

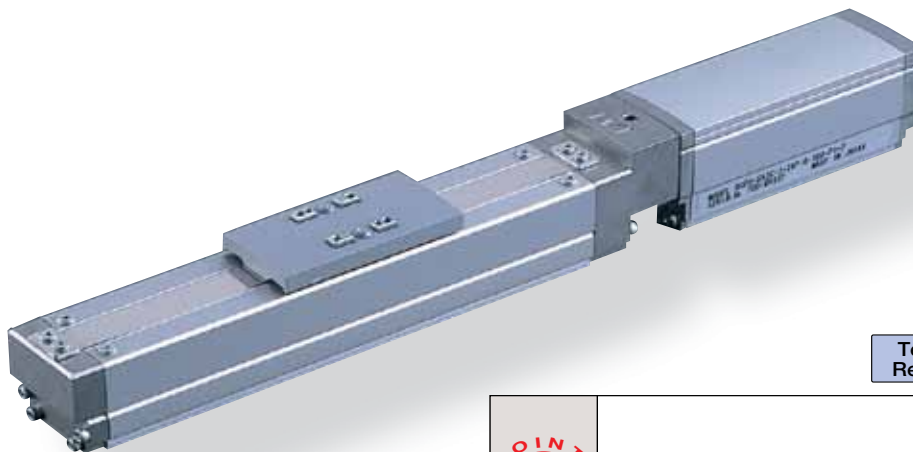
RCA2-SA3C

ROBO Cylinder Slider Type 32mm Width Servo Motor Coupled

■ Configuration:	RCA2	SA3C	I	10					
	Series	Type	Encoder	Motor	Lead	Stroke	Compatible Controllers	Cable Length	Option
			I: Incremental * The Simple absolute encoder models are labeled as "I".	10P: 10W Servo motor	6 :6mm 4 :4mm 2 :2mm	50: 50mm 300:300mm (50mm pitch increments)	A1: ACON RACON ASEL A3: AMEC ASEP	N : None P : 1m S : 3m M : 5m X □□ : 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

POINT
Notes on Selection

(1) The load capacity is based on operation at an acceleration of 0.3G (2G for the 2mm-lead model, or when used vertically). These values are the upper limits for the acceleration.

Actuator Specifications

Lead and Load Capacity

Model	Motor Output (W)	Lead (mm)	Max. Load Capacity Horizontal (kg) Vertical (kg)	Rated Thrust (N)	Stroke (mm)
RCA2-SA3C-I-10-6-①-②-③-④	10	6	1 0.5	28	50 ~ 300 (50mm increments)
RCA2-SA3C-I-10-4-①-②-③-④		4	2 1	43	
RCA2-SA3C-I-10-2-①-②-③-④		2	3 1.5	85	

Legend ① Stroke ② Compatible controller ③ Cable length ④ Options

Stroke and Maximum Speed

Stroke Lead	50 ~ 300 (50mm increments)
6	300
4	200
2	100

(Unit: mm/s)

① Stroke List

Stroke (mm)	Standard Price
	With cover (standard) No cover (Option)
50	- -
100	- -
150	- -
200	- -
250	- -
300	- -

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

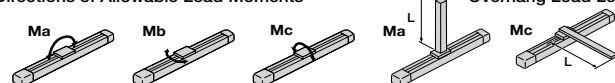
Name	Option Code	See Page	Standard Price
Brake-Equipped	B	→ A-25	-
Cable Exit Direction (Top)	CJT	→ A-25	-
Cable Exit Direction (Right)	CJR	→ A-25	-
Cable Exit Direction (Left)	CJL	→ A-25	-
Cable Exit Direction (Bottom)	CJB	→ A-25	-
Power-saving	LA	→ A-32	-
No Cover	NCO	→ A-33	-
Reversed-home	NM	→ A-33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

Actuator Specifications

Item	Description
Drive System	Ball screw Ø6mm C10 grade
Positioning Repeatability	±0.02mm
Lost Motion	0.1mm or less
Base	Material: Aluminum (special alumite treated)
Allowable Static Moment	Ma: 5.0N·m Mb: 7.1N·m Mc: 7.9N·m
Allowable Dynamic Moment(*)	Ma: 1.96N·m Mb: 2.84N·m Mc: 3.14N·m
Overhang Load Length	100mm 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



