

RCA2-SA2AC

ROBO Cylinder, Mini Slider Type, Motor Unit Coupled, Actuator Width 20mm, 24V Servo Motor, Ball Screw Specification

Model Specification Items	RCA2 — SA2AC —	I —	5 —	<input type="checkbox"/> —	<input type="checkbox"/> —	A3 —	<input type="checkbox"/> —	<input type="checkbox"/>
	Series — Type	Encoder type	Motor type	Lead	Stroke	Applicable controller	Cable length	Options
		I: Incremental * The Simple absolute encoder is also considered type "I".	5: Servo motor SW	4 : 4mm 2 : 2mm 1 : 1mm	25: 25mm 100: 100mm (25mm pitch increments)	A3: ASEP MSEP	N: None P: 1m S: 3m M: 5m X <input type="checkbox"/> : Custom length	See Options below.

* See page Pre-47 for details on the model descriptions.



Technical References Appendix P.5

- POINT** Notes on selection
- (1) The load capacity is based on operation at an acceleration of 0.3G. These values are the upper limits for the acceleration.
 - (2) Take note that, since there is no brake, the slider may come down when the power is turned off if the actuator is used vertically.
 - (3) See page A-71 for details on push motion.

Actuator Specifications

Leads and Payloads

Model number	Motor output (W)	Feed screw	Lead (mm)	Max. Load Capacity		Rated thrust (N)	Positioning Repeatability (mm)	Stroke (mm)
				Horizontal (kg)	Vertical (kg)			
RCA2-SA2AC-I-5-4-①-A3-②-③	5	Ball screw	4	0.5	0.25	21.4	±0.02	25~100 (every 25mm)
RCA2-SA2AC-I-5-2-①-A3-②-③			2	1	0.5	42.3		
RCA2-SA2AC-I-5-1-①-A3-②-③			1	2	1	85.5		

Stroke and Maximum Speed

Lead	Stroke	25 (mm)	50~100 (mm)
		Ball screw	4
	2	100	
	1	50	

Code explanation ① Stroke ② Cable length ③ Options *See page A-71 for details on push motion.

(Unit: mm/s)

① Stroke

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

② Cable Length

Type	Cable symbol	Standard price
Standard (Robot Cables)	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 RCA2 is the robot cable.
* See page A-59 for cables for maintenance.

③ Options

Name	Option code	See page	Standard price
Non-motor end specification	NM	→ A-52	—

Actuator Specifications

Item	Description
Drive System	Ball screw, ø4mm, rolled C10
Lost Motion	0.1mm or less (initial value)
Base	Material: Aluminum, white alumite treated
Guide	Linear guide
Allowable dynamic moment (*)	Ma: 0.22 N·m, Mb: 0.31 N·m, Mc: 0.28 N·m
Allowable overhang	40mm or less in Ma, Mb and Mc directions
Ambient Operating Temp./Humidity	0 to 40°C, 85% RH or less (Non-condensing)
Service Life	5,000km

(*) Based on 5,000km travel life.

Dimensional Drawings

CAD drawings can be downloaded from the website.

