MSEL

3-8 axes



For 200v AC Servo Motor

XSEL

14 Safety function types



SCON2 SU-S

Functional
Safety Unit

SCON-CB/CGB

Field Networks

Our controllers support numerous field networks

DeviceNet

PROFIBUS

EtherCAT

MECHATROLINK

CompoNet

PROFINET

CC-Link

SSCNET III/H

EtherNet/IP

CC-Link IE Field

Other Products

PSA-24(L)
Power Supply
for IAI productsBKR-01
Brake Release
BoxIA-OS
For position
controllerIA-101
For program
controller

*Please purchase through your distributor and a
download link will be sent to your valid email address.

Teaching software for PC

Touch Panel Teaching Pendant

Position controller / Program controller common use



TB-02



TB-03

*TB-03 with wireless
option is available.



TB-03E/TB-02E

*ROBO Cylinder compatibility
pendant is available.

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

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