

RCP4-SA6C

ROBO Cylinder, Slider Type, Motor Unit Coupled, Actuator Width 58 mm, 24-V Pulse Motor

Model Specification Items **RCP4 — SA6C — I — 42P —** — — **P3** — —

Series — Type — Encoder type — Motor type — Lead — Stroke — Applicable controller — Cable length — Options

I: Incremental specification 42P: Pulse motor, size 42□ 20: 20mm 12: 12mm 6: 6mm 3: 3mm 50: 50mm 800: 800mm (every 50mm) P3: PCON-CA MSEP-C N: None P: 1 m S: 3 m M: 5 m X□□: Custom length R□□: Robot cable See Options below.

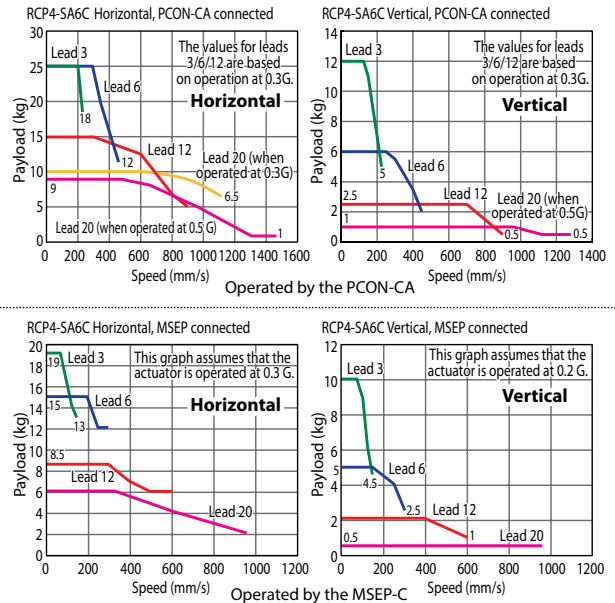
* See page Pre-47 for details on the model descriptions.



Technical References Appendix P.5

- POINT** Notes on selection
- The maximum payload is the value when operated at 0.3G (0.2G with some models) acceleration. The upper limit of acceleration is 1 G (*). Note that raising the acceleration causes the payload to drop. (*The specific value varies depending on the connected controller and actuator lead. For details, refer to "Selection References" on page A-100 and A-102.)
 - Take note that the maximum payload and maximum speed vary depending on the controller connected to the RCP4. (Refer to the actuator specifications below.)
 - See page A-71 for details on push motion.

Correlation Diagrams of Speed and Payload



Actuator Specifications

Leads and Payloads

(*) When operated at 0.2 G

Model number	Lead (mm)	Connected controller	Maximum payload		Stroke (mm)
			Horizontal (kg)	Vertical (kg)	
RCP4-SA6C-I-42P-20-①-P3-②-③	20	PCON-CA	10	1	50~800 (every 50mm)
		MSEP-C	6	0.5 (*)	
RCP4-SA6C-I-42P-12-①-P3-②-③	12	PCON-CA	15	2.5	
		MSEP-C	8.5	2	
RCP4-SA6C-I-42P-6-①-P3-②-③	6	PCON-CA	25	6	
		MSEP-C	15	5	
RCP4-SA6C-I-42P-3-①-P3-②-③	3	PCON-CA	25	12	
		MSEP-C	19	10	

Code explanation ① Stroke ② Cable length ③ Options

* See page A-71 for details on push motion.

Stroke and Maximum Speed

Lead (mm)	Connected controller	Stroke (mm)							
		50~450 (every 50mm)	500	550	600	650	700	750	800
20	PCON-CA	1440 <1280>							
	MSEP-C	960							
12	PCON-CA	900	795	670	570	490	430	375	335
	MSEP-C	600		570	490	430	375	335	
6	PCON-CA	450	395	335	285	245	215	185	165
	MSEP-C	300		285	245	215	185	165	
3	PCON-CA	225	195	165	140	120	105	90	80
	MSEP-C	150		140	120	105	90	80	

The values in <> apply when the actuator is used vertically.

(unit: mm/s)

① Stroke

Stroke (mm)	Standard price	Stroke (mm)	Standard price
50	—	450	—
100	—	500	—
150	—	550	—
200	—	600	—
250	—	650	—
300	—	700	—
350	—	750	—
400	—	800	—

② Cable Length

Type	Cable symbol	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)	—
		—

* See page A-59 for cables for maintenance.

③ Options

Name	Option code	See page	Standard price
Brake	B	→ A-42	—
Optional cable exit direction (top)	CJT	→ A-42	—
Optional cable exit direction (right)	CJR	→ A-42	—
Optional cable exit direction (left)	CJL	→ A-42	—
Optional cable exit direction (bottom)	CJB	→ A-42	—
Non-motor end specification	NM	→ A-52	—
Slider roller specification	SR	→ A-55	—

Actuator Specifications

Item	Description
Drive system	Ball screw ø10mm, rolled C10
Positioning repeatability (*1)	±0.02mm [±0.03mm]
Lost motion	0.1mm or less
Base	Material: Aluminum, white alumite treated
Guide	Linear guide
Allowable dynamic moment (*2)	Ma: 8.9 N·m, Mb: 12.7 N·m, Mc: 18.6 N·m
Allowable overhang	220mm or less in Ma, Mb and Mc directions
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (Non-condensing)

(*1) The value at lead 20 is shown in [].

(*2) Based on 5,000km of traveling life

