RCS2-SA7C

ROBO Cylinder, Slider Type, Actuator Width 73mm, 200V Servo Motor, Coupled Motor Specification

■Model Specification Items

RCS2 — SA7C — □ — 60 — □ — □ — □ — □ — □

Series	Type	Encoder type	Motor type	Lead	Stroke	Applicable controller	Cable length	Options
		WA : Battery-less absolute	60 : Servo motor 60W	24 : 24mm 16 : 16mm 8 : 8mm 4 : 4mm	50 : 50mm ~ 800 : 800mm (Can be set in 50mm increments)	T2 : SCON-CB	N : No cable P : 1m S : 3m M : 5m X□□ : Specified length R□□ : Robot cable	Please refer to the options table below.

*Controller is not included.

CE RoHS

* CE marking is an option.

High Accel./Decel. Option
(Excludes lead 4)

Horizontal | Vertical | Side | Ceiling

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

POINT Note on selection

(1) When the stroke is increased, the maximum speed will drop to prevent reaching a critical rotational speed of the ball screw. Please confirm the maximum speed for the desired stroke in the actuator specifications table below.
(2) The payload assumes operation at an acceleration of 0.3G (0.2G for lead 4) for standard specification, and 1G for high accel./decel. specification (0.8G for lead 8 and 24. Excludes lead 4).
(The values shown in the table below are the upper limit for the maximum payload even if acceleration/deceleration is decreased.)
(3) Please refer to our website for more information about push-motion operation.

Actuator Specifications

■Lead and Payload

Model number	Motor (W)	Lead (mm)	Maximum payload Horizontal (kg)	Maximum payload Vertical (kg)	Rated thrust (N)	Stroke (mm)
RCS2-SA7C-①-60-24-②-③-④-⑤	60	24	8	1.4	42.4	50~800 (Every 50mm)
RCS2-SA7C-①-60-16-②-③-④-⑤		16	12	3	63.8	
RCS2-SA7C-①-60-8-②-③-④-⑤		8	25	6	127.5	
RCS2-SA7C-①-60-4-②-③-④-⑤		4	40	12	255.0	

Legend: ① Encoder type ② Stroke ③ Applicable controller ④ Cable length ⑤ Options

■Stroke and Maximum Speed

Lead \ Stroke	50~600 (Every 50mm)	~700 (mm)	~800 (mm)
24	1,200	960	720
16	800	640	480
8	400	320	240
4	200	160	120

(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	-
450/500	-
550/600	-
650/700	-
750/800	-

④ Cable Length

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

*Please refer to P. 84 for maintenance cables.

⑤ Options

Name	Option code	Reference page	Standard price
Brake (Cable exit to end)	**BE**	Please refer to our website for the details of the options.	-
Brake (Cable exit to left side)	**BL**		-
Brake (Cable exit to right side)	**BR**		-
CE marking	**CE**		-
High acceleration/deceleration	**HA**		-
Non-motor end specification	**NM**		-
Slider roller specification	**SR**		-

* High acceleration/deceleration option and slider roller option cannot be combined together.
* High acceleration/deceleration option cannot be chosen for lead 4.

Actuator Specifications

Item	Description
Drive system	Ball screw Ø12mm, rolled C10
Positioning repeatability	±0.02mm
Lost motion	0.1mm or less
Base	Material: Aluminum with white alumite treatment
Static allowable moment	Ma: 50.4N•m, Mb: 71.9N•m, Mc: 138.0N•m
Dynamic allowable moment (*)	Ma: 20.7N•m, Mb: 29.6N•m, Mc: 56.7N•m
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (Non-condensing)

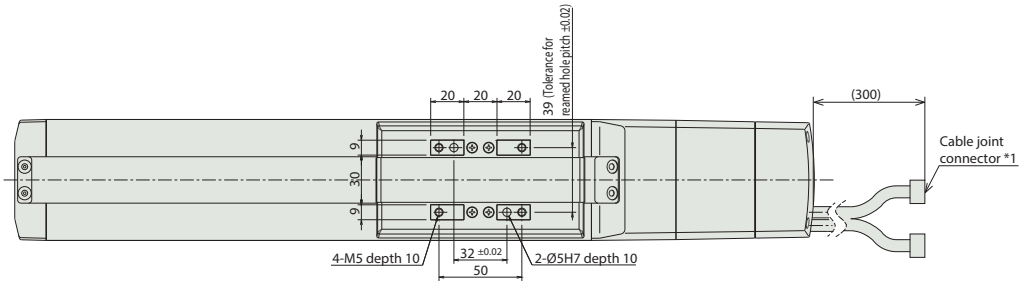
•Reference for overhang load length/Ma: 230mm or less, Mb, Mc: 230mm or less
(*) Assumes a standard rated life of 5,000km. The operational life will vary depending on operation and installation conditions.
Please refer to our website for more information regarding the service life of the products, directions of the allowable moment, and overhang load length.

