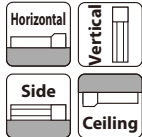


RCP6(S)-TA6C

Table Type Motor Unit Type Coupled Motor Body Width **58 mm** 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	TA6C	WA: Battery-less Absolute	42P: Stepper Motor 42□ Size	20: 20mm 12: 12mm 6: 6mm 3: 3mm	25: 25mm 320: 320mm	[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.

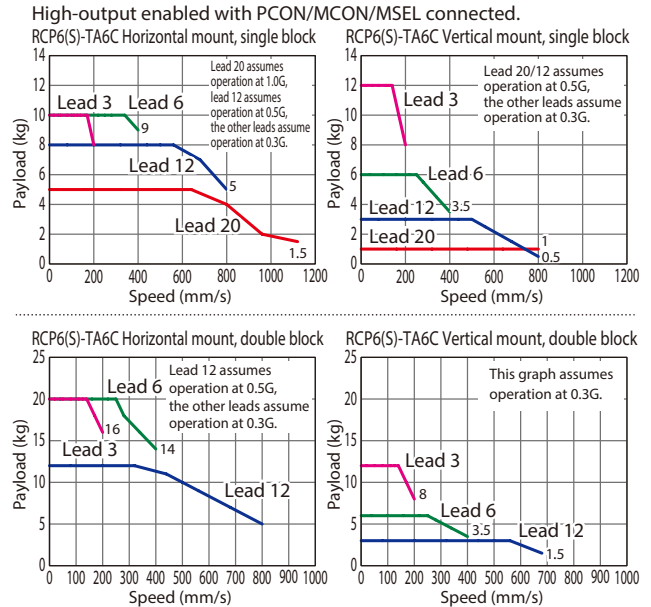


* Depending on the model, there may be some limitations to using the vertical, side, and ceiling mount positions. Please contact IAI for more information regarding mounting positions.



- 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) Depending on the ambient operational temperature, duty control is necessary for the RCP6S (built-in controller type) with lead 3/6. Please refer to P.130 for more information.
 - (5) High-rigidity (double-block) specification can be selected as an option.

Correlation Diagrams of Speed and Payload



Actuator Specifications

Lead and Payload

	Model Number	Lead (mm)	Connected Controller	Max. Payload		Stroke (mm)
				Horizontal (kg)	Vertical (kg)	
Single Block	RCP6(S)-TA6C-WA-42P-20-①-②-③-④	20	High-output Enabled	5	1	25~200 (The increment of stroke is 50mm)
	RCP6(S)-TA6C-WA-42P-12-①-②-③-④	12	High-output Enabled	8	3	
	RCP6(S)-TA6C-WA-42P-6-①-②-③-④	6	High-output Enabled	10	6	
	RCP6(S)-TA6C-WA-42P-3-①-②-③-④	3	High-output Enabled	10	12	
Double Block	RCP6(S)-TA6C-WA-42P-12-①-②-③-④	12	High-output Enabled	15	3	45~320
	RCP6(S)-TA6C-WA-42P-6-①-②-③-④	6	High-output Enabled	20	6	
	RCP6(S)-TA6C-WA-42P-3-①-②-③-④	3	High-output Enabled	20	12	

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 25~200	Double Block 45~220	270	320
20	High-output Enabled	1,120 <800>	-	-	-
12	High-output Enabled	800	800 <680>	735 <680>	575
6	High-output Enabled	400	400	365	285
3	High-output Enabled	200	200	185	140

Values in brackets < > are for vertical use.

① Stroke

Stroke (mm)	Single Block		Double Block	
	RCP6	RCP6S	RCP6	RCP6S
25	○	○	45	○
50	○	○	70	○
75	○	○	95	○
100	○	○	120	○
125	○	○	170	○
150	○	○	220	○
175	○	○	270	○
200	○	○	320	○

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 φ10mm, 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: 32.3N·m, Mb: 46.2N·m, Mc: 68.3N·m
	Double Block Ma: 169N·m, Mb: 242N·m, Mc: 137N·m
Dynamic allowable moment (*)	Single block Ma: 11.6N·m, Mb: 16.6N·m, Mc: 24.6N·m
	Double block Ma: 49.5N·m, Mb: 70.7N·m, Mc: 40N·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.

