

# RCP6(S)-SA8R

±10µm  
Standard

Simple  
Dust-proof

Battery-less  
Absolute

Motor  
Unit  
Type

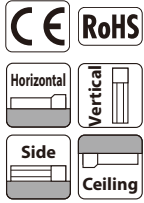
Side-mounted  
Motor

Body Width  
85\*  
mm

24v  
Stepper  
Motor

Model Specification Items	Series	Type	Encoder Type	Motor Type	Lead	Stroke	Applicable Controller/I/O Type	Cable Length	Options
	SA8R	WA	56SP						
	RCP6: Separate Controller RCP6S: Built-in Controller		WA: Battery-less Absolute	56SP: High-thrust Stepper Motor 56□ Size	30: 30mm 20: 20mm 10: 10mm 5: 5mm	50: 50mm 1100: 1,100mm (50mm increments)	[RCP6] P4: PCON- CFB/CGFB [RCP6S] SE: SIO Type	N : None P : 1m S : 3m M : 5m X□□ : Specified Length R□□ : Robot Cable	Please refer to the options table below.  * Please make sure to specify either ML or MR when ordering the side-mounted motor type.

\* RCP6 does not include a controller. RCP6S includes a built-in controller.  
\* Please refer to P.10 for more information about the model specification items.



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

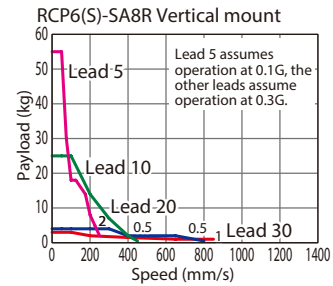
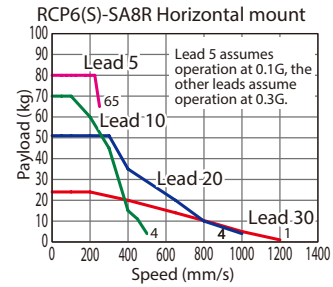


The figure above is the motor side-mounted to the left (ML).

POINT  
Selection  
Notes

- (1) The maximum acceleration/deceleration is 1G for horizontal, and 0.5G for vertical use.
- (2) The actuator specification displays the payload's maximum value, but it will vary depending on the acceleration and speed. Please refer to the "Selection Guidelines" (RCP6 Tables of Payload by Speed/Acceleration) on P.115 for more details.
- (3) When performing push-motion operation, please confirm the push force of each model by checking the "Correlation diagram of push force and current limit" on P.113.

### Correlation Diagrams of Speed and Payload



### Actuator Specifications

#### Lead and Payload

Model Number	Lead (mm)	Max. Payload (kg)		Stroke (mm)
		Horizontal	Vertical	
RCP6(S)-SA8R-WA-56SP-30-①-②-③-④	30	26	3	50~1,100 (The increment of stroke is 50mm)
RCP6(S)-SA8R-WA-56SP-20-①-②-③-④	20	55	4	
RCP6(S)-SA8R-WA-56SP-10-①-②-③-④	10	70	25	
RCP6(S)-SA8R-WA-56SP-5-①-②-③-④	5	80	55	

Legend: ① Stroke ② Applicable controller/I/O type ③ Cable length ④ Options

#### Stroke and Max. Speed

Lead (mm)	Max. Speed (mm/s)									
	50~650 (Every 50mm)	700 (mm)	750 (mm)	800 (mm)	850 (mm)	900 (mm)	950 (mm)	1,000 (mm)	1,050 (mm)	1,100 (mm)
30	1,200 <850>		1,155 <850>	1,040 <850>	940 <850>	855 <850>	780	715	660	
20	1,000 <800>	950 <800>	860 <800>	770	695	630	570	520	480	440
10	500 <450>	480 <450>	430	385	345	310	285	260	235	220
5	250 <225>	240 <225>	215	190	175	155	145	130	120	110

Values in brackets < > are for vertical use.

#### ① Stroke

Stroke (mm)	RCP6	RCP6S	Stroke (mm)	RCP6	RCP6S
50	○	○	600	○	○
100	○	○	650	○	○
150	○	○	700	○	○
200	○	○	750	○	○
250	○	○	800	○	○
300	○	○	850	○	○
350	○	○	900	○	○
400	○	○	950	○	○
450	○	○	1000	○	○
500	○	○	1050	○	○
550	○	○	1100	○	○

#### ③ Cable Length

Cable Type	Cable Code	RCP6	RCP6S
Standard	P (1m)	○	○
	S (3m)	○	○
	M (5m)	○	○
Specified Length	X06 (6m) ~X10 (10m)	○	○
	X11 (11m) ~X15 (15m)	○	○
	X16 (16m) ~X20 (20m)	○	○
	R01 (1m) ~R03 (3m)	○	○
Robot Cable	R04 (4m) ~R05 (5m)	○	○
	R06 (6m) ~R10 (10m)	○	○
	R11 (11m) ~R15 (15m)	○	○
	R16 (16m) ~R20 (20m)	○	○

\* Please refer to P.144 for more information regarding the maintenance cables.

#### ④ Options

Name	Option Code	Reference Page
Brake	B	See P.105
Cable exit direction (Outside)	CJO	See P.105
Motor side-mounted to the left	ML	See P.109
Motor side-mounted to the right	MR	See P.109
Non-motor end specification	NM	See P.110
Slider spacer	SS	See P.111

# When selecting multiple options, please list them in alphabetical order. (e.g. B-CJB-NM)

### Actuator Specifications

Item	Description
Drive system	Ball screw φ16mm, rolled C10
Positioning repeatability	±0.01mm
Lost motion	0.1mm or less
Base	Material: Aluminum with white alumite treatment
Static allowable moment	Ma: 219N·m, Mb: 219N·m, Mc: 414N·m
Dynamic allowable moment (*)	Ma: 77.0N·m, Mb: 77.0N·m, Mc: 146N·m
Ambient operating temp. & humidity	0~40°C, 85% RH or less (Non-condensing)

\* Reference for overhang load length: Ma: 400mm or less, Mb, Mc: 400mm or less

(\*) Assumes a standard rated life of 5,000km. The service life will vary depending on operation and installation conditions.

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

