

RCA2-SA4C

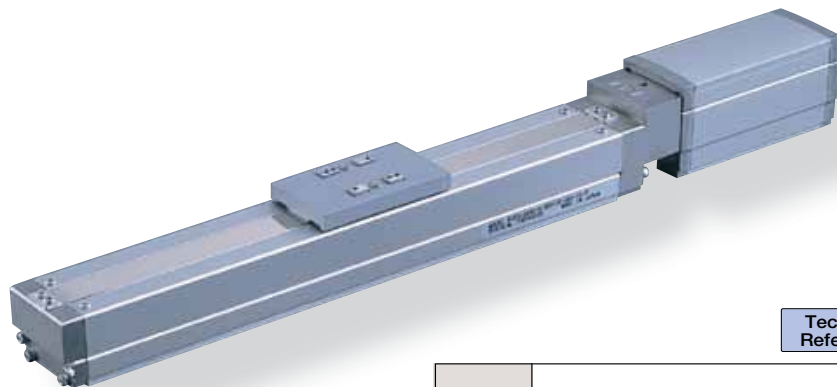
ROBO Cylinder Slider Type 40mm Width Servo Motor Coupled

■ Configuration: **RCA2** — **SA4C** — **I** — **20** — — — — —

Series	Type	Encoder	Motor	Lead	Stroke	Compatible Controllers	Cable Length	Option
		I: Incremental * The Simple absolute encoder models are labeled as "I".	20P: 20W Servo motor	10: 6mm 5: 4mm 2.5: 2mm	50: 50mm 5 500:500mm (50mm pitch increments)	A1: ACON RACON ASEL A3: AMEC ASEP	N : None P : 1m S : 3m M : 5m X <input type="checkbox"/> : Custom Length	See Options below

* See page Pre-35 for explanation of each code that makes up the configuration name.

Power-saving



Technical References P. A-5

4 POINT Notes on Selection

(1) The load capacity is based on operation at an acceleration of 0.3G (0.2G for the 2.5mm-lead model, or when used vertically). These values are the upper limits for the acceleration.

Actuator Specifications							Stroke and Maximum Speed		
■ Lead and Load Capacity							■ Stroke and Maximum Speed		
Model	Motor Output (W)	Lead (mm)	Max. Load Capacity	Rated Thrust (N)	Stroke (mm)	Stroke / Lead	50 ~ 500 (50mm increments)		
RCA2-SA4C-I-20-10- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/>	20	10	Horizontal (kg) 2 Vertical (kg) 1	34	50 ~ 500 (50mm increments)	10	500		
RCA2-SA4C-I-20-5- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/>		5	4 1.5	68		5	250		
RCA2-SA4C-I-20-2.5- <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/> - <input type="checkbox"/>		2.5	6 3	136		2.5	125		

Legend Stroke Compatible controller Cable length Options (Unit: mm/s)

① Stroke List		
Stroke (mm)	Standard Price	
	With cover (standard)	No cover (Option)
50	-	-
100	-	-
150	-	-
200	-	-
250	-	-
300	-	-
350	-	-
400	-	-
450	-	-
500	-	-

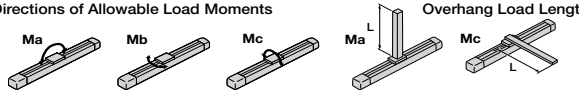
③ Cable List		
Type	Cable Symbol	Standard Price
Standard (Robot Cables)	P (1m)	-
	S (3m)	-
	M (5m)	-
Special Lengths	X06 (6m) ~ X10 (10m)	-
	X11 (11m) ~ X15 (15m)	-
	X16 (16m) ~ X20 (20m)	-
		-

* The standard cable for the RCA2 is the robot cable.
* For cables for maintenance, see page A-39.

