

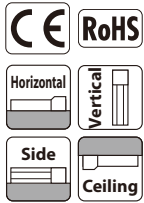
RCP6(S)-TA4C

Table Type Motor Unit Type Coupled Motor Body Width 40mm 24v Stepper Motor

Model Specification Items

Series	Type	Encoder Type	Motor Type	Lead	Stroke	Applicable Controller/I/O Type	Cable Length	Options
RCP6: Separate Controller RCP6S: Built-in Controller	TA4C	WA: Battery-less Absolute	35P: Stepper Motor 35□ Size	16: 16mm 10: 10mm 5: 5mm 2.5: 2.5mm	25: 25mm 240: 240mm	[RCP6] P3: PCON MCON MSEL [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.

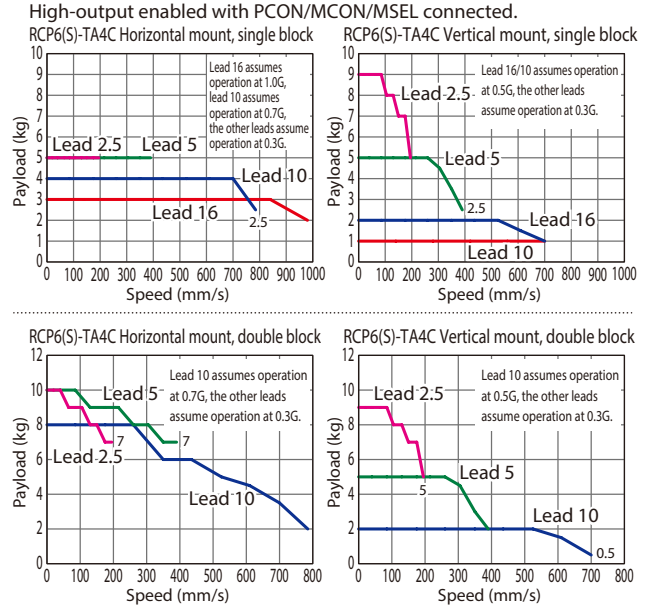
* RCP6 does not include a controller. RCP6S includes a built-in controller.
* Please refer to P.12 for more information about the model specification items.



*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.



Correlation Diagrams of Speed and Payload



- 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.
 - (4) High-rigidity (double-block) specification can be selected as an option.

Actuator Specifications

Lead and Payload

Model Number	Lead (mm)	Connected Controller	Max. Payload		Stroke (mm)
			Horizontal (kg)	Vertical (kg)	
RCP6(S)-TA4C-WA-35P-16-①-②-③-④	16	High-output Enabled	3	1	25~150 (The increment of stroke is 50mm)
RCP6(S)-TA4C-WA-35P-10-①-②-③-④	10	High-output Enabled	4	2.5	
RCP6(S)-TA4C-WA-35P-5-①-②-③-④	5	High-output Enabled	5	5	
RCP6(S)-TA4C-WA-35P-2.5-①-②-③-④	2.5	High-output Enabled	5	10	40~240
RCP6(S)-TA4C-WA-35P-10-①-②-③-④	10	High-output Enabled	8	2.5	
RCP6(S)-TA4C-WA-35P-5-①-②-③-④	5	High-output Enabled	10	5	
RCP6(S)-TA4C-WA-35P-2.5-①-②-③-④	2.5	High-output Enabled	10	10	

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

Stroke and Max. Speed

Lead (mm)	Connected Controller	Max. Speed (Unit: mm/s)		
		Single Block 25~150	Double Block 40~190 240	
16	High-output Enabled	980 <700>	-	
10	High-output Enabled	785 <700>	785 <700>	680
5	High-output Enabled	390	390	340
2.5	High-output Enabled	195	195	170

Values in brackets < > are for vertical use.