Overhang Load Length

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RCA2-SA3C

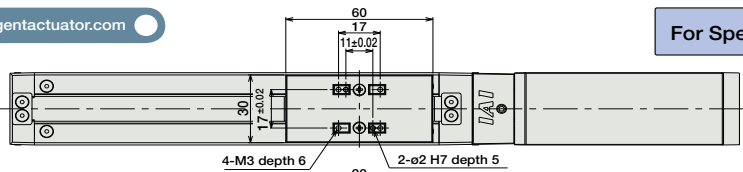
Dimensions

CAD drawings can be downloaded from IAI website. www.intelligentactuator.com

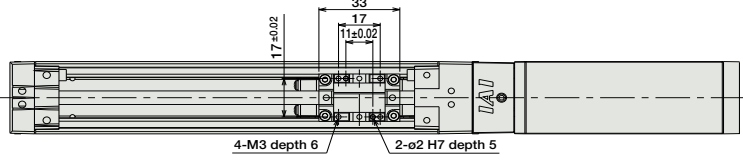
2D CAD

3D CAD

(With Cover)

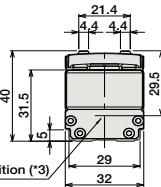


(Without Cover)



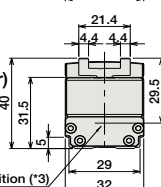
(With Cover)

Ma moment offset reference position (*3)

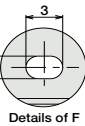


(Without Cover)

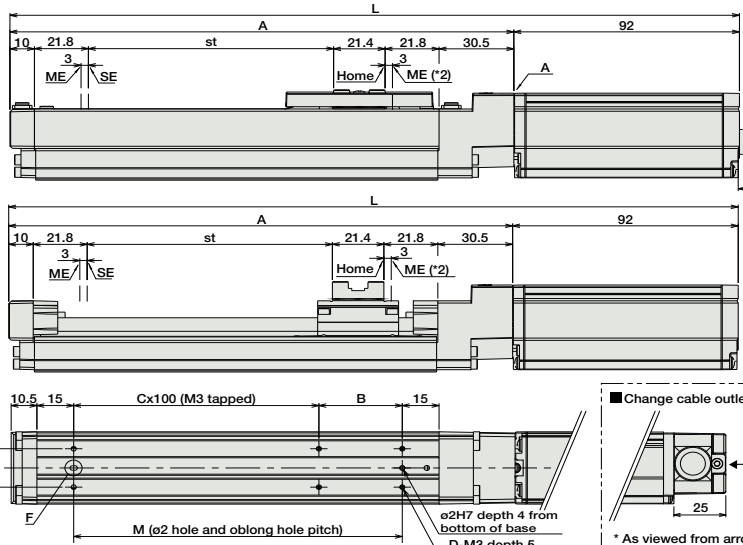
Ma moment offset reference position (*3)



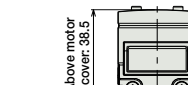
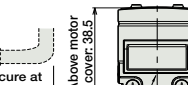
depth from bottom of base 4
ø2H7



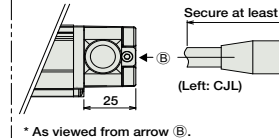
(Common)



If equipped with a brake
(* The above brake unit is added to section A)



Change cable outlet direction (optional)



Dimensions/Weight by Stroke

* Brake-equipped models are heavier by 0.2kg.

Stroke	50	100	150	200	250	300
L	No Brake	247.5	297.5	347.5	397.5	447.5
	Brake-Equipped	292	342	392	442	492
A		155.5	205.5	255.5	305.5	355.5
B		84	34	84	34	84
C		0	1	1	2	3
D		4	6	6	8	10
M		84	134	184	234	284
Weight (kg)	With Cover	0.6	0.6	0.7	0.8	0.9
	No Cover	0.5	0.6	0.6	0.7	0.8

(*1) A motor-encoder cable (integrated) is connected here. (For details on cables for maintenance, see page A-39.)

(*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

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-10I①-NP-2-1	Easy-to-use controller, even for beginners	3 points	AC100V	2.4A rated	—	→ P477		
	Splash-Proof Solenoid Valve Type		ASEP-C-10I①-NP-2-0				Operable with same signal as solenoid valve. Supports both single and double solenoid types. No homing necessary with simple absolute type.	—	→ P487	
		ASEP-CW-10I①-NP-2-0	—							
Positioner Type		ACON-C-10I①-NP-2-0	Positioning is possible for up to 512 points	512 points			DC24V	(Standard) 1.3A rated 4.4A max. (Power-saving) 1.3A rated 2.5A max.	—	→ P535
Safety-Compliant Positioner Type		ACON-CG-10I①-NP-2-0							—	
Pulse Train Input Type (Differential Line Driver)		ACON-PL-10I①-NP-2-0	Pulse train input type with differential line driver support	(-)					—	
Pulse Train Input Type (Open Collector)		ACON-PO-10I①-NP-2-0	Pulse train input type with open collector support						—	
Serial Communication Type		ACON-SE-10I①-N-0-0	Dedicated to serial communication	64 points					—	
Field Network Type		RACON-10①	Dedicated to field network	768 points					—	→ P503
Program Control Type		ASEL-C-1-10I①-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 replaced with the code "LA" when support for power-saving is specified.