

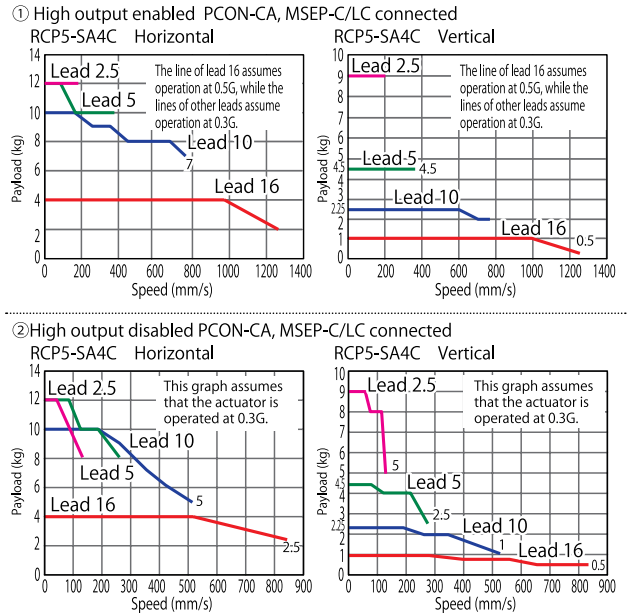
# RCP5-SA4C

ROBO Cylinder, Slider Type, Motor Unit Coupled, Actuator Width 40mm, 24-V Pulse Motor

Model Specification Items	<b>RCP5</b> — <b>SA4C</b> — <b>WA</b> — <b>35P</b> — <input type="checkbox"/> — <input type="checkbox"/> — <b>P3</b> — <input type="checkbox"/> — <input type="checkbox"/>
	Series — Type — Encoder type — Motor type — Lead — Stroke — Applicable controller — Cable length — Options
	WA : Battery-less absolute specification 35P : Pulse motor, size 35□ 16 : 16mm 10 : 10mm 5 : 5mm 2.5 : 2.5mm 50 : 50mm 500 : 500mm (every 50mm) P3 : PCON-CA MSEP-C/LC N : None P : 1m S : 3m M : 5m X□ : Specified length R□ : Robot cable



## Correlation Diagrams of Speed and Payload



**POINT**  
Note on selection

(1) The payload in "Actuator Specifications" represents the maximum values, but the payload of a specific model varies depending on the acceleration. For details, refer to "Selection Guideline" (Table of RCP5 Payload by Speed/Acceleration) on P. 33 to 35.

(2) Refer to P. 31 for the push-motion operation.

## Actuator Specifications

### Lead and Payload

Model number	Lead (mm)	Connected controller	Maximum payload		Stroke (mm)
			Horizontal (kg)	Vertical (kg)	
RCP5-SA4C-WA-35P-16-①-P3-②-③	16	High output enabled PCON-CA MSEP-C/LC	4	1	50~500 (every 50mm)
		High output disabled PCON-CA MSEP-C/LC			
RCP5-SA4C-WA-35P-10-①-P3-②-③	10	High output enabled PCON-CA MSEP-C/LC	10	2.25	
		High output disabled PCON-CA MSEP-C/LC			
RCP5-SA4C-WA-35P-5-①-P3-②-③	5	High output enabled PCON-CA MSEP-C/LC	12	4.5	
		High output disabled PCON-CA MSEP-C/LC			
RCP5-SA4C-WA-35P-2.5-①-P3-②-③	2.5	High output enabled PCON-CA MSEP-C/LC	12	9	
		High output disabled PCON-CA MSEP-C/LC			

Code explanation ① Stroke ② Cable length ③ Options

### Stroke and Maximum Speed

(unit: mm/s)

Lead (mm)	Connected controller	50~400 (every 50mm)		
		450 (mm)	500 (mm)	
16	High output enabled PCON-CA MSEP-C/LC	1260	1060	875
	High output disabled PCON-CA MSEP-C/LC	840		
10	High output enabled PCON-CA MSEP-C/LC	785	675	555
	High output disabled PCON-CA MSEP-C/LC	525		
5	High output enabled PCON-CA MSEP-C/LC	390	330	275
	High output disabled PCON-CA MSEP-C/LC	260		
2.5	High output enabled PCON-CA MSEP-C/LC	195	165	135
	High output disabled PCON-CA MSEP-C/LC	130		

