

RCP2CR-SA7C

Cleanroom ROBO Cylinder Slider Coupling Type 73mm Width Pulse motor Aluminum Base

■ Configuration: **RCP2CR-SA7C-I-56P** — [] — [] — [] — [] — []

Series — Type — Encoder — Motor — Lead — Stroke — Compatible Controllers — Cable Length — Option

I: Incremental
* The simple absolute encoder is also considered type "I".

56P: Pulse motor
56 [] size

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

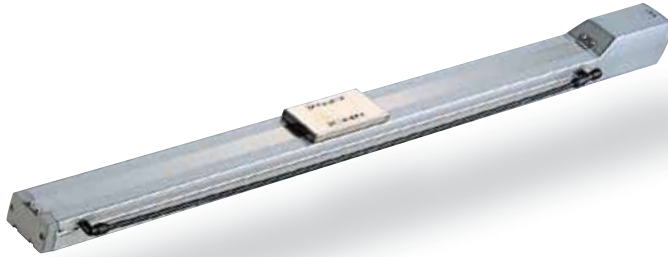
50: 50mm
800: 800mm (50mm pitch increments)

P1: PCON
RPCON
PSEL
P3: PMEC
PSEP

N: None
P: 1m
S: 3m
M: 5m
X []: Custom
R []: Robot cable

BE: Brake (Cable exiting from end)
BL: Brake (Cable exiting from left)
BR: Brake (Cable exiting from right)
NM: Reversed-home

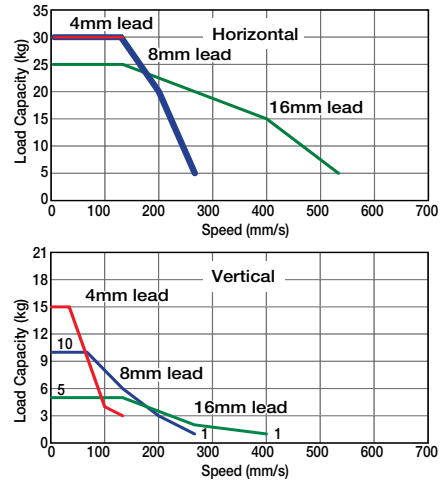
* See page Pre-35 for an explanation of the naming convention.



Technical References P. A-5

- POINT** Notes on Selection
- When the stroke increases, the maximum speed will drop to prevent the ball screw from reaching the critical rotational speed. Use the actuator specification table below to check the maximum speed at the stroke you desire.
 - Since the RCP2 series use the pulse motor, the load capacity decreases at high speeds. In the Speed vs. Load Capacity graph on the right, see if your desired speed and load capacity are supported.
 - The load capacity is based on operation at an acceleration of 0.3G (0.2G for the 4mm-lead model, or when used vertically). This is the upper limit of the acceleration.
 - The cleanliness class 10 is for horizontal usage. Please note that the actuator may not support C10 when used on its side or in vertical orientation.

■ Speed vs. Load Capacity
Due to the characteristics of the Pulse motor, the RCP2 series' load capacity decreases at high speeds. In the table below, check if your desired speed and load capacity are supported.



Actuator Specifications

■ Lead and Load Capacity (Note 1) Please note that the maximum load capacity decreases as the speed increases.

Model	Lead (mm)	Max. Load Capacity (Note 1)		Stroke (mm)
		Horizontal (kg)	Vertical (kg)	
RCP2CR-SA7C-I-56P-16-①-②-③-④	16	~ 25	~ 5	50~800 (50mm increments)
RCP2CR-SA7C-I-56P-8-①-②-③-④	8	~ 30	~ 10	
RCP2CR-SA7C-I-56P-4-①-②-③-④	4	~ 30	~ 15	

Legend: ① Stroke ② Compatible controller ③ Cable length ④ Options

■ Stroke, Max. Speed, and Suction Volume

Lead	Stroke	50 ~ 700 (50mm increments)		~ 800 (mm)	Suction Volume (Nl/min)
		500	<400>	<400>	
16	16	533	<400>	480	70
8	8	266		240	40
4	4	133		120	30

* The values enclosed in "<" ">" apply to vertical usage (Unit: mm/s)

① Stroke List

Stroke (mm)	Standard Price
50/100	-
150/200	-
250/300	-
350/400	-
450/500	-
550/600	-
650/700	-
750/800	-

③ Cable List

Type	Cable Symbol	Standard Price
Standard Type	P (1m)	-
	S (3m)	-
	M (5m)	-
Special Lengths	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)	-

* See page A-39 for cables for maintenance.

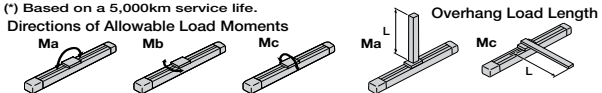
④ Option List

Name	Option Code	See Page	Standard Price
Brake (Cable exiting from end)	BE	→ A-25	-
Brake (Cable exiting from left)	BL	→ A-25	-
Brake (Cable exiting from right)	BR	→ A-25	-
Reversed-home	NM	→ A-33	-
Intake port on opposite side	VR	→ A-38	-

Actuator Specifications

Item	Description
Drive System	Ball screw ø12mm C10 grade
Positioning Repeatability	±0.02mm
Lost Motion	0.1mm or less
Allowable Static Moment	Ma: 50.4N·m Mb: 71.9N·m Mc: 138.0N·m
Allowable Dynamic Moment (*)	Ma: 13.9N·m Mb: 19.9N·m Mc: 38.3N·m
Overhang Load Length	Ma direction: 230mm or less Mb, Mc direction: 230mm or less
Grease Type	Low dust generation grease (both ball screw and guide)
Cleanliness	Class 10 (0.1µm)
Ambient Operating Temp./Humidity	0~40°C, 85% RH or less (non-condensing)

(*) Based on a 5,000km service life.



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