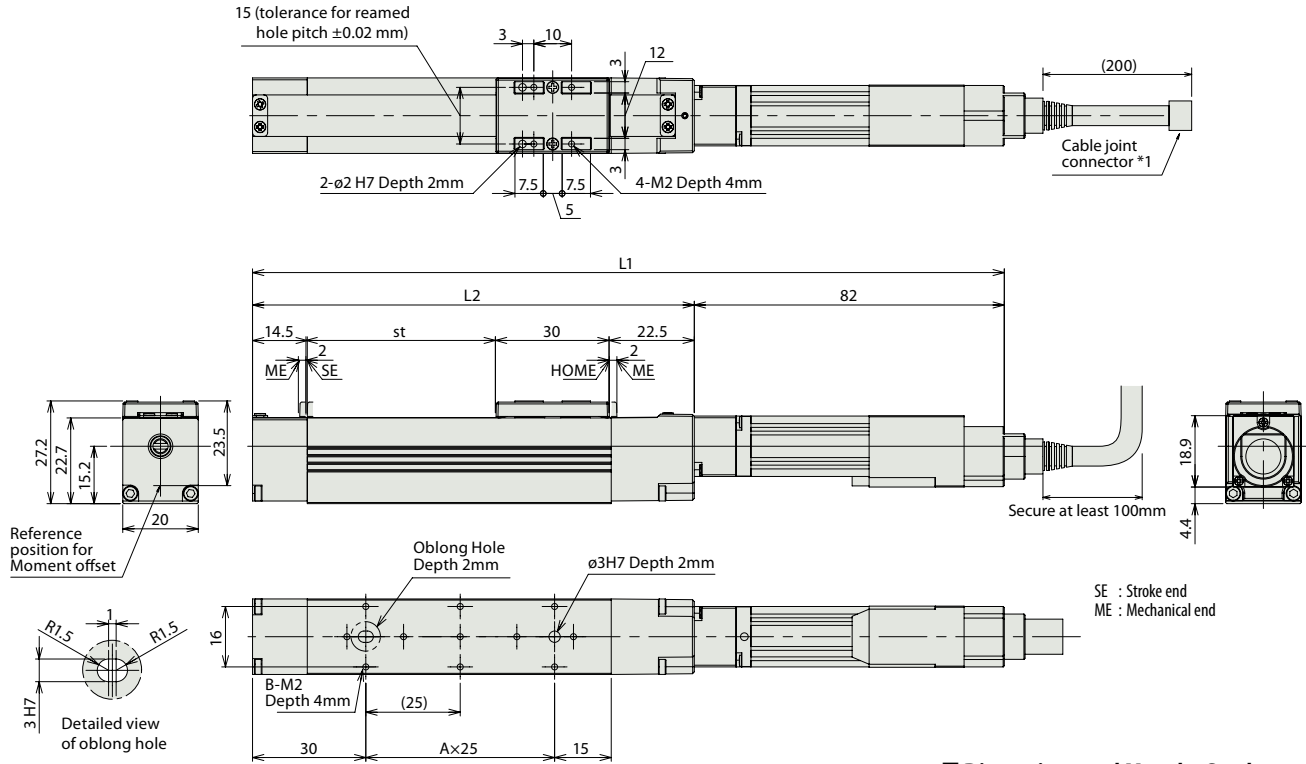
www.intelligentactuator.com

For Special Orders

Appendix P.15



- *1 Connect the motor-encoder integrated cable here. See page A-59 for details on cables.
- *2 During the homing operation, the slider moves to actuator's mechanical end, and then reverses. Therefore, watch for any interference with its surroundings.



Dimensions and Mass by Stroke

Stroke	25	50	75	100
L1	174	199	224	249
L2	92	117	142	167
A	1	2	3	4
B	4	6	8	10
Weight (kg)	0.2	0.22	0.23	0.25

Applicable Controllers

RCA2 series actuators can be operated with the controllers indicated below. Select the type according to your intended application.

Name	External view	Model number	Features	Maximum number of positioning points	Input power	Power supply capacity	Standard price	Reference page
Solenoid valve type		ASEP-C-5SI-①-2-0	Simple controller operable with the same signal as a solenoid valve	3 points	DC24V	1A rated 2A max.	—	→ P547
Solenoid valve multi-axis type PIO specification		MSEP-C-②-~-①-2-0	Positioner type based on PIO control, allowing up to 8 axes to be connected					→ P563
Solenoid valve multi-axis type Network specification		MSEP-C-②-~-③-0-0	Field network-ready positioner type, allowing up to 8 axes to be connected	256 points				

*① indicates I/O type (NP/PN). *② indicates number of axes (1 to 8). *③ indicates field network specification symbol.