① Stroke

Stroke (mm)	Single Block		Double Block	
	RCP6	RCP6S	RCP6	RCP6S
25	○	○	○	○
50	○	○	○	○
75	○	○	○	○
100	○	○	○	○
125	○	○	○	○
150	○	○	○	○

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-rigidity (Double-block guide)	DB	See P.105
Non-motor end specification	NM	See P.110

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

Actuator Specifications

Item	Description
Drive system	Ball screw φ8mm, rolled C10
Positioning repeatability	±0.01mm
Lost motion	0.1mm or less
Base	Material: Aluminum with white alumite treatment
Static allowable moment	Single block Ma: 13N·m, Mb: 18.6N·m, Mc: 25.3N·m
	Double block Ma: 76.8N·m, Mb: 110N·m, Mc: 50.5N·m
Dynamic allowable moment (*)	Single block Ma: 4.98N·m, Mb: 7.11N·m, Mc: 9.68N·m
	Double block Ma: 23.9N·m, Mb: 34.1N·m, Mc: 15.7N·m
Ambient operating temp. & humidity	0~40°C, 85% RH or less (Non-condensing)

(*) 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.

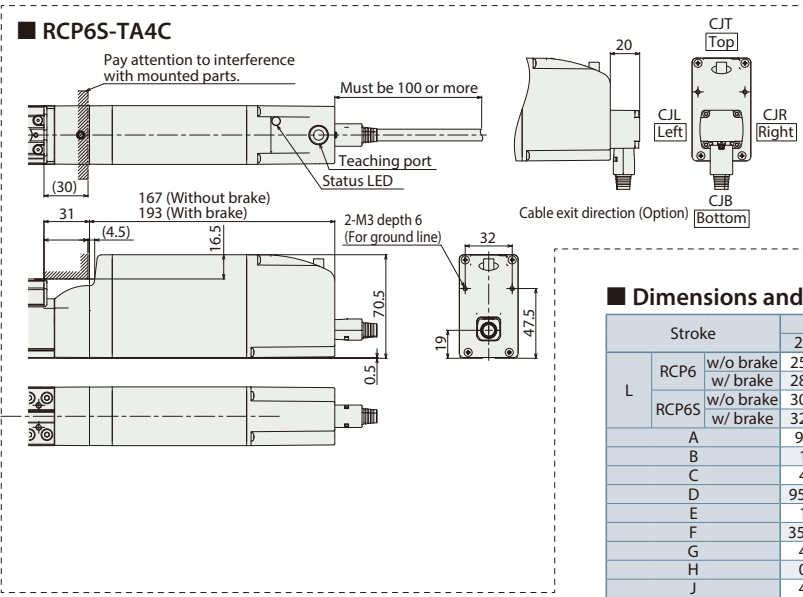
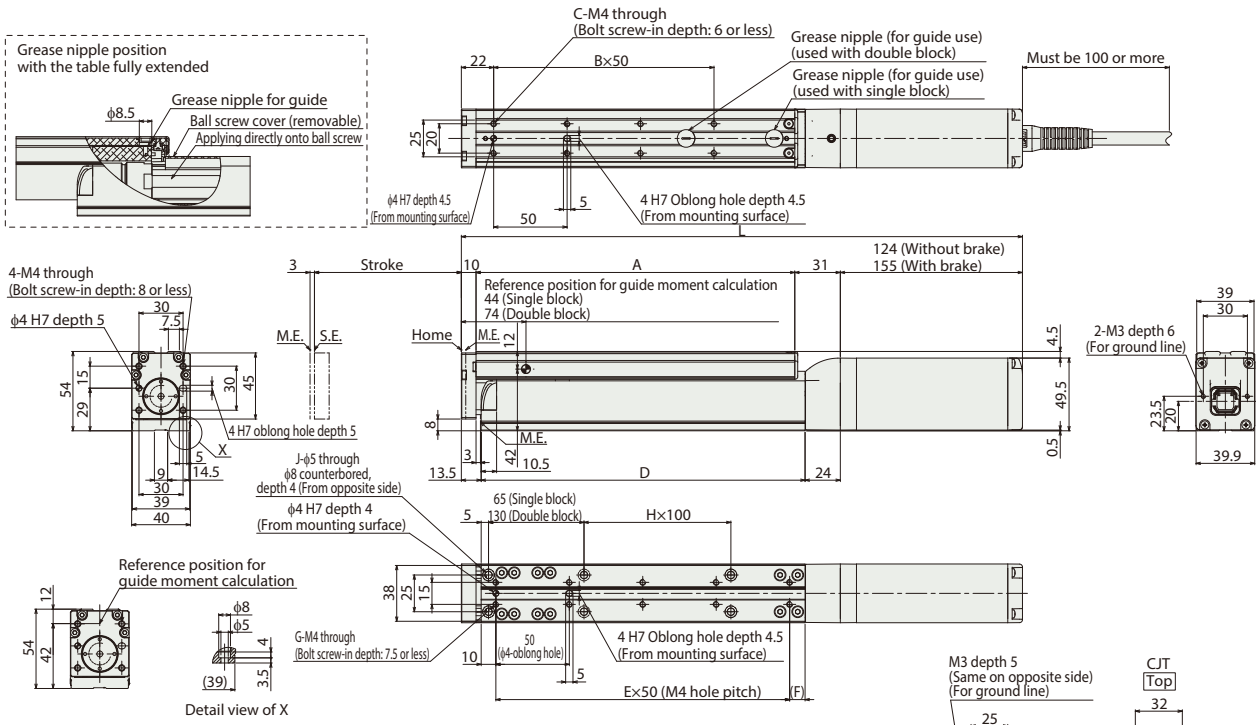
Please refer to RCP6 instruction manual regarding the displacement of the table.

