

RCP6(S)-WRA16R

Battery-less Absolute

Motor Unit Type

Side-mounted Motor

Body Width 160* mm

24v Stepper Motor

Model 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
800: 800mm (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.

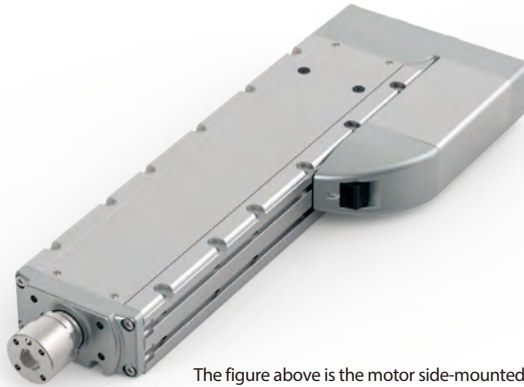
* RCP6 does not include a controller. RCP6S includes a built-in controller.

* Please refer to P.12 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).

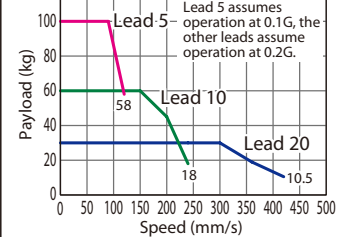


- (1) The maximum acceleration/deceleration is 0.1G for lead 5 and 0.2G for lead 10/20.
- (2) The actuator specification displays the payload's maximum value, but it will vary depending on the acceleration and speed. Please refer to the "Selection Guidelines" (RCP6 Tables of Payload by Speed/Acceleration) 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 with lead 5 varies depending on the payload when using vertically. Please refer to P. 114 for more information.

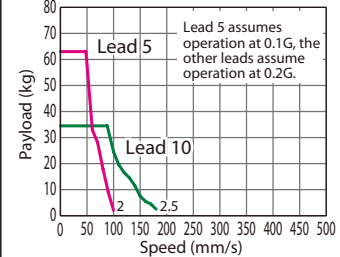
Correlation Diagrams of Speed and Payload

PCON connected.

RCP6(S)-WRA16R Horizontal mount



RCP6(S)-WRA16R 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)-WRA16R-WA-60P-20-①-②-③-④	20	30	-	50~800 (The increment of stroke is 50mm)
RCP6(S)-WRA16R-WA-60P-10-①-②-③-④	10	60	34.5	
RCP6(S)-WRA16R-WA-60P-5-①-②-③-④	5	100	63	

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 (mm)	150~400 (mm)	450 (mm)	500 (mm)	550 (mm)	600 (mm)	650 (mm)	700 (mm)	750 (mm)	800 (mm)
20	280	405	420	400	340	295	260	225	200	180	
10		240 <180>	230 <180>	195	165	145	125	110	100	90	
5		120 <100>	115 <100>	95	80	70	60	55	50	45	

Values in brackets < > are for vertical use.

① Stroke

Stroke (mm)	RCP6	RCP6S	Stroke (mm)	RCP6	RCP6S
50	○	○	450	○	○
100	○	○	500	○	○
150	○	○	550	○	○
200	○	○	600	○	○
250	○	○	650	○	○
300	○	○	700	○	○
350	○	○	750	○	○
400	○	○	800	○	○

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
Motor side-mounted to the left	ML	See P.109
Motor side-mounted to the right	MR	See P.109
Non-motor end specification	NM	See P.110
T-slot nut bar (Left)	NTBL	See P.110
T-slot nut bar (Right)	NTBR	See P.110

* When selecting T-slot nut bar option with a side-mounted motor model, please choose NTBR when the motor is side-mounted to the left, and NTBL when the motor is side-mounted to the right.

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	φ45mm Stainless steel
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)

