

RCA-SA6C

ROBO Cylinder Slider Type 58mm Width 24V Servo Motor Coupled

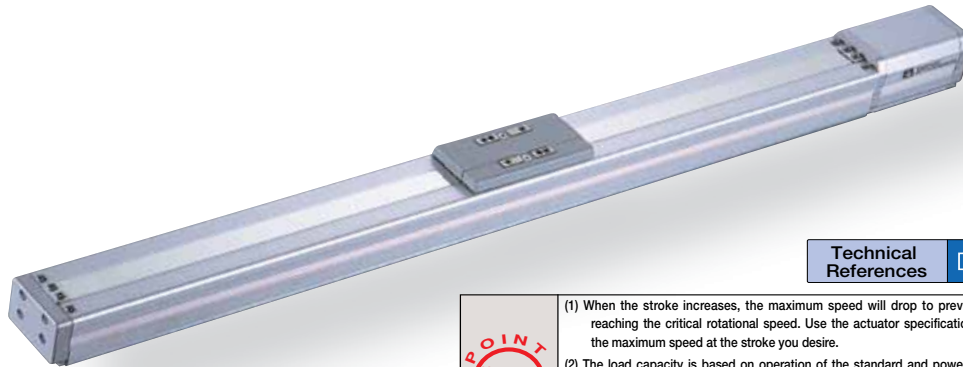
■ Configuration: **RCA** — **SA6C** — — **30** — — — — —

Series — Type — Encoder — Motor — Lead — Stroke — Compatible Controllers — Cable Length — Option

I: Incremental
A: Absolute
30: 30W Servo motor
12: 12mm
6: 6mm
3: 3mm
50: 50mm
600: 600mm (50mm pitch increments)
A1: ACON
RACON
ASEL
A3: AMEC
ASEP
N: None
P: 1m
S: 3m
M: 5m
X : Custom Length
R : Robot Cable
See Options below

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

For High Acceleration/Deceleration **Power-saving**
(excluding the 3-mm lead model)



Technical References P. A-5

- POINT**
Notes on Selection
- (1) When the stroke increases, the maximum speed will drop to prevent the ball screw from reaching the critical rotational speed. Use the actuator specification table below to check the maximum speed at the stroke you desire.
 - (2) The load capacity is based on operation of the standard and power-saving models at 0.3G (0.2G for 3mm-lead), and operation of the high acceleration/deceleration model at 1G (excluding the 3mm-lead model).
(Even when the acceleration/deceleration is dropped, the maximum load capacity values shown in the table below are the upper limits.)

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 ~ 450 (50mm increments)	500 (mm)	550 (mm)	600 (mm)	
RCA-SA6C-①-30-12-②-③-④-⑤	30	12	Horizontal (kg)	Vertical (kg)	24.2	50 ~ 600 (50mm increments)	12	800	760	640	540	
RCA-SA6C-①-30-6-②-③-④-⑤		6	12	3			48.4	6	400	380	320	270
RCA-SA6C-①-30-3-②-③-④-⑤		3	18	6			96.8	3	200	190	160	135

Legend ① Encoder ② Stroke ③ Compatible controller ④ Cable length ⑤ Option (Unit: mm/s)

Encoder & Stroke List		
② Stroke (mm)	Standard Price	
	① Encoder Type	
	Incremental	Absolute
50	-	A
100	-	-
150	-	-
200	-	-
250	-	-
300	-	-
350	-	-
400	-	-
450	-	-
500	-	-
550	-	-
600	-	-

④ Cable List		
Type	Cable Symbol	Standard Price
Standard	P (1m)	—
	S (3m)	—
	M (5m)	—
Special Lengths	X06 (6m) ~ X10 (10m)	—
	X11 (11m) ~ X15 (15m)	—
	X16 (16m) ~ X20 (20m)	—
	R01 (1m) ~ R03 (3m)	—
Robot Cable	R04 (4m) ~ R05 (5m)	—
	R06 (6m) ~ R10 (10m)	—
	R11 (11m) ~ R15 (15m)	—
	R16 (16m) ~ R20 (20m)	—

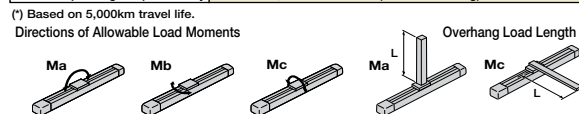
* See page A-39 for cables for maintenance.

