

RCP6(S)-RRA8R

Battery-less
AbsoluteMotor
Unit
TypeSide-mounted
MotorBody Width
85*
mm24v
Stepper
MotorModel
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

WA: Battery-less
Absolute

60P: Stepper
Motor
60□ Size

20: 20mm
10: 10mm
5: 5mm

50: 50mm
700: 700mm
(50mm
increments)

[RCP6]
P4: PCON-
CFB/CGFB
[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.
*Please make sure to
specify either ML or MR
when ordering the side-
mounted motor type.

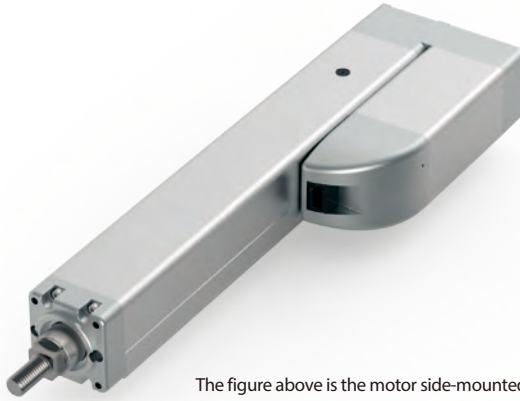
* RCP6 does not include a controller. RCP6S includes a built-in controller.

* Please refer to P.11 for more information about the model specification items.

Radial Load OK



*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.



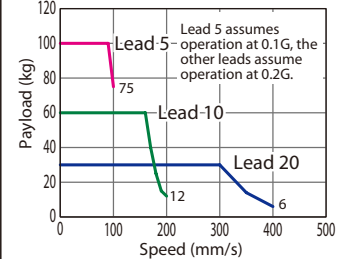
The figure above is the motor side-mounted to the left (ML).



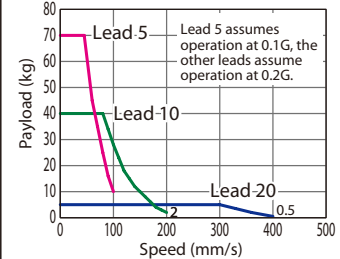
- (1) The maximum acceleration/deceleration is 0.1G for lead 5 and 0.2G for lead 10/20.
- (2) The actuator specification displays the payload's maximum value, but it will vary depending on the acceleration and speed. Please refer to the "Selection Guidelines" (RCP6 Tables of Payload by Speed/Acceleration) on P.115 for more details.
- (3) The radial cylinder is equipped with a built-in guide. Please refer to the graphs shown in P.127 and after for the allowable load mass.
- (4) 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.
- (5) For RCP6S (built-in controller type), please limit the duty cycle to 70% or less.
- (6) The service life of an actuator varies depending on the payload when using vertically. Please refer to P. 114 for more information.

Correlation Diagrams of Speed and Payload
PCON connected.

RCP6(S)-RRA8R Horizontal mount



RCP6(S)-RRA8R Vertical mount



Actuator Specifications

Lead and Payload

(Note 1) The payload assumes that there is an external guide.

Model Number	Lead (mm)	Max. Payload		Stroke (mm)
		Horizontal (kg)	Vertical (kg)	
RCP6(S)-RRA8R-WA-60P-20-①-②-③-④	20	30	5	50~700 (The increment of stroke is 50mm)
RCP6(S)-RRA8R-WA-60P-10-①-②-③-④	10	60	40	
RCP6(S)-RRA8R-WA-60P-5-①-②-③-④	5	100	70	

Legend: ① Stroke ② Applicable controller/I/O type ③ Cable length ④ Options

Stroke and Max. Speed

(Unit: mm/s)

Lead (mm)	50 (mm)	100~450 (mm)	500 (mm)	550 (mm)	600 (mm)	650 (mm)	700 (mm)
20	280	400	360	320	280	240	220
10		200	180	160	140	120	110
5		100	90	80	70	60	55

① Stroke

Stroke (mm)	RCP6	RCP6S	Stroke (mm)	RCP6	RCP6S
50	○	○	400	○	○
100	○	○	450	○	○
150	○	○	500	○	○
200	○	○	550	○	○
250	○	○	600	○	○
300	○	○	650	○	○
350	○	○	700	○	○

④ Options

Name	Option Code	Reference Page
Brake	B	See P.105
Cable exit direction (Outside)	CJO	See P.105
Flange	FL	See P.106
Tip adapter (Internal thread)	NFA	See P.109
Motor side-mounted to the left	ML	See P.109
Motor side-mounted to the right	MR	See P.109
Knuckle joint*	NJ	See P.110
Non-motor end specification	NM	See P.110
Clevis bracket*	QR	See P.111

* The clevis (QR) and knuckle joint (NJ) are sold as a set.

The assembly is to be performed by the customer.

When selecting multiple options, please list them in alphabetical order. (e.g. B-CJB-NM)

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.

Actuator Specifications

Item	Description
Drive system	Ball screw φ16mm, rolled C10
Positioning repeatability	±0.01mm
Lost motion	0.1mm or less
Rod	φ40mm Aluminum
Rod non-rotation precision*	0 deg.
Allowable load and torque on rod tip	See P. 127
Rod tip overhang distance	150mm
Ambient operating temp. & humidity	0~40°C, 85% RH or less (Non-condensing)

* Rod's angular displacement in rotational direction with no load applied to the rod.

