

RCP6(S)-WSA16R



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

56SP: High-thrust Stepper Motor

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

50: 50mm
1100: 1,100mm (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.

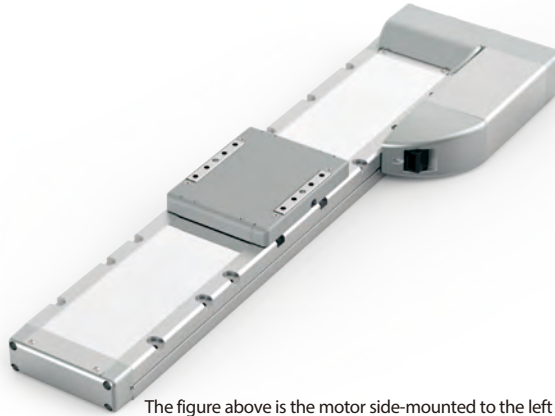
* Please make sure to specify either ML or MR when ordering the side-mounted motor type.

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

* Please refer to P.10 for more information about the model specification items.



* 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.



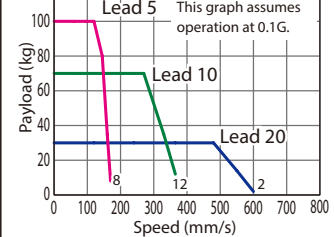
The figure above is the motor side-mounted to the left (ML).

- POINT Selection Notes**
- (1) The maximum acceleration/deceleration is 1G for horizontal, and 0.5G for vertical use.
 - (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) 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.
 - (4) 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.

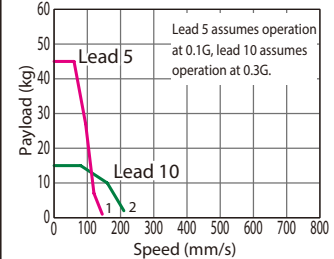
Correlation Diagrams of Speed and Payload

PCON connected.

RCP6(S)-WSA16R Horizontal mount



RCP6(S)-WSA16R Vertical mount



Actuator Specifications

Lead and Payload

Model Number	Lead (mm)	Max. Payload (kg)	Stroke (mm)
RCP6(S)-WSA16R-WA-56SP-20-①-②-③-④	20	30	-
RCP6(S)-WSA16R-WA-56SP-10-①-②-③-④	10	70	15
RCP6(S)-WSA16R-WA-56SP-5-①-②-③-④	5	100	45

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

Stroke and Max. Speed

(Unit: mm/s)

Lead (mm)	50~650 (Every 50mm)	700 (mm)	750 (mm)	800 (mm)	850 (mm)	900 (mm)	950 (mm)	1,000 (mm)	1,050 (mm)	1,100 (mm)
20	600					590	535	490	450	415
10	365 <210>	355 <210>	320 <210>	290 <210>	265 <210>	240 <210>	225 <210>	205		
5	170 <145>	160 <145>	145	130	120	110	100			

Values in brackets < > are for vertical use.

① Stroke

Stroke (mm)	RCP6	RCP6S	Stroke (mm)	RCP6	RCP6S
50	○	○	600	○	○
100	○	○	650	○	○
150	○	○	700	○	○
200	○	○	750	○	○
250	○	○	800	○	○
300	○	○	850	○	○
350	○	○	900	○	○
400	○	○	950	○	○
450	○	○	1000	○	○
500	○	○	1050	○	○
550	○	○	1100	○	○

④ Options

Name	Option Code	Reference Page
Brake	B	See P.105
Cable exit direction (Outside)	CJO	See P.105
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

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)	○ ○ ○	○ ○ ○
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.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
Base	Material: Aluminum with white alumite treatment
Static allowable moment	Ma: 642N·m, Mb: 642N·m, Mc: 1,610N·m
Dynamic allowable moment (*1)	Ma: 161N·m, Mb: 161N·m, Mc: 404N·m
Ambient operating temp. & humidity	0~40°C, 85% RH or less (Non-condensing)

* Reference for overhang load length: Ma: 650mm or less, Mb, Mc: 650mm or less

(*1) Assumes a standard rated life of 5,000km. The service life will vary depending on operation and installation conditions.

Please refer to our website for more information regarding the directions of the allowable moment and overhang load length.

