CA-SA4C

ROBO Cylinder, Slider Type, Actuator Width 40mm, 24V Servo Motor, Coupled Motor Specification

Specification items

SA4C Type

Encoder type WA: Battery-less absolute

20 Motor type 20 : Servo motor 20W

10:10mm 5:5mm 2.5:2.5mm

Stroke 50 · 50mm

50mm increments)

400 : 400mm (Can be set in

Applicable controller A5: ACON-CB

High Accel./Decel. Option

(Excludes lead 2.5)

length N: No cable
P: 1m
S: 3m
M: 5m
X : Specified length
R : Robot cable

Cable

Options Please refer to the options table below.

Energy Saving Option

*Controller is not included.



Depending on the mod there may be some limitations to using the vertical, side, and ceiling mount positions. Please contact for more information regarding mounting positions.

* This product is equipped with a slot for slider position adjustment (refer to the dimensional drawing on the right page) shown as A in the figure above



- (1) The payload assumes operation at an acceleration of 0.3G (0.2G for lead 2.5) for standard and energy saving specifications, and 1G for high accel./decel. specification (excludes lead 2.5). (The values shown in the table below are the upper limit for the maximum payload even if acceleration/deceleration is decreased.)
- (2) Please refer to our website for more information about push-motion operation.

Actuator Specifications

■Lead and Payload

Model number		Lead	Maximum payload		Rated thrust	Stroke
		(mm)	Horizontal (kg)	Vertical (kg)	(N)	(mm)
RCA-SA4C- ① -20-10- ② - ③ - ④ - ⑤		10	4	1	19.6	
RCA-SA4C- ① -20-5- ② - ③ - ④ - ⑤		5	6	2.5	39.2	50~400 (Every 50mm)
RCA-SA4C- ① -20-2.5- ② - ③ - ④ - ⑤		2.5	8	4.5	78.4	
Legend: Encoder type Stroke Applicable controller A Cable length Options						

■Stroke and Maximum Speed

Stroke Lead	50~400 (Every 50mm)
10	665
5	330
2.5	165
	(Unit: mm/s)

①Encoder Type / ② Stroke

Stroke (mm)	Standard price				
	Encoder type				
	Battery-less absolute				
	WA				
50	-				
100	-				
150	-				
200	-				
250	-				
300	-				
350	-				
400	-				

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(4) Cable Lefigur						
Type	Cable code	Standard price				
	P (1m)	-				
Standard type	S (3m)	-				
	M (5m)	-				
	X06 (6m) ~X10 (10m)	-				
Special length	X11 (11m) ~X15 (15m)	-				
	X16 (16m) ~X20 (20m)	-				
	R01 (1m) ~R03 (3m)	-				
	R04 (4m) ~R05 (5m)	-				
Robot cable	R06 (6m) ~R10 (10m)	-				
	R11 (11m) ~R15 (15m)	-				
	R16 (16m) ~R20 (20m)	-				

*Please refer to P. 73 for maintenance cables.

⑤ Options

Name	Option code	Reference page	Standard price	
Brake	В		-	
Foot bracket	FT		-	
High acceleration/deceleration	HA	Please refer to our	-	
Home check sensor	HS	website for the	-	
Energy saving	LA	details of the	-	
Non-motor end specification	NM	options.	-	
Slider roller specification	SR		-	
Slider spacer	SS		-	

- * High acceleration/deceleration option and slider roller option cannot be combined together. * High acceleration/deceleration option cannot be chosen for lead 2.5
- * High acceleration/deceleration option and energy saving option cannot be combined together.

Actuator Specifications					
Item	Description				
Drive system	Ball screw Ø8mm, rolled C10				
Positioning repeatability	±0.02mm				
Lost motion	0.1mm or less				
Base	Material: Aluminum with white alumite treatment				
Static allowable moment	Ma: 6.9N•m, Mb: 9.9N•m, Mc: 17.0N•m				
Dynamic allowable moment (*)	Ma: 3.29N•m, Mb: 4.71N•m, Mc: 8.07N•m				
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (Non-condensing)				

- •Reference for overhang load length/Ma: 120mm or less, Mb, Mc: 120mm or less
- (*) Assumes a standard rated life of 5,000km. The operational life will vary depending on operation and installation conditions

Please refer to our website for more information regarding the service life of the products, directions of the allowable moment, and overhang load length.

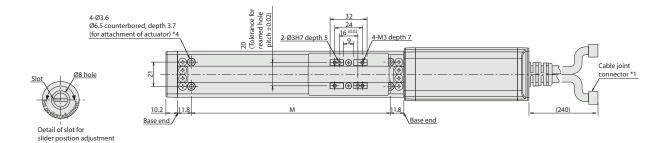
Dimensions

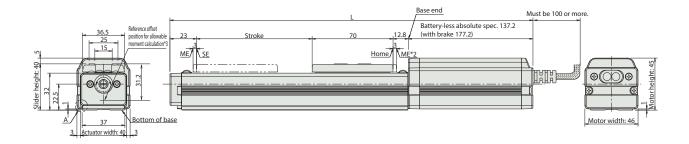
CAD drawings can be downloaded from our website. www.intelligentactuator.com

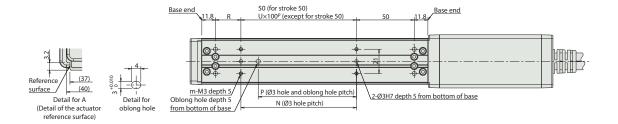




- *1 Connects the motor-encoder cable. Please refer to P. 73 for the details of the cables. Connects the motor-encoder cable. Please refer to P. 73 for the details of the cables.
 When the slider is returning to its home position, please be careful of interference from surrounding objects, as it will travel until it reaches the ME.
 ME: Mechanical end SE: Stroke end
 Reference position used when calculating the Ma moment.
- *4 When the actuator is mounted only using the mounting holes on the top of the base, the base can be distorted, which could cause sliding error or abnormal noise. When using the mounting holes on the top of the base, please keep the stroke length less than 200mm.







■Dimensions and Mass by Stroke *Brake equipped types are 0.3kg heavier.

Stroke		50	100	150	200	250	300	350	400	
L	Battery-less	Without brake	293	343	393	443	493	543	593	643
_	absolute	With brake	333	383	433	483	533	583	633	683
M		122	172	222	272	322	372	422	472	
N		50	100	100	200	200	300	300	400	
Р		35	85	85	185	185	285	285	385	
R		22	22	72	22	72	22	72	22	
U		-	1	1	2	2	3	3	4	
m		4	4	4	6	6	8	8	10	
Mass (kg)		0.7	0.8	0.9	1	1.1	1.2	1.3	1.4	

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