④ Option List			
Name	Option Code	See Page	Standard Price
Brake-Equipped	B	→ A-25	-
Cable Exit Direction (Top)	CJT	→ A-25	-
Cable Exit Direction (Right)	CJR	→ A-25	-
Cable Exit Direction (Left)	CJL	→ A-25	-
Cable Exit Direction (Bottom)	CJB	→ A-25	-
Power-saving	LA	→ A-32	-
No Cover	NCO	→ A-33	-
Reversed-home	NM	→ A-33	-

Actuator Specifications	
Item	Description
Drive System	Ball screw Ø8mm C10 grade
Positioning Repeatability	±0.02mm
Lost Motion	0.1mm or less
Base	Material: Aluminum (special alumite treated)
Allowable Static Moment	Ma: 6.8N·m Mb: 9.7N·m Mc: 13.3N·m
Allowable Dynamic Moment(*)	Ma: 3.04N·m Mb: 4.31N·m Mc: 5.00N·m
Overhang Load Length	120mm or less
Ambient Operating Temp./Humidity	0~40°C, 85% RH or less (non-condensing)

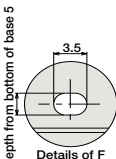
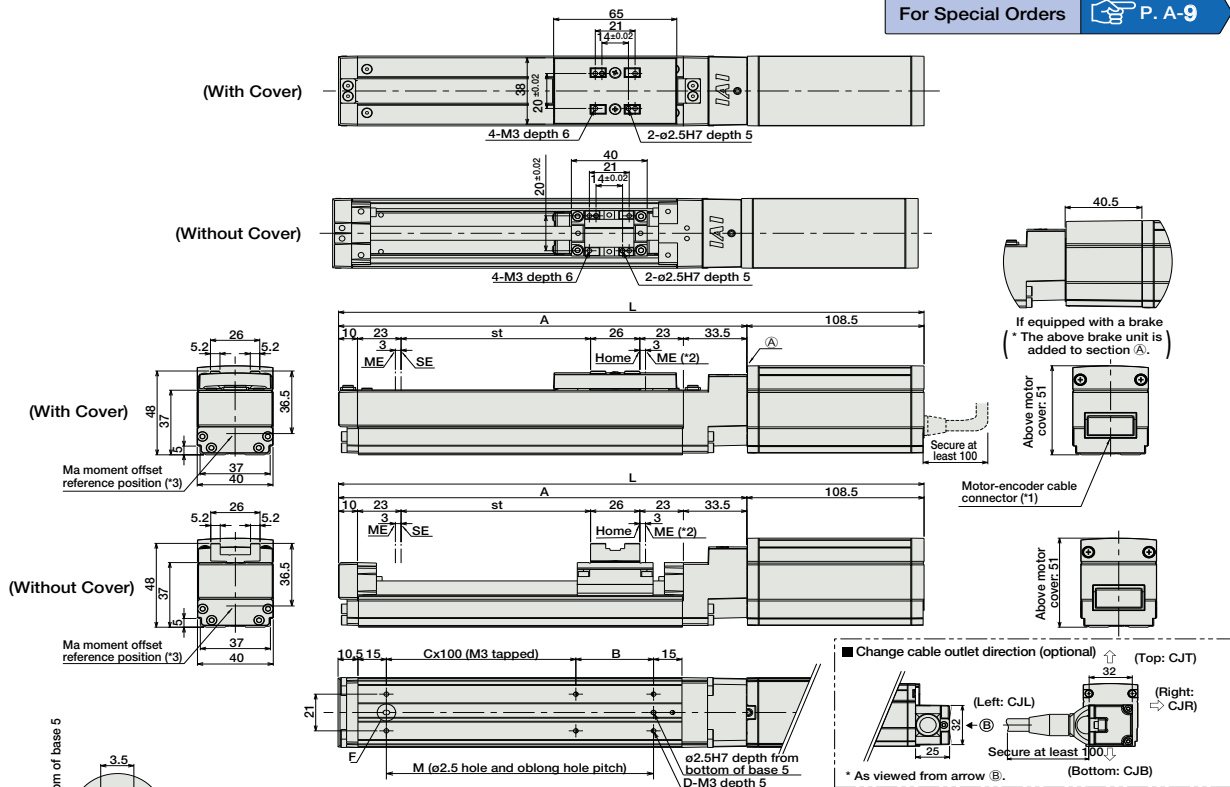
(*) Based on 5,000km travel life. Directions of Allowable Load Moments



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Dimensions

For Special Orders P. A-9



- (1) A motor-encoder cable (integrated) is connected here. (See page A-39 for details on cables)
- (2) After homing, the slider moves to the ME, therefore, please watch for any interference with surrounding objects.
ME : Mechanical end
SE : Stroke end
- (3) Reference position for calculating the moment Ma

■ Dimensions/Weight by Stroke

* Brake-equipped models are heavier by 0.3kg.