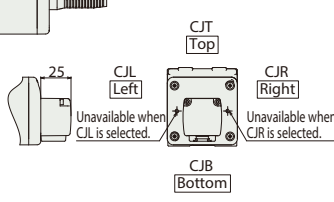
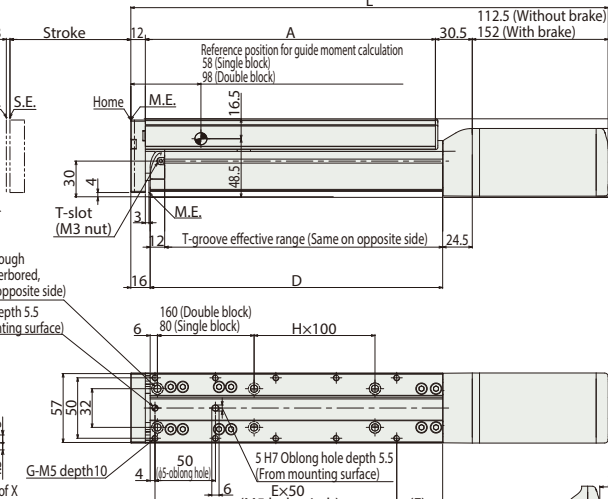
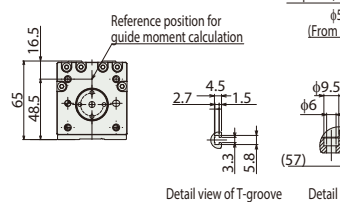
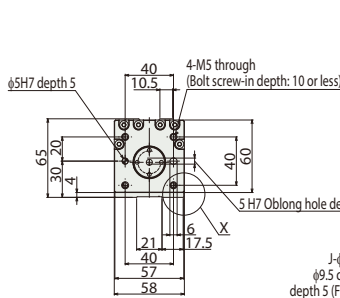
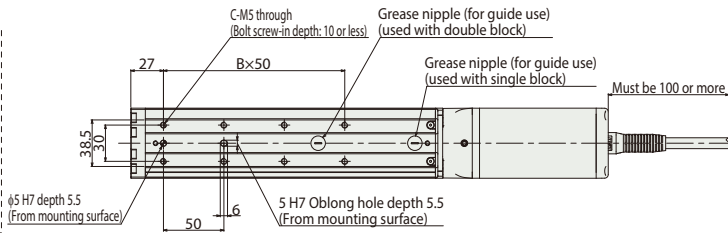
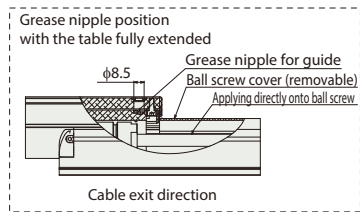
Please refer to RCP6 instruction manual regarding the displacement of the table.

Dimensions

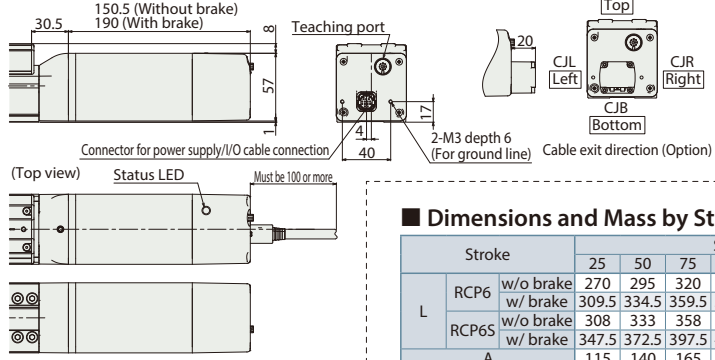
CAD drawings can be downloaded from our website.
www.intelligentactuator.com



*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



RCP6S-TA6C



Dimensions and Mass by Stroke

Stroke	Single Block												Double Block					
	25	50	75	100	125	150	175	200	45	70	95	120	170	220	270	320		
L	RCP6 w/o brake	270	295	320	345	370	395	420	445	370	395	420	445	495	545	595	645	
	RCP6 w/ brake	309.5	334.5	359.5	384.5	409.5	434.5	459.5	484.5	409.5	434.5	459.5	484.5	534.5	584.5	634.5	684.5	
L	RCP6S w/o brake	308	333	358	383	408	433	458	483	408	433	458	483	533	583	633	683	
	RCP6S w/ brake	347.5	372.5	397.5	422.5	447.5	472.5	497.5	522.5	447.5	472.5	497.5	522.5	572.5	622.5	672.5	722.5	
A	115	140	165	190	215	240	265	290	215	240	265	290	340	390	440	490		
B	1	1	2	2	3	3	4	4	3	3	4	4	5	6	7	8		
C	4	4	6	6	8	8	10	10	8	8	10	10	12	14	16	18		
D	117	142	167	192	217	242	267	292	217	242	267	292	342	392	442	492		
E	2	2	3	3	4	4	5	5	4	4	5	5	6	7	8	9		
F	13	38	13	38	13	38	13	38	13	38	13	38	38	38	38	38		
G	6	6	8	8	10	10	12	12	10	10	12	12	14	16	18	20		
H	0	0	0	0	1	1	1	1	0	0	0	0	1	1	2	2		
J	4	4	4	4	6	6	6	6	4	4	4	4	6	6	8	8		
Mass (kg)	RCP6	w/o brake	2.1	2.2	2.4	2.5	2.7	2.9	3.0	3.2	2.9	3.0	3.2	3.3	3.7	4.0	4.3	4.6
		w/ brake	2.3	2.5	2.6	2.8	2.9	3.1	3.3	3.4	3.1	3.3	3.4	3.6	3.9	4.2	4.5	4.9
	RCP6S	w/o brake	2.2	2.4	2.5	2.7	2.8	3.0	3.2	3.3	3.0	3.2	3.3	3.5	3.8	4.1	4.4	4.8
		w/ brake	2.4	2.6	2.8	2.9	3.1	3.2	3.4	3.6	3.2	3.4	3.6	3.7	4.0	4.4	4.7	5.0

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.					256
MSEL-PC/PG		4	Single-phase 100~230VAC	-	-	●		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.