

RCS2-SA5R

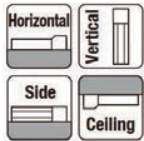
ROBO Cylinder, Slider Type, Actuator Width 52mm,
200V Servo Motor, Side-mounted Motor Specification

Model Specification Items	RCS2	SA5R	Encoder type	20	Lead	Stroke	Applicable controller	Cable length	Options
	Series	Type	WA : Battery-less absolute	20 : Servo motor 20W	12 : 12mm 6 : 6mm 3 : 3mm	50 : 50mm 500 : 500mm (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. * Please specify which side the motor is to be mounted (ML/MR)

*Controller is not included.



* CE marking is an option.



* 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.



A The figure above is the motor side-mounted to the left (ML).

* 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). This is the upper limit of the acceleration.
 - (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	Rated thrust (N)	Stroke (mm)
			Horizontal (kg)	Vertical (kg)	
RCS2-SA5R-①-20-12-②-③-④-⑤	20	12	4	1	16.7
RCS2-SA5R-①-20-6-②-③-④-⑤		6	8	2	33.3
RCS2-SA5R-①-20-3-②-③-④-⑤		3	12	4	65.7

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

Stroke and Maximum Speed

Stroke Lead	50~450 (Every 50mm)	500 (mm)
12	800	760
6	400	380
3	200	190

(Unit: mm/s)

① Encoder Type / ② Stroke

Stroke (mm)	Standard price
	Encoder type
	Battery-less absolute
	WA
50	-
100	-
150	-
200	-
250	-
300	-
350	-
400	-
450	-
500	-

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		-
Home check sensor	HS		-
Non-motor end specification	NM		-
Motor side-mounted to the left (Standard)	ML		-
Motor side-mounted to the right	MR		-
Slider roller specification	SR		-

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: 18.6N·m, Mb: 26.6N·m, Mc: 47.5N·m
Dynamic allowable moment (*)	Ma: 5.81N·m, Mb: 8.30N·m, Mc: 14.8N·m
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (Non-condensing)

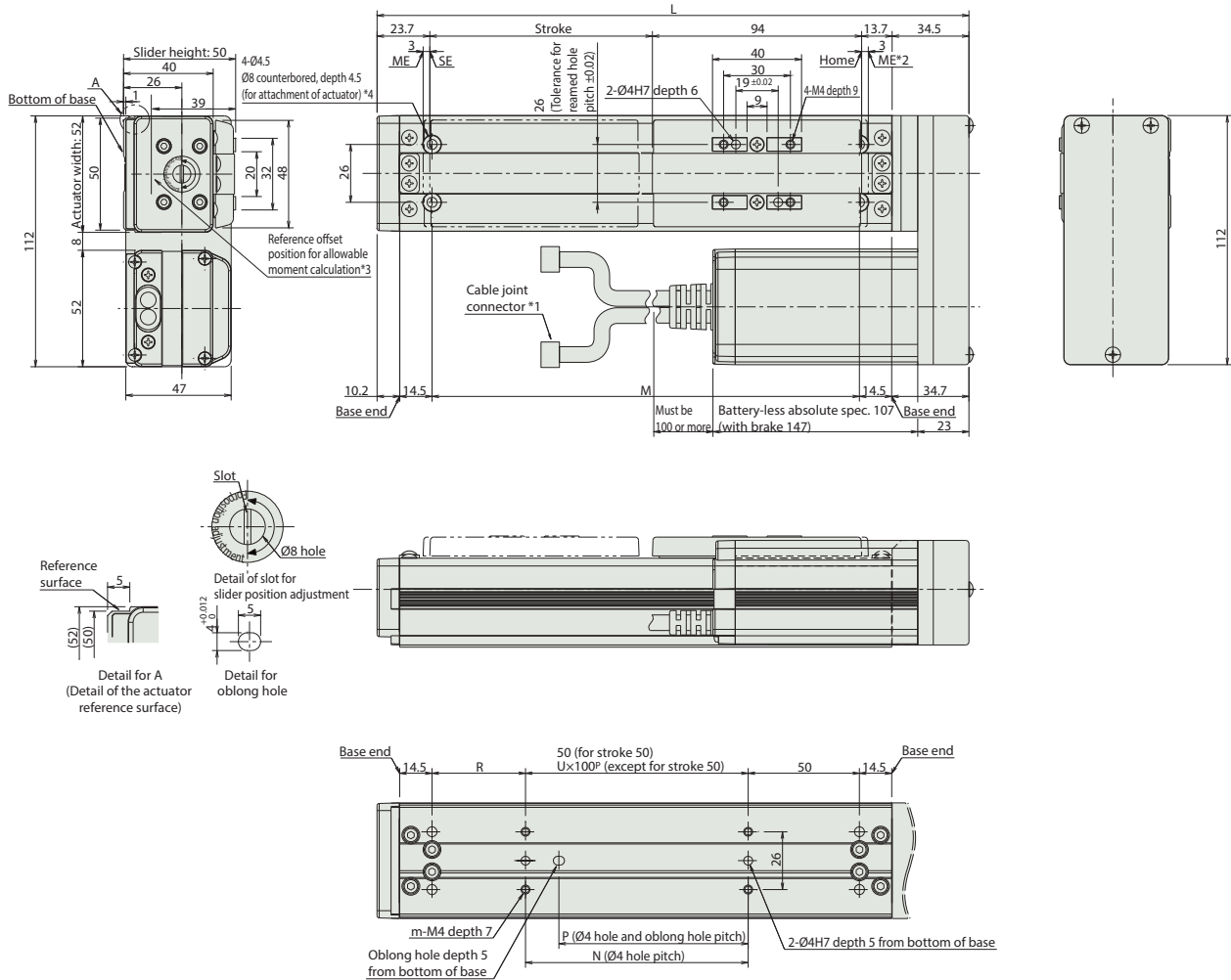
*Reference for overhang load length/Ma: 150mm or less, Mb, Mc: 150mm or less

(*) 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. 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.
- *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 300mm.

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

Stroke	50	100	150	200	250	300	350	400	450	500
L	215.9	265.9	315.9	365.9	415.9	465.9	515.9	565.9	615.9	665.9
M	142	192	242	292	342	392	442	492	542	592
N	50	100	100	200	200	300	300	400	400	500
P	35	85	85	185	185	285	285	385	385	485
R	42	42	92	42	92	42	92	42	92	42
U	—	1	1	2	2	3	3	4	4	5
m	4	4	4	6	6	8	8	10	10	12
Mass (kg)	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3	2.4