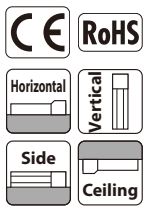


RCP6(S)-SA8C



Model Specification Items	Series	Type	Encoder Type	Motor Type	Lead	Stroke	Applicable Controller/I/O Type	Cable Length	Options
	SA8C	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 1,100: 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.	

* 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.

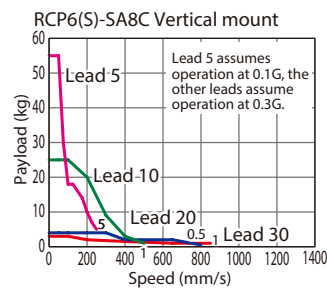
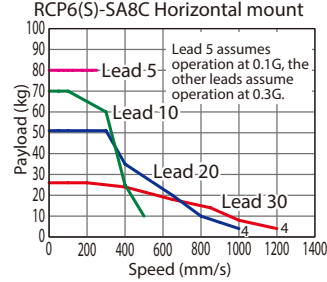


*Depending on the model, there may be some limitations to using the vertical, side, and ceiling mount positions. Please contact IAI for more information regarding mounting positions



- 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		Stroke (mm)
		Horizontal (kg)	Vertical (kg)	
RCP6(S)-SA8C-WA-56SP-30-①-②-③-④	30	28	3	50~1,100 (The increment of stroke is 50mm)
RCP6(S)-SA8C-WA-56SP-20-①-②-③-④	20	60	4	
RCP6(S)-SA8C-WA-56SP-10-①-②-③-④	10	70	25	
RCP6(S)-SA8C-WA-56SP-5-①-②-③-④	5	80	55	

Stroke and Max. Speed

(Unit: mm/s)

Lead (mm)	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	480	430	385	345	310	285	260	235	220
5	250	240	215	190	175	155	140	130	120	110

Legend: ① Stroke ② Applicable controller/I/O type ③ Cable length ④ Options 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 (Top)	CJT	See P.105
Cable exit direction (Right)	CJR	See P.105
Cable exit direction (Left)	CJL	See P.105
Cable exit direction (Bottom)	CJB	See P.105
High-precision specification *	HPR	See P.108
Non-motor end specification	NM	See P.110

Actuator Specifications

Item	Description
Drive system	Ball screw φ16mm, rolled C10
Positioning repeatability (*1)	±0.01mm [±0.005mm]
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 (*2)	Ma: 77.0N·m, Mb: 77.0N·m, Mc: 146N·m
Ambient operating temp. & humidity	0~40°C, 85% RH or less (Non-condensing)