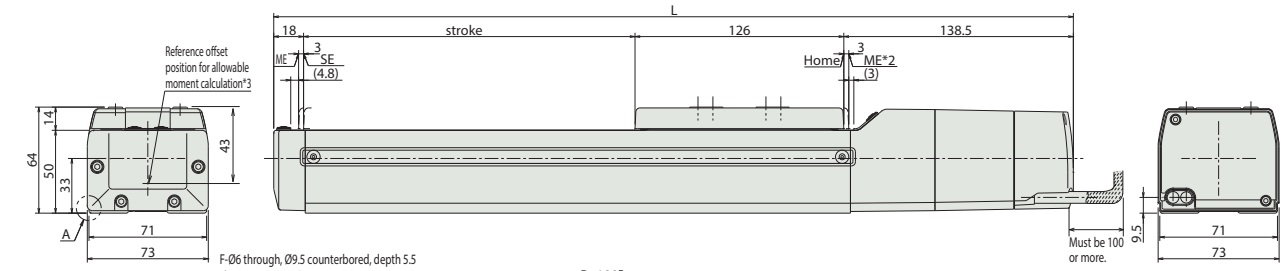
Dimensions

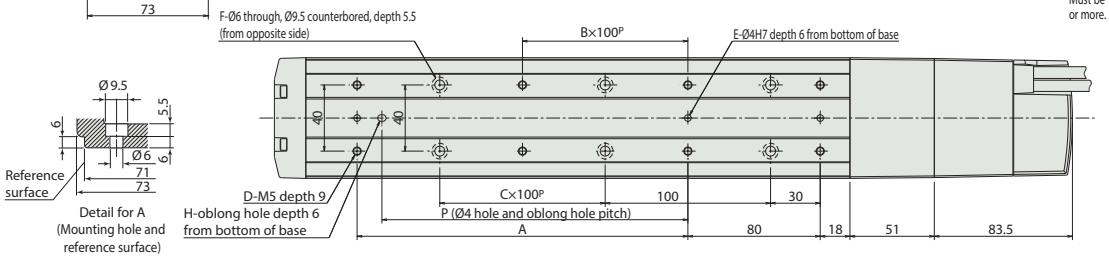
CAD drawings can be downloaded from our website. www.intelligentactuator.com

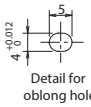
2D CAD 3D CAD

*1 Connects the motor-encoder cable. Please refer to P. 84 for the details of the cables.
*2 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
*3 Reference position used when calculating the Ma moment.



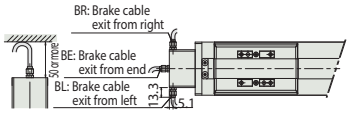


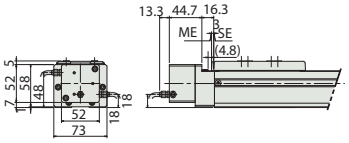




Dimensions for the brake part

*The total length for brake-equipped type is 43mm (56.3mm when cable exits from rear end) the weight increases by 0.6kg.





■Dimensions and Mass by Stroke

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
L	332.5	382.5	432.5	482.5	532.5	582.5	632.5	682.5	732.5	782.5	832.5	882.5	932.5	982.5	1,032.5	1,082.5
A	0	100	100	200	200	300	300	400	400	500	500	600	600	700	700	800
B	0	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7
C	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
D	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20
E	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	4	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18
H	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
P	0	85	85	185	185	285	285	385	385	485	485	585	585	685	685	785
Mass (kg)	2.4	2.6	2.8	3.0	3.3	3.5	3.7	3.9	4.2	4.4	4.6	4.8	5.1	5.3	5.5	5.7