⑤ Option List			
Name	Option Code	See Page	Standard Price
Brake	B	→ A-25	—
Foot bracket	FT	→ A-29	—
For High Acceleration/Deceleration	HA	→ A-32	—
Home sensor	HS	→ A-32	—
Power-saving	LA	→ A-32	—
Reversed-home	NM	→ A-33	—
Slider Roller	SR	→ A-36	—

* The high-acceleration/deceleration option and the slider roller option cannot be used together.
* The high acceleration/deceleration option cannot be used on the 3mm-lead model.
* The high-acceleration/deceleration option and the power saving option cannot be used together.

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Actuator Specifications	
Item	Description
Drive System	Ball screw Ø10mm C10 grade
Positioning Repeatability	±0.02mm
Lost Motion	0.1mm or less
Base	Material: Aluminum (white alumite treated)
Allowable Static Moment	Ma: 38.3 N·m Mb: 54.7 N·m Mc: 81.0 N·m
Allowable Dynamic Moment (*)	Ma: 8.9 N·m Mb: 12.7 N·m Mc: 18.6 N·m
Overhang Load Length	Ma direction: 220mm or less Mb-Mc direction: 220mm or less
Ambient Operating Temp./Humidity	0 ~ 40°C, 85% RH or less (non-condensing)

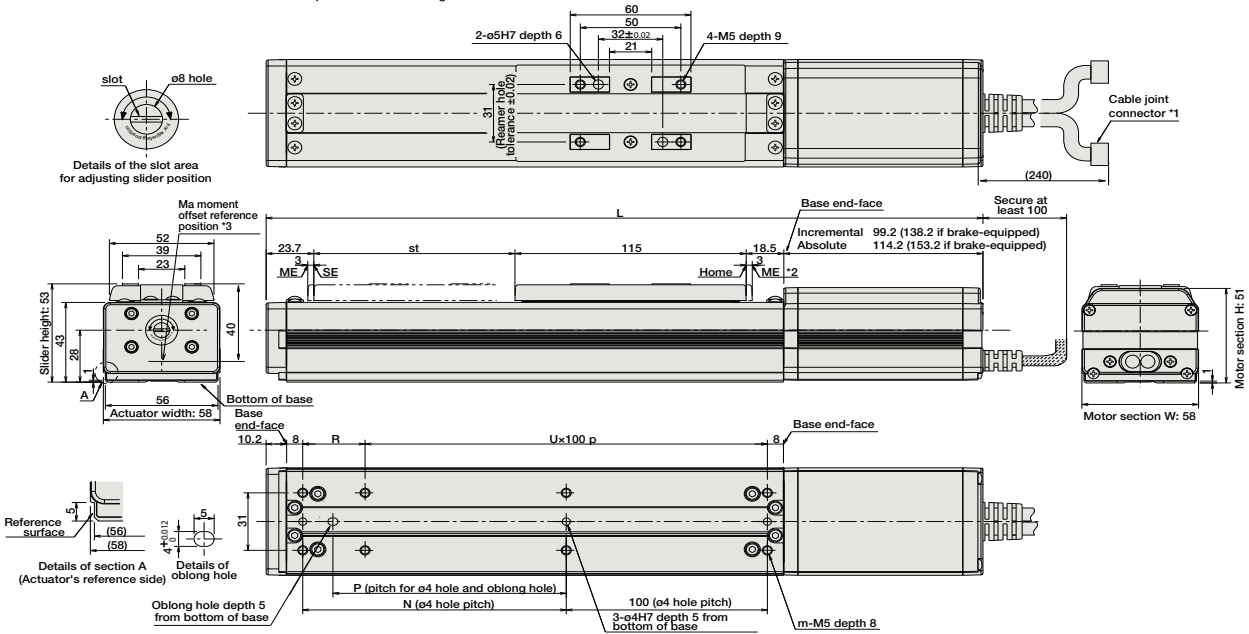


- Slider Type
- Mini
- Standard
- Controllers Integrated
- Rod Type
- Mini
- Standard
- Controllers Integrated
- Table/Arm/Flat Type
- Mini
- Standard
- Gripper/Rotary Type
- Linear Servo Type
- Cleanroom Type
- Splash-Proof
- Controllers
- PMEC/AMEC
- PSEP/ASEP
- ROBO NET
- ERC2
- PCON
- ACON
- SDON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

Dimensions

For Special Orders P. A-9

- *1 A motor-encoder cable is connected here. See page A-39 for details on cables.
- *2 When homing, the slider moves to the ME; therefore, please watch for any interference with the 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		50	100	150	200	250	300	350	400	450	500	550	600	
L	Incremental	No Brake	306.4	356.4	406.4	456.4	506.4	556.4	606.4	656.4	706.4	756.4	806.4	856.4
		With Brake	345.4	395.4	445.4	495.4	545.4	595.4	645.4	695.4	745.4	795.4	845.4	895.4