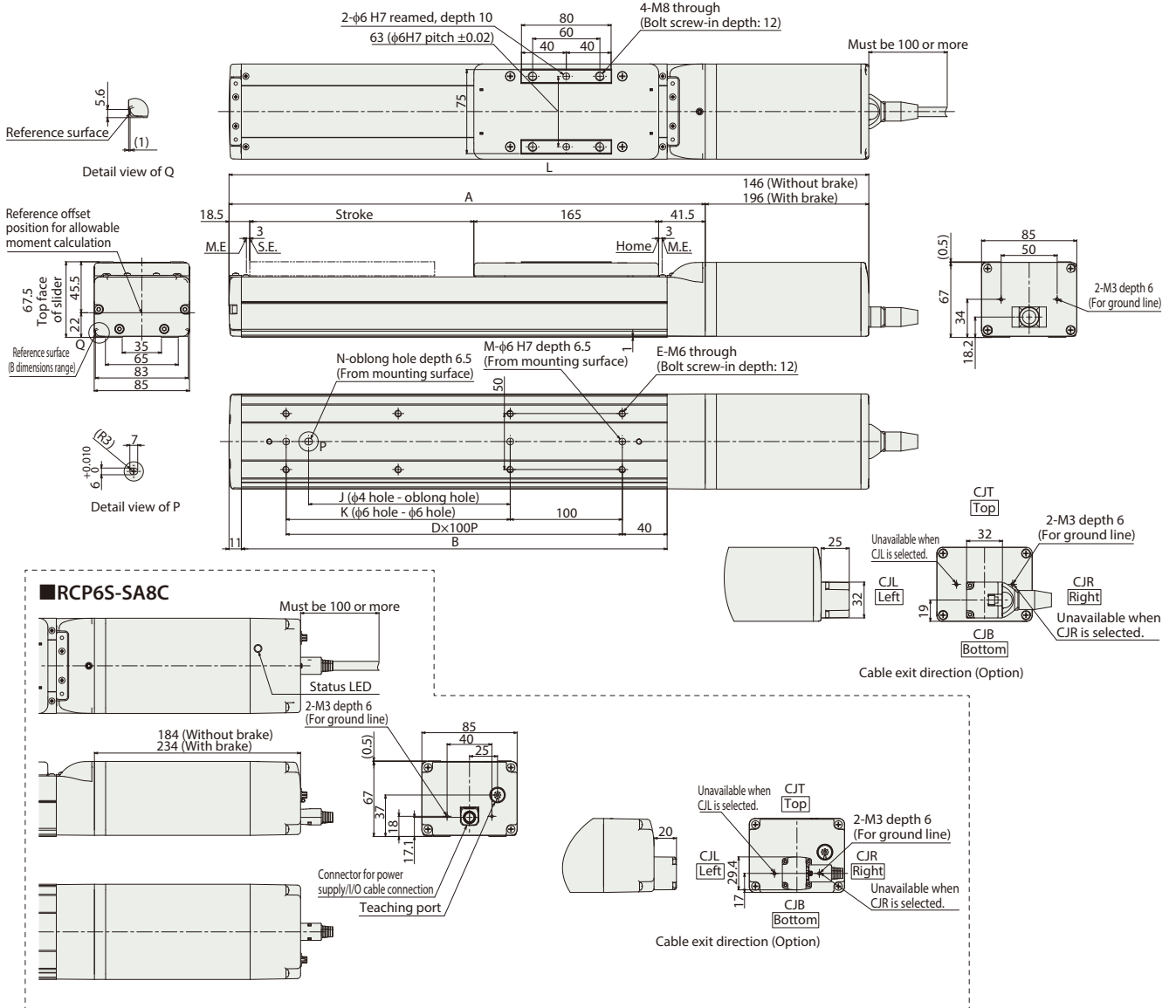
* Positioning repeatability is ±5µm for high-precision specification (HPR). High-precision specification option cannot be selected for lead 20, 30.
When selecting multiple options, please list them in alphabetical order. (e.g. B-CJB-NM)
* Reference for overhang load length: Ma: 400mm or less, Mb, Mc: 400mm or less
(*1) Values in [] are for high-precision (for lead 5/10) specification.
(*2) 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.

Dimensions

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



*1 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 M.E.
M.E: Mechanical end S.E: Stroke end



■ Dimensions and Mass by Stroke

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1,000	1,050	1,100	
L	RCP6 w/o brake	421	471	521	571	621	671	721	771	821	871	921	971	1,021	1,071	1,121	1,171	1,221	1,271	1,321	1,371	1,421	1,471
	RCP6S w/o brake	459	509	559	609	659	709	759	809	859	909	959	1,009	1,059	1,109	1,159	1,209	1,259	1,309	1,359	1,409	1,459	1,509
A	275	325	375	425	475	525	575	625	675	725	775	825	875	925	975	1,025	1,075	1,125	1,175	1,225	1,275	1,325	
B	230	280	330	380	430	480	530	580	630	680	730	780	830	880	930	980	1,030	1,080	1,130	1,180	1,230	1,280	
D	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	
E	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	
J	0	0	80	180	180	280	280	380	380	480	480	580	580	680	680	780	780	880	880	980	980	1,080	
K	0	100	100	200	200	300	300	400	400	500	500	600	600	700	700	800	800	900	900	1,000	1,000	1,100	
M	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
N	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Mass (kg)	RCP6 w/o brake	4.5	4.7	5.0	5.3	5.5	5.8	6.1	6.4	6.6	6.9	7.2	7.5	7.7	8.0	8.3	8.5	8.8	9.1	9.4	9.6	9.9	10.2
	RCP6S w/o brake	4.7	4.9	5.2	5.5	5.8	6.0	6.3	6.6	6.9	7.1	7.4	7.7	7.9	8.2	8.5	8.8	9.0	9.3	9.6	9.9	10.1	10.4
	RCP6S w/ brake	5.2	5.5	5.7	6.0	6.3	6.5	6.8	7.1	7.4	7.6	7.9	8.2	8.5	8.7	9.0	9.3	9.5	9.8	10.1	10.4	10.6	10.9

② Applicable Controllers

The RCP6 series actuators can be operated by the controllers indicated below. Please select the type depending on your intended use. * Please refer to P.147 for more information about the built-in controller of RCP6S series.

Name	External view	Max. number of controlled axes	Input power	Positioner	Pulse train	Program	Control method			Maximum number of positioning points	Reference page
							Network *Option				
PCON-CFB/CGFB		1	DC24V	● *Option	● *Option	-	DeviceNet	CompoNet	EtherNet/IP	512 (768 for network spec.)	Please see P.131