RCS2-SA6C

ROBO Cylinder, Slider Type, Actuator Width 58mm, 200V Servo Motor, Coupled Motor Specification

■Model Specification Items

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Series	Type	Encoder type	Motor type	Lead	Stroke	Applicable controller	Cable length	Options
		WA : Battery-less absolute	30 : Servo motor 30W	20 : 20mm 12 : 12mm 6 : 6mm 3 : 3mm	50 : 50mm ~ 600 : 600mm (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 3)

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.

* 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.

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 3) for standard specification, and 1G for high accel./decel. specification (excludes lead 3).
(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-SA6C-①-30-20-②-③-④-⑤	30	20	3	0.5	15.8	50~600 (Every 50mm)
RCS2-SA6C-①-30-12-②-③-④-⑤		12	6	1.5	24.2	
RCS2-SA6C-①-30-6-②-③-④-⑤		6	12	3	48.4	
RCS2-SA6C-①-30-3-②-③-④-⑤		3	18	6	96.8	

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

■Stroke and Maximum Speed

Lead \ Stroke	50~450 (Every 50mm)	500 (mm)	550 (mm)	600 (mm)
20	1,300 <800>		1,160 <800>	990 <800>
12	800	760	640	540
6	400	380	320	270
3	200	190	160	135

*Values in brackets < > are for vertical use. (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	-

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	**B**	Please refer to our website for the details of the options.	-
CE marking	**CE**		-
Foot bracket	**FT**		-
High acceleration/deceleration	**HA**		-
Home check sensor	**HS**		-
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 3.

Actuator Specifications

Item	Description
Drive system	Ball screw Ø10mm, rolled C10
Positioning repeatability	±0.02mm
Lost motion	0.1mm or less
Base	Material: Aluminum with white alumite treatment
Static allowable moment	Ma: 38.3N•m, Mb: 54.7N•m, Mc: 81.0N•m
Dynamic allowable moment (*)	Ma: 11.6N•m, Mb: 16.6N•m, Mc: 24.6N•m
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (Non-condensing)

•Reference for overhang load length/Ma: 220mm or less, Mb, Mc: 220mm or less

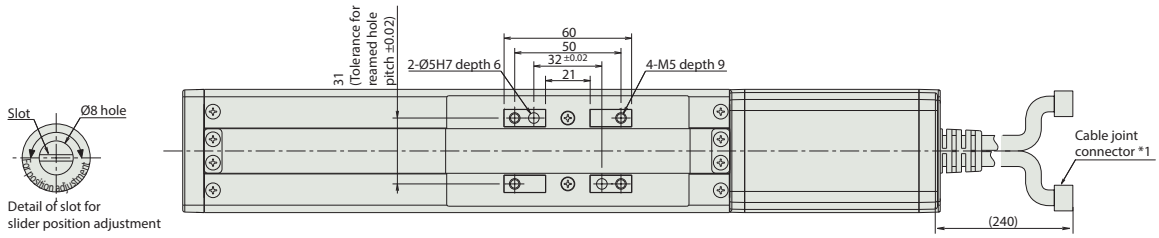
(*) Assumes a standard rated life of 5,000km. The operational life will vary depending on operation and installation conditions.
Please refer to our website for more information regarding the service life of the products, directions of the allowable moment, and overhang load length.

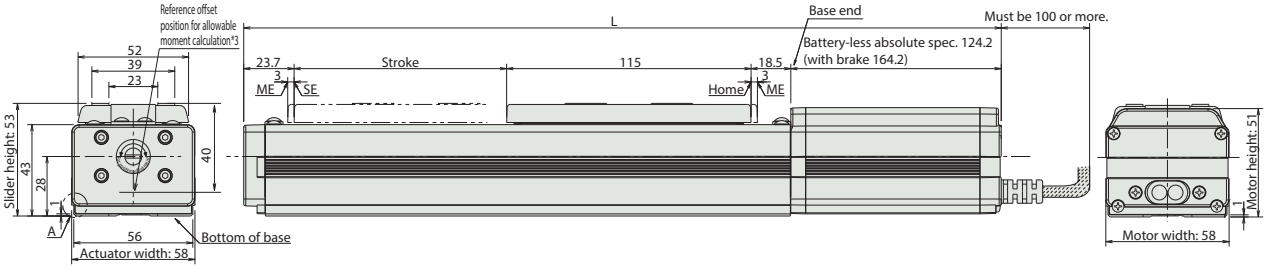
Dimensions

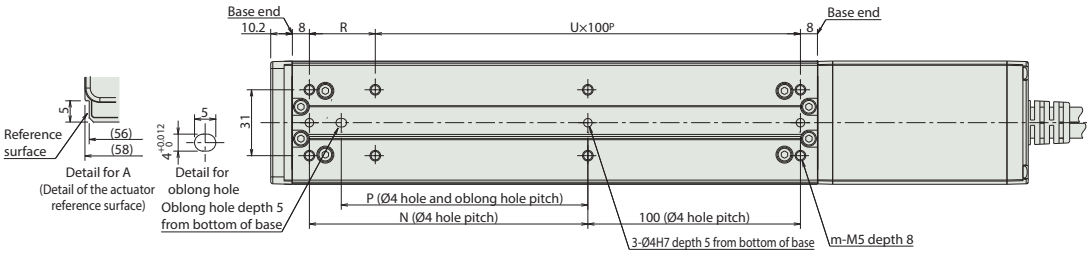
CAD drawings can be downloaded from our website. www.intelligentactuator.com

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

Stroke			50	100	150	200	250	300	350	400	450	500	550	600
L	Battery-less absolute	Without brake	331.4	381.4	431.4	481.4	531.4	581.4	631.4	681.4	731.4	781.4	831.4	881.4
		With brake	371.4	421.4	471.4	521.4	571.4	621.4	671.4	721.4	771.4	821.4	871.4	921.4
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
Mass (kg)			1.4	1.6	1.8	2	2.2	2.4	2.6	2.8	3	3.2	3.4	3.6