

# RCP3-SA2BR

ROBO Cylinder Mini Slider Type Side-Mounted Motor Type Actuator Width 59.5mm Pulse Motor Lead Screw Specification

Model Description	RCP3	SA2BR	I	20P					
	Series	Type	Encoder type	Motor type	Lead	Stroke	Compatible controllers	Cable length	Option
			I: Incremental specification * Model number is "I" when used with simple absolute unit.	20P: Pulse motor 20□□ size	6S: Lead screw 6mm 4S: Lead screw 4mm 2S: Lead screw 2mm	25: 25mm ? : 150: 150mm (every 25mm)	P3: PCON MSEL P5: RCON RSEL	N: None P: 1 m S: 3 m M: 5 m X□□: Length Designation	See options table below. * Be sure to specify which side the motor is to be mounted (ML/MR).

\* See page 14 for details on the model descriptions.

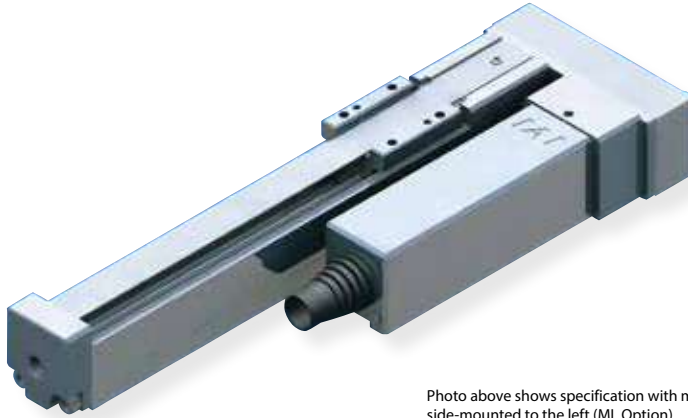
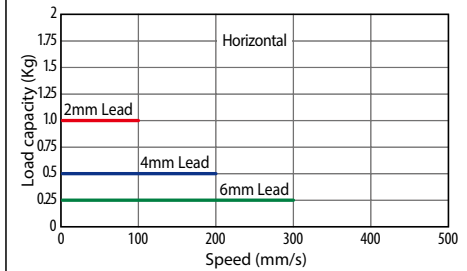


Photo above shows specification with motor side-mounted to the left (ML Option).

■ **Correlation Diagrams of Speed and Load Capacity**  
With the RCP3 series, due to the characteristics of the pulse motor, load capacity decreases as the speed increases. Use the chart below to confirm that the desired speed and load capacity requirements are met.



- POINT**  
Notes on selection
- (1) The payload is the value when operated at 0.2G acceleration. The acceleration upper limit is the value indicated above.
  - (2) Cannot be used in the horizontal orientation with the slider facing to the side or in the vertical orientation.
  - (3) Service life decreases significantly if used in a dusty environment.

## Actuator Specifications Table

### Leads and Payloads

Model	Feed screw	Lead (mm)	Maximum payload		Positioning repeatability (mm)	Stroke (mm)
			Horizontal (kg)	Vertical (kg)		
RCP3-SA2BR-I-20P-6S-①-②-③-④	Lead screw	6	0.25	—	±0.05	25 to 150 (every 25mm)
RCP3-SA2BR-I-20P-4S-①-②-③-④		4	0.5	—		
RCP3-SA2BR-I-20P-2S-①-②-③-④		2	1	—		

Legend ① Stroke ② Compatible Controllers ③ Cable length ④ Option

### Stroke and Maximum Speed

Lead screw	Stroke	25 (mm)	50 (mm)	75~150 (mm)
	Lead			
Lead screw	6	180	280	300
	4	180	200	
	2	100		

(unit: mm/s)

### ① Stroke list

① Stroke (mm)	Standard price
25	—
50	—
75	—
100	—
125	—
150	—

### ③ Cable Length

Type	Cable symbol	Standard price
Standard type (Robot cable)	P (1m)	—
	S (3m)	—
	M (5m)	—
Special length	X06 (6m) ~ X10 (10m)	—
	X11 (11m) ~ X15 (15m)	—
	X16 (16m) ~ X20 (20m)	—

\* The standard cable for the RCP3 is the robot cable.