Dimensions

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



*1 When the table 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	Single Block						Double Block						
	25	50	75	100	125	150	40	65	90	140	190	240	
L	RCP6 w/o brake	257	282	307	332	357	382	332	357	382	432	482	532
	RCP6S w/o brake	288	313	338	363	388	413	363	388	413	463	513	563
A	RCP6S w/ brake	300	325	350	375	400	425	375	400	425	475	525	575
	RCP6S w/ brake	326	351	376	401	426	451	401	426	451	501	551	601
B	92	117	142	167	192	217	167	192	217	267	317	367	
C	1	1	2	2	3	3	2	3	3	4	5	6	
D	4	4	6	6	8	8	6	8	8	10	12	14	
E	95.5	120.5	145.5	170.5	195.5	220.5	170.5	195.5	220.5	270.5	320.5	370.5	
F	1	2	2	3	3	4	3	3	4	5	6	7	
G	35.5	10.5	35.5	10.5	35.5	10.5	35.5	10.5	35.5	10.5	10.5	10.5	
H	4	6	6	8	8	10	8	10	12	14	16	16	
J	0	0	0	0	1	1	0	0	0	1	1	2	
Mass (kg)	RCP6 w/o brake	1.2	1.3	1.4	1.5	1.6	1.6	1.5	1.6	1.7	1.9	2.1	2.2
	RCP6S w/o brake	1.4	1.4	1.5	1.6	1.7	1.8	1.7	1.8	1.9	2.0	2.2	2.4
	RCP6S w/ brake	1.4	1.5	1.6	1.7	1.7	1.8	1.7	1.8	1.9	2.1	2.3	2.4
	RCP6S w/ brake	1.5	1.6	1.7	1.8	1.9	2.0	1.9	2.0	2.1	2.2	2.4	2.6

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	Control method				Maximum number of positioning points	Reference page
				Positioner	Pulse train	Program	Network *Option		
PCON-CB/CGB		1	DC24V	● *Option	● *Option	-		512 (768 for network spec.)	Please see P.131
MCON-C/CG		4		This model is network-compatible only.					
MSEL-PC/PG		4	Single-phase 100~230VAC	-	-	●	Note: The type of compatible networks will vary depending on the controller. Please refer to reference page for more information.	30,000	Please see the MSEL-PC/PG catalog.

* Please select "high-output specification" as an option for the MCON. With the MCON, operation is possible only when the high-output specification is selected.