### ① Stroke

Stroke (mm)	Standard price	Stroke (mm)	Standard price
50	—	300	—
100	—	350	—
150	—	400	—
200	—	450	—
250	—	500	—

### 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)	—
	R01 (1m) ~ R03 (3m)	—
Robot cable	R04 (4m) ~ R05 (5m)	—
	R06 (6m) ~ R10 (10m)	—
	R11 (11m) ~ R15 (15m)	—
	R16 (16m) ~ R20 (20m)	—

### ③ Option

Name	Option code	See page	Standard price
Brake	B		—
Non-motor end specification	NM	→P.10	—

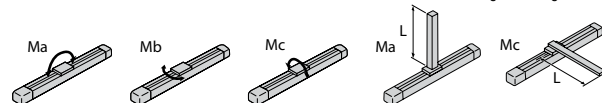
## Actuator Specifications

Item	Description
Drive system	Ball screw ø8mm, rolled C10
Positioning repeatability	±0.02mm
Lost motion	0.1 mm or less
Base	Material: Aluminum with white alumite treatment
Guide	Linear guide
Dynamic allowable moment (*1)	Ma: 3.9 N·m, Mb: 5.5 N·m, Mc: 7.5 N·m
Allowable overhang	120mm or less in Ma, Mb and Mc directions
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (Non-condensing)