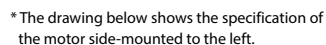
### ③ Options

Title	Option code	See page	Standard price
Specification with motor side-mounted to the left	ML	—	—
Specification with motor side-mounted to the right	MR	—	—
Reversed-home specification	NM	—	—

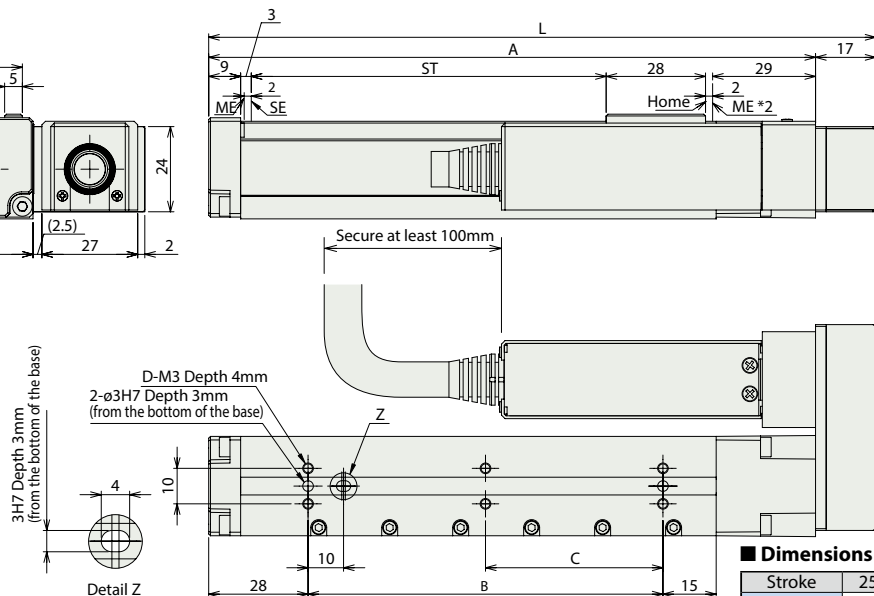
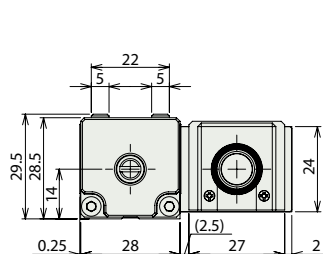
### Actuator Specifications

Item	Description
Drive System	Lead screw, ø6mm, rolled C10
Lost motion	0.3mm or less (initial value)
Base	Material: Aluminum, white alumite treated
Guide	Slide guide
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (Non-condensing)
Service life	10 million cycles

CAD drawings can be downloaded from the website. [www.intelligentactuator.com](http://www.intelligentactuator.com)








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- The technical drawing shows the LAI 1000 actuator in two views. The top view is a side profile showing the actuator body, a cable joint connector, and a mounting bracket. Dimensions include a total length of 88.5 mm, a cable joint connector length of 200 mm, and a mounting bracket length of 17 mm. The bottom view is a front view showing the actuator body with a diameter of 20 mm and a depth of 3 mm. The mounting bracket has a depth of 5.5 mm. The actuator body is labeled 'LAI'.
- Technical drawing of the LAI 1000 actuator showing dimensions and specifications:
- Top view (Side profile):
    - Overall length: 88.5
    - Cable joint connector length: (200)
    - Actuator body length: 17
    - Mounting bracket length: 17
    - Mounting bracket hole diameter:  $2-\phi H7$  Depth 3mm
    - Mounting bracket hole position:  $17 \pm 0.02$
    - Mounting bracket hole diameter:  $17 \pm 0.1$
    - Mounting bracket hole position:  $8 \pm 0.02$
    - Mounting bracket hole diameter:  $4-M3$  Depth 5.5mm
  - Bottom view (Front view):
    - Actuator body diameter:  $\phi 20$
    - Actuator body depth: 3mm
    - Mounting bracket depth: 5.5mm



ST : Stroke  
ME: Mechanical end  
SE : Stroke end

Stroke	25	50	75	100	125	150
L	113	138	163	188	213	238
A	96	121	146	171	196	221
B	25	50	75	100	125	150
C	0	0	0	50	62.5	75
D	4	4	4	6	6	6
Mass (kg)	0.32	0.34	0.37	0.39	0.42	0.46

The actuators on this page can be operated by the controllers indicated below. Please select the type depending on your intended use.

Name	External view	Max. number of connectable axes	Power supply voltage	Control method														Maximum number of positioning points	Reference page	
				Positioner	Pulse-train	Program	Network option *1													
							DV	CC	CIE	PR	CN	ML	ML3	EC	EP	PRT	SSN			ECM
MSEL-PC/PG		4	Single phase 100VAC/230VAC	-	-	●	●	●	-	●	-	-	-	●	●	●	-	-	30000	Please contact IAI for more information
PCON-CB/CGB		1	24VDC	● * Option	● * Option	-	●	●	●	●	●	●	●	●	●	●	-	-	512 (768 for network spec.)	
PCON-CYB/PLB/POB		1		● * Option	● * Option	-	-	-	-	-	-	-	-	-	-	-	-	-	64	
RCON		16 (ML3,SSN,ECM=8)		-	-	-	●	●	●	●	-	-	●	●	●	●	●	●	128 (No position data for ML3, SSN, ECM),	
RSEL		8		-	-	●	●	●	●	●	-	-	-	●	●	●	-	-	36000	

\*1 For network abbreviations such as DV and CC, please contact IAI.

**More controller info is available in the General Controller Catalog PDF.**

