

# RCP4-RA3C

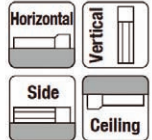
ROBO Cylinder, Rod Type, Motor Unit Coupled,  
Actuator Width 32mm, Pulse Motor 24V

Model Specification Items	Series	Type	Encoder type	Motor type	Lead	Stroke	Applicable controllers	Cable length	Options
	RCP4 — RA3C	I	28P						
			I: Incremental specification	28P: Pulse motor Size 28□	16: 16mm 10: 10mm 5: 5mm 2.5: 2.5mm	25: 25mm 300: 300mm (Every 25mm)	P3: PCON / MSEL P5: RCON / RSEL	N: None P: 1m S: 3m M: 5m X□□: Specified length R□□: Robot cable	Refer to the option list below.

\*Controller is not included.  
\*Please refer to our ROBO Cylinder General Catalog for the contents of the model specification items.

\*The Simple absolute encoder is also considered type "I".

## Radial Load Applicable



\* Depending on the model, there may be some limitations to using the vertical mount position. Please contact us for more information.

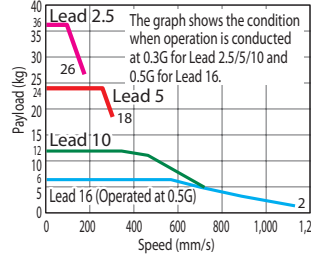


- (1) The actuator specifications displays the payload's maximum value, but it will vary depending on the acceleration. Please refer to "The Tables for Payload by Speed and Acceleration" on P. 13.
- (2) Please refer to "Correlation Diagrams Between Push Force and Current Limit" on P. 14 for push-motion operation.
- (3) The radial cylinder is equipped with a built-in guide. Please refer to the diagrams on back cover for allowable load mass.

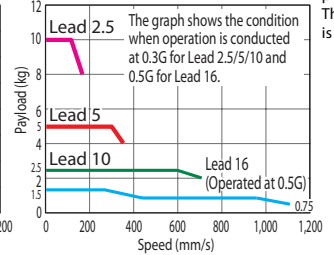
## Correlation Diagrams of Speed and Payload

### ① High output enabled PCON-CA, MSEP, MSEL connected

#### RCP4-RA3C Horizontal



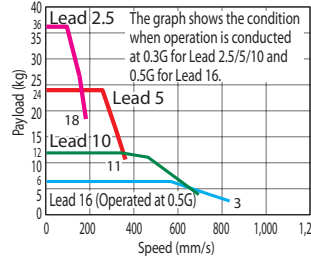
#### RCP4-RA3C Vertical



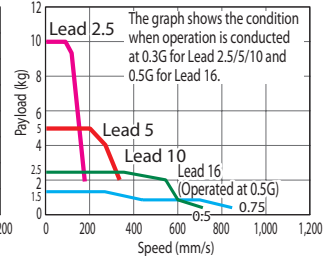
\* PCON-CA is a previous model. The current model is PCON-CB.

### ② High output disabled PCON-CA, MSEP connected

#### RCP4-RA3C Horizontal



#### RCP4-RA3C Vertical



## Actuator Specifications

### Lead and Payload

Model Number	Lead (mm)	Maximum Payload Horizontal (kg)	Maximum Payload Vertical (kg)	Maximum Push Force (N)	Stroke (mm)
RCP4-RA3C-I-28P-16-①-P3-②-③	16	6	1.5	36	25 ~ 300 (Every 25mm)
RCP4-RA3C-I-28P-10-①-P3-②-③	10	12	2.5	57	
RCP4-RA3C-I-28P-5-①-P3-②-③	5	24	5	114	
RCP4-RA3C-I-28P-2.5-①-P3-②-③	2.5	36	10	229	

Legend: ① Stroke ② Cable length ③ Options \*Refer to P. 14 for the push-motion operation.

### Stroke and Max. Speed

(Unit: mm/s)

Lead (mm)	High-output Setting	25 ~ 300 (Every 25mm)
16	Enabled	1,120
	Disabled	840
10	Enabled	700
	Disabled	350
5	Enabled	350
	Disabled	175
2.5	Enabled	175
	Disabled	175

### ① Stroke

Stroke (mm)	Standard Price	Stroke (mm)	Standard Price
25	—	175	—
50	—	200	—
75	—	225	—
100	—	250	—
125	—	275	—
150	—	300	—

### ② Cable Length

Type	Cable Code	Standard Price
Standard Type	P (1m)	—
	S (3m)	—
	M (5m)	—
Specified Length	X06 (6m) ~ X10 (10m)	—
	X11 (11m) ~ X15 (15m)	—
	X16 (16m) ~ X20 (20m)	—
	X21 (21m) ~ X25 (25m)	—
Robot Cable	R01 (1m) ~ R03 (3m)	—
	R04 (4m) ~ R05 (5m)	—
	R06 (6m) ~ R10 (10m)	—
	R11 (11m) ~ R15 (15m)	—
	R16 (16m) ~ R20 (20m)	—
	R21 (21m) ~ R25 (25m)	—

\* For a maintenance cable, please see the back cover.

### ③ Options

Name	Option Code	Reference Page	Standard Price
Brake	B	Please refer to our ROBO Cylinder General Catalog.	—
Home-position Check Sensor (Top)	HS		—
Non-motor End Specification	NM		—

## Actuator Specifications

Item	Description
Drive System	Ballscrew Ø8mm rolled C10
Positioning Repeatability	±0.02mm
Lost Motion	0.1mm or less
Rod	Ø16mm Aluminum
Rod Non-rotation Precision(*1)	0 deg.
Allowable Load and Torque on Rod Tip	Refer to the table in the right page and the graph at the back cover of this catalog.
Rod Tip Overhang Distance	100mm or less
Ambient Operating Temperature, Humidity	0 ~ 40°C, 85% RH or less (Non-condensing)

(\*1) Accuracy of rod displacement in rotating direction when no load is received.