Stroke	Stroke										
	50	100	150	200	250	300	350	400	450	500	
L	No Brake	274	324	374	424	474	524	574	624	674	724
	Brake-Equipped	314.5	364.5	414.5	464.5	514.5	564.5	614.5	664.5	714.5	764.5
A	165.5	215.5	265.5	315.5	365.5	415.5	465.5	515.5	565.5	615.5	
B	91	41	91	41	91	41	91	41	91	41	
C	0	1	1	2	2	3	3	4	4	5	
D	4	6	6	8	8	10	10	12	12	14	
M	91	141	191	241	291	341	391	441	491	541	
Weight (kg)	With Cover	0.9	1	1.1	1.1	1.2	1.3	1.4	1.5	1.6	
	No Cover	0.8	0.9	1	1	1.1	1.2	1.3	1.4	1.5	

② Compatible Controllers

The RCA2 series actuators can operate with the controllers below. Select the controller according to your usage.

Name	External View	Model	Description	Max. Positioning Points	Input Voltage	Power Supply Capacity	Standard Price	See Page
Solenoid Valve Type		AMEC-C-20Si①-NP-2-1	Easy-to-use controller, even for beginners	3 points	AC100V	2.4A rated	—	→ P477
		ASEP-C-20Si①-NP-2-0	Operable with same signal as solenoid valve. Supports both single and double solenoid types.					
Splash-Proof Solenoid Valve Type		ASEP-CW-20Si①-NP-2-0	Operable with same signal as solenoid valve. Supports both single and double solenoid types. No homing necessary with simple absolute type.	3 points	AC100V	2.4A rated	—	→ P487
Positioner Type		ACON-C-20Si①-NP-2-0	Positioning is possible for up to 512 points	512 points	DC24V	(Standard) 1.7A rated 5.1A max.	—	→ P535
Safety-Compliant Positioner Type		ACON-CG-20Si①-NP-2-0						
Pulse Train Input Type (Differential Line Driver)		ACON-PL-20Si①-NP-2-0	Pulse train input type with differential line driver support	—	DC24V	(Power-saving) 1.7A rated 3.4A max.	—	→ P535
Pulse Train Input Type (Open Collector)		ACON-PO-20Si①-NP-2-0	Pulse train input type with open collector support					
Serial Communication Type		ACON-SE-20Si①-N-0-0	Dedicated to serial communication	64 points	DC24V	(Power-saving) 1.7A rated 3.4A max.	—	→ P503
Field Network Type		RACON-20S①	Dedicated to field network	768 points	DC24V	(Power-saving) 1.7A rated 3.4A max.	—	→ P503
Program Control Type		ASEL-C-1-20Si①-NP-2-0	Programmed operation is possible Can operate up to 2 axes	1500 points	DC24V	(Power-saving) 1.7A rated 3.4A max.	—	→ P567

* This is for the single-axis ASEL.
* ① is replaced with the code "LA" when support for power-saving is specified.

- Slider Type
- Mini
- Standard
- Controllers Integrated
- Rod Type
- Mini
- Standard
- Controllers Integrated
- Table/Arm /Flat Type
- Mini
- Standard
- Gripper/ Rotary Type
- Linear Servo Type
- Cleanroom Type
- Splash-Proof
- Controllers
- PMEC /AMEC
- PSEP /ASEP
- ROBO NET
- ERC2
- PCON
- ACON
- SCON
- PSEL
- ASEL
- SSEL
- XSEL
- Pulse Motor
- Servo Motor (24V)
- Servo Motor (200V)
- Linear Servo Motor