

RCP4-RA6R

ROBO Cylinder, Rod Type, Side-mounted Motor Type, Actuator Width 61mm, 24-V Pulse Motor

Model
Specification
Items

RCP4 — RA6R

Series — Type

I

Encoder type

56P

Motor type

I: Incremental
specification

56P: Pulse motor,
size 56□

Lead

24: 24mm
16: 16mm
8: 8mm
4: 4mm

Stroke

50: 50mm
500: 500mm
(every 50mm)

Applicable controller

P3: PCON / MSEL
P5: PCON / RSEL

Cable length

N: None
P: 1 m
S: 3 m
M: 5 m
X□□: Specified length
R□□: Robot cable

Options

Refer to the options
table below.
* Be sure to specify
either "ML" or "MR"
as the motor side-
mounted direction.

Built-in guide mechanism



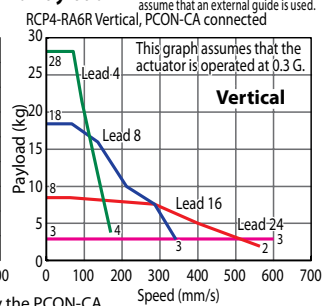
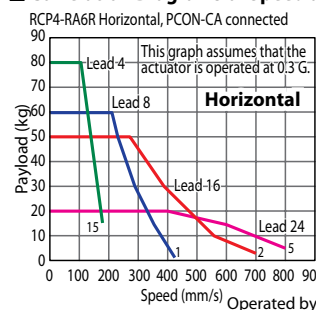
The "Motor side-mounted to the left (ML)" option is selected for the actuator shown above.

POINT
Notes on
selection

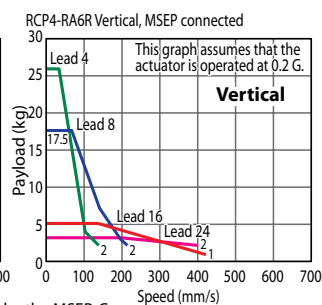
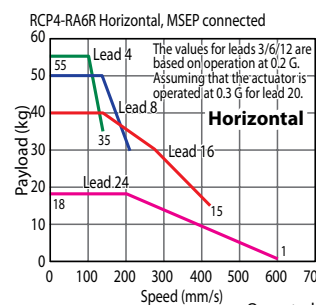
- (1) The maximum payload is the value when operated at 0.3G (0.2G with some models) acceleration. The upper limit of acceleration is 1 G (*). Note that raising the acceleration causes the payload to drop.
- (*) The specific value varies depending on the connected controller and actuator lead. For details, refer to "Selection References" on P. 37 to 40.
- (2) Take note that the maximum payload and maximum speed vary depending on the controller connected to the RCP4. (Refer to the actuator specifications below.)
- (3) All horizontal payloads are values when an external guide is used.

Correlation Diagrams of Speed and Payload

* The values of the horizontal specification assume that an external guide is used.



* PCON-CA is a previous model. The current model is PCON-CB.



Actuator Specifications

* PCON-CA is a previous model. The current model is PCON-CB.

Leads and Payloads

Model number	Lead (mm)	Connected controller	Maximum payload Horizontal (kg) Vertical (kg)	Max. push force (N)	Stroke (mm)
RCP4-RA6R-I-56P-24-①-P3-②-③	24	PCON-CA	20 3	—	182
		MSEP-C	18 3 (*)	—	
RCP4-RA6R-I-56P-16-①-P3-②-③	16	PCON-CA	50 8	—	273
		MSEP-C	40 (*) 5 (*)	—	
RCP4-RA6R-I-56P-8-①-P3-②-③	8	PCON-CA	60 18	—	547
		MSEP-C	50 (*) 17.5 (*)	—	
RCP4-RA6R-I-56P-4-①-P3-②-③	4	PCON-CA	80 28	—	1094
		MSEP-C	55 (*) 26 (*)	—	

Code explanation ① Stroke ② Cable length ③ Options (*) When operated at 0.2 G

Stroke and Maximum Speed

Lead (mm)	Connected controller	50~500 (every 50mm)
24	PCON-CA	800<600>
	MSEP-C	600<400>
16	PCON-CA	560
	MSEP-C	420
8	PCON-CA	420<350>
	MSEP-C	210
4	PCON-CA	175
	MSEP-C	140

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

(unit: mm/s)

① Stroke

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

③ Options *

Name	Option code	See page	Standard price
Brake	B	P8	—
Optional cable exit direction (top)	CJT	P8	—
Optional cable exit direction (outside)	CJO	P8	—
Optional cable exit direction (bottom)	CJB	P8	—
Flange bracket (*)	FL	P8	—
Motor side-mounted to the left (standard)	ML	P8	—
Motor side-mounted to the right	MR	P8	—
Non-motor end specification	NM	P8	—
Scraper	SC	P8	—

(*) The flange bracket cannot be used on the 50mm and less stroke with brake specification.

* Please see page 7 and 8 of the RCP4 catalog (CJ0182-4A-UST-1.2A) for all available options.

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)	—

Actuator Specifications

Item	Description
Drive system	Ball screw Ø12 mm, rolled C10
Positioning repeatability (*1)	±0.02mm [±0.03mm]
Lost motion	0.1mm or less
Rod	Ø25mm stainless steel pipe
Rod non-rotation precision	±0 deg
Allowable rod load mass	Refer to P. 28 and P. 36
Rod tip overhang distance	100mm or less
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (Non-condensing)

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