(\*1) Based on 5,000km of traveling life

Allowable load moment directions

Overhang load lengths

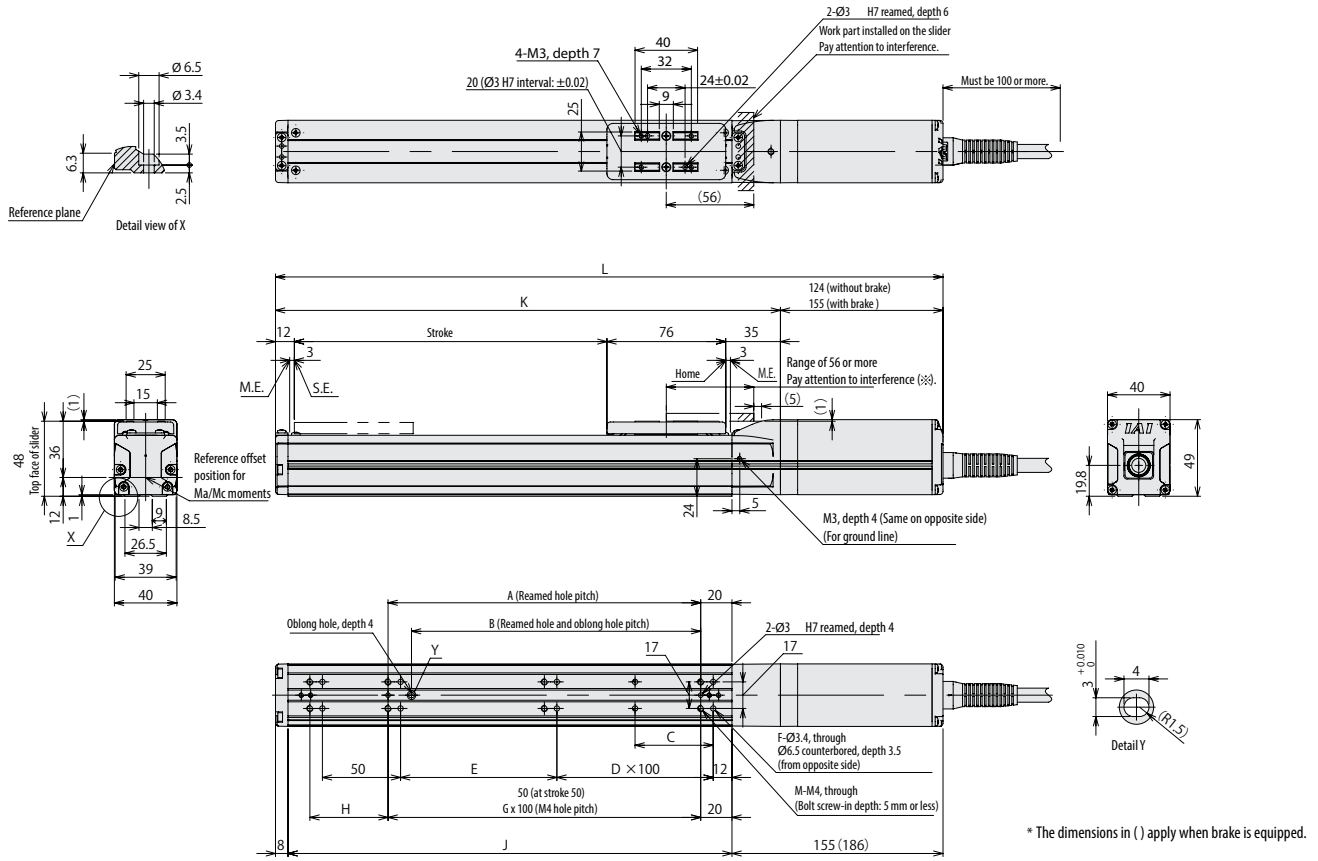


## Dimensional Drawings

CAD drawings can be downloaded from the website: [www.intelligentactuator.com](http://www.intelligentactuator.com)



\*1 During home return, be careful to avoid interference from peripheral objects because the slider travels until the mechanical end.  
ME: Mechanical end  
SE: Stroke end



\* The dimensions in ( ) apply when brake is equipped.

### Dimensions and Mass by Stroke

Stroke	L	50	100	150	200	250	300	350	400	450	500
		Without brake	297	347	397	447	497	547	597	647	697
With brake	328	378	428	478	528	578	628	678	728	778	
A	50	100	100	200	200	300	300	400	400	500	
B	35	85	85	185	185	285	285	385	385	485	
C	25	50	50	50	50	50	50	50	50	50	
D	0	0	1	1	2	2	3	3	4	4	
E	50	100	50	100	50	100	50	100	50	100	
F	8	8	10	10	12	12	14	14	16	16	
G	-	1	1	2	2	3	3	4	4	5	
H	50	50	100	50	100	50	100	50	100	50	
J	134	184	234	284	334	384	434	484	534	584	
K	173	223	273	323	373	423	473	523	573	623	
M	6	6	6	8	8	10	10	12	12	14	
Mass (kg)	Without brake	1.0	1.1	1.2	1.3	1.3	1.4	1.5	1.6	1.7	1.8
	With brake	1.2	1.3	1.4	1.5	1.5	1.6	1.7	1.8	1.9	2.0

### Applicable Controller

RCP5 series actuators can be operated with the controller indicated below. Select the type according to your intended application.

Name	External view	Model number	Features	Maximum number of positioning points	Input power	Power supply capacity	Standard price	Reference page	
Positioner type		PCON-CA-35PWAI-NP-□-0-□ PCON-CA-35PWAI-PN-□-0-□	Equipped with a high-output driver Positioner type based on PIO control	512 points	DC24V	Refer to P. 46	—	Refer to P. 39	
Pulse-train type		PCON-CA-35PWAI-PLN-□-0-□ PCON-CA-35PWAI-PLP-□-0-□	Equipped with a high-output driver Pulse-train input type	—			—		
Field network type		PCON-CA-35PWAI-□-0-0-□	Equipped with a high-output driver Supporting major field networks	768 points			—		
Position controller, 8-axis type	MSEP-C-□-35PWAI-□-□-0	Positioner type that accepts connection of up to eight axes.	3 points/256 points	Refer to P. 55			Contact IAL		Refer to P. 47
6-axis type with I/O control function	MSEP-LC-□-35PWAI-□-□-0-□	Axes can be moved and I/O signal turned ON/OFF using a ladder logic program.	256 points						

\* In the model numbers shown above, ① indicates the field network specification (DV, CC, PR, CN, ML, EC or EP)