	Absolute	No Brake	321.4	371.4	421.4	471.4	521.4	571.4	621.4	671.4	721.4	771.4	821.4	871.4
		With Brake	360.4	410.4	460.4	510.4	560.4	610.4	660.4	710.4	760.4	810.4	860.4	910.4
N		81	131	181	231	281	331	381	431	481	531	581	631	
P		66	116	166	216	266	316	366	416	466	516	566	616	
R		81	31	81	31	81	31	81	31	81	31	81	31	
U		1	2	2	3	3	4	4	5	5	6	6	7	
m		6	8	8	10	10	12	12	14	14	16	16	18	
Weight (kg)		1.4	1.6	1.8	2	2.2	2.4	2.6	2.8	3	3.2	3.4	3.6	

③ Compatible Controllers

The RCA 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-30(2)-NP-2-1	Easy-to-use controller, even for beginners	3 points	AC100V	2.4A rated	-	→ P477
		ASEP-C-30(2)-NP-2-0	Operable with same signal as solenoid valve. Supports both single and double solenoid types. No homing necessary with simple absolute type.					
Splash-Proof Solenoid Valve Type		ASEP-CW-30(2)-NP-2-0						→ P487
Positioner Type		ACON-C-30(2)-NP-2-0	Positioning is possible for up to 512 points	512 points	DC24V	(Standard) 1.3A rated 4.4A max.	-	→ P535
Safety-Compliant Positioner Type		ACON-CG-30(2)-NP-2-0						
Pulse Train Input Type (Differential Line Driver)		ACON-PL-30(2)-NP-2-0	Pulse train input type with differential line driver support	(-)	DC24V	(Power-saving) 1.3A rated 2.2A max.	-	→ P535
Pulse Train Input Type (Open Collector)		ACON-PO-30(2)-NP-2-0	Pulse train input type with open collector support					
Serial Communication Type		ACON-SE-30(2)-N-0-0	Dedicated to serial communication	64 points				
Field Network Type		RACON-30(2)	Dedicated to field network	768 points				→ P503
Program Control Type		ASEL-C-1-30(1)-2-NP-2-0	Programmed operation is possible. Can operate up to 2 axes	1500 points				→ P567

* This is for the single-axis ASEL.
 * ① is a placeholder for the encoder type (I: incremental, A: absolute).
 * ② is a placeholder for the code "HA" or "LA", when the high-acceleration/deceleration option or the energy-saving option is selected.

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