

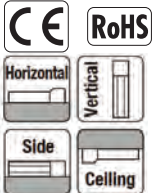
# RCP5-RA4R

ROBO Cylinder, Rod Type, Side-mounted Motor Type,  
Actuator Width 40mm, 24V Pulse Motor

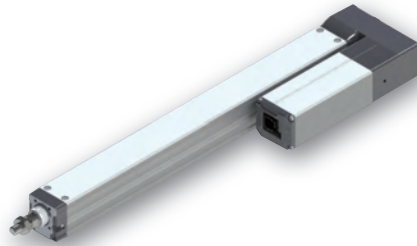
Model	RCP5	RA4R	WA	35P					
Specification	Series	Type	Encoder type	Motor type	Lead	Stroke	Applicable controllers	Cable length	Options
Items			WA: Battery-less absolute specification	35P: Pulse motor, size 35□	16: 16mm 10: 10mm 5: 5mm 2.5: 2.5mm	60: 60mm 410: 410mm (Every 50mm)	P3: PCON/MSEL P5: RCON/RSEL	N: No cable P: 1m S: 3m M: 5m X□: Specified length R□: Robot cable	Please refer to the options table below.

\*Controller is not included.

## Radial Load Applicable



\* Depending on the model, there may be some limitations to using the vertical mount position. Please refer to P.59 for details.



The figure above is the motor side-mounted to the left (ML).

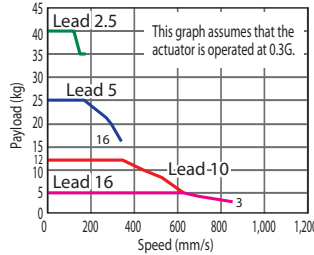
**POINT**  
Note on selection

- (1) The actuator specification displays the payload's maximum value, but it will vary depending on the acceleration. Please refer to the "Selection Guidelines" (RCP5 Payload by Speed/Acceleration Table) on P. 61.
- (2) Please refer to P. 59 for push-motion operation.
- (3) The radial cylinder is equipped with a built-in guide. Please refer to the graphs shown in P. 65 and after for the allowable load mass.

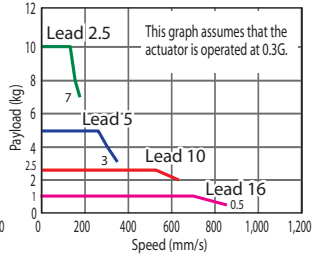
## Correlation Diagrams of Speed and Payload

(1) High-output enabled with PCON-CA, MSEP, MSEL connected

RCP5-RA4R, Horizontal mount



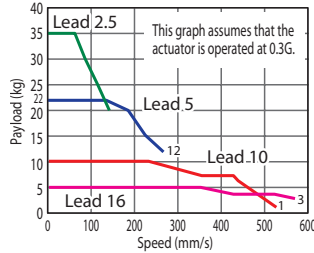
RCP5-RA4R, Vertical mount



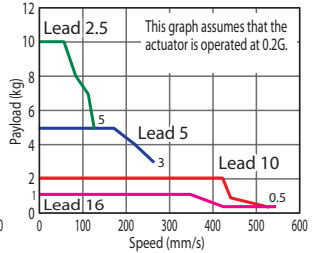
\* PCON-CA is a previous model. Current model is PCON-CB.

(2) High-output disabled with PCON-CA, MSEP connected

RCP5-RA4R, Horizontal mount



RCP5-RA4R, Vertical mount



## Actuator Specifications

### Lead and Payload

Model number	Lead (mm)	Connected controller	Maximum payload Horizontal (kg) Vertical (kg)	Maximum push force (N)	Stroke (mm)
RCP5-RA4R-WA-35P-16-①-P3-②-③	16	High-output enabled	5	1	48
		High-output disabled			
RCP5-RA4R-WA-35P-10-①-P3-②-③	10	High-output enabled	12	2.5	77
		High-output disabled	10	2	
RCP5-RA4R-WA-35P-5-①-P3-②-③	5	High-output enabled	25	5	155
		High-output disabled	22		
RCP5-RA4R-WA-35P-2.5-①-P3-②-③	2.5	High-output enabled	40	10	310
		High-output disabled	35		

Legend: ① Stroke ② Cable length ③ Options \*Please refer to P. 59 for push-motion operation.

### Stroke and Maximum Speed

(Unit: mm/s)

Lead (mm)	Connected controller	60~360 (Every 50mm)	410 (mm)
16	High-output enabled	840	
	High-output disabled	560	
10	High-output enabled	610	
	High-output disabled	525	
5	High-output enabled	350	340
	High-output disabled	260	
2.5	High-output enabled	175	170
	High-output disabled	130	

### ① Stroke

Stroke (mm)	Standard price	Stroke (mm)	Standard price
60	-	260	-
110	-	310	-
160	-	360	-
210	-	410	-

### ③ Options

Name	Option code	Reference page	Standard price
Brake	B	→ P. 11	-
Cable exit direction (Top)	CJT	→ P. 11	-
Cable exit direction (Outside)	CJO	→ P. 11	-
Cable exit direction (Bottom)	CJB	→ P. 11	-
Flange	FL	→ P. 12	-
Tip adapter (Flange)	FFA	→ P. 12	-
Tip adapter (Internal thread)	NFA	→ P. 13	-
Tip adapter (Keyway)	KFA	→ P. 13	-
Motor side-mounted to the left (Standard)	ML	→ P. 11	-
Motor side-mounted to the right	MR	→ P. 11	-
Non-motor end specification	NM	→ P. 11	-

Depending on the stroke, some rod attachment options are not available. Also, when selecting the shorter strokes, please be careful of nearby objects. Some interference may occur. Please refer to P. 14.

### ② Cable Length

Type	Cable code	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)	-

\*Please refer to P. 89 for maintenance cables.

## Actuator Specifications

Item	Description
Drive system	Ball screw Ø8mm, rolled C10
Positioning repeatability	±0.02mm
Lost motion	0.1mm or less
Rod	Ø20mm Aluminum
Rod non-rotation precision (*1)	0 deg.
Allowable load and torque on rod tip	Refer to table in the page on the right, refer to P. 65
Rod tip overhang distance	100mm or less
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (Non-condensing)

(\*1) Rod's angular displacement in rotational direction with no applied load is shown.

