RCP2-SRGS4R

ROBO Cylinder Short Rod Type with Single Guide 45mm Width
Pulse Motor Side-Mounted Motor

■ Configuration: RCP2 — SRGS4R — I — 35P — ☐ — ☐ — ☐ — ☐ — ☐

Series	Type	Encoder	Motor	Lead	Stroke	Compatible Controllers	Cable Length	Option
RCP2	SRGS4R	I: Incremental * The Simple absolute encoder is also considered type "I".	35P: Pulse motor 35 ☐ size	5 : 5mm 2.5 : 2.5mm	20: 20mm \ 200: 200mm (10mm pitch increments) * Set in 50mm increments over 100mm	P1: PCON RPCON PSEL P3: PMEC PSEP	N : None P : 1m S : 3m M : 5m X ☐☐: Custom	See options below

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

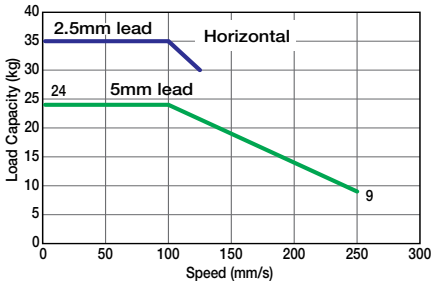
Technical References P. A-5

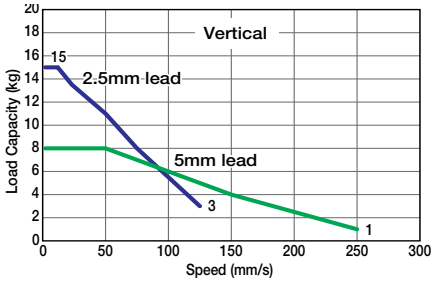
POINT Notes on Selection

(1) Since the RCP2 series use a pulse motor, the load capacity decreases at high speeds. Check in the Speed vs. Load Capacity graph to see if your desired speed and load capacity are supported.
(2) The load capacity is based on operation at an acceleration of 0.3G (0.2G for the 2.5mm-lead model, or when used vertically).
This is the upper limit of the acceleration.
(3) The horizontal load capacity is based on the use of an external guide. See the technical resources (page A-82) for the allowable weight using the supplied guide alone.

■ 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) Horizontal (kg)	Max. Load Capacity (Note 1) Vertical (kg)	Maximum Push Force (N) (Note 2)	Stroke (mm)
RCP2-SRGS4R-I-35P-5-①-②-③-④	5	~ 24	~ 8	90	20 ~ 200 (10mm increments) (Note 3)
RCP2-SRGS4R-I-35P-2.5-①-②-③-④	2.5	~ 35	~ 15	170	

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

(Note 2) See page A-69 for the pushing force graphs.
(Note 3) 50mm increments over 100mm.

■ Stroke and Maximum Speed

Lead \ Stroke	20 ~ 200 (10mm increments)
5	250
2.5	125

(Unit: mm/s)

① Stroke List

Stroke (mm)	Standard Price
20~50	–
60~100	–
150	–
200	–

③ Cable List

Type	Cable Symbol	Standard Price
Standard (Robot Cables)	P (1m)	–
	S (3m)	–
	M (5m)	–
Special Lengths	X06 (6m) ~ X10 (10m)	–
	X11 (11m) ~ X15 (15m)	–
	X16 (16m) ~ X20 (20m)	–

* The cable is a motor-encoder integrated cable, and is provided as a robot cable.
* See page A-39 for cables for maintenance.

④ Option List

Name	Option Code	See Page	Standard Price
Brake	B	→ A-25	–
Flange bracket (back)	FLR	→ A-28	–
Foot bracket 1 (base mounting)	FT	→ A-29	–
Foot bracket 2 (right/left side mounting)	FT2/FT4	→ A-31	–
Guide mounting direction	GS2 ~ GS4	→ A-156	–
Reversed-home	NM	→ A-33	–

* The brake is available for strokes of 70mm or more.
* Please be sure that the mounting direction of the guide is specified in the product name.
* The guide and the foot bracket cannot be mounted in the same direction.

Actuator Specifications

Item	Description
Drive System	Ball screw ø8mm C10 grade
Positioning Repeatability	±0.02mm
Lost Motion	0.1mm or less
Rod Diameter	ø22mm
Non-rotating accuracy of rod	±0.05 deg
Ambient Operating Temp./Humidity	0 ~ 40°C, 85% RH or less (non-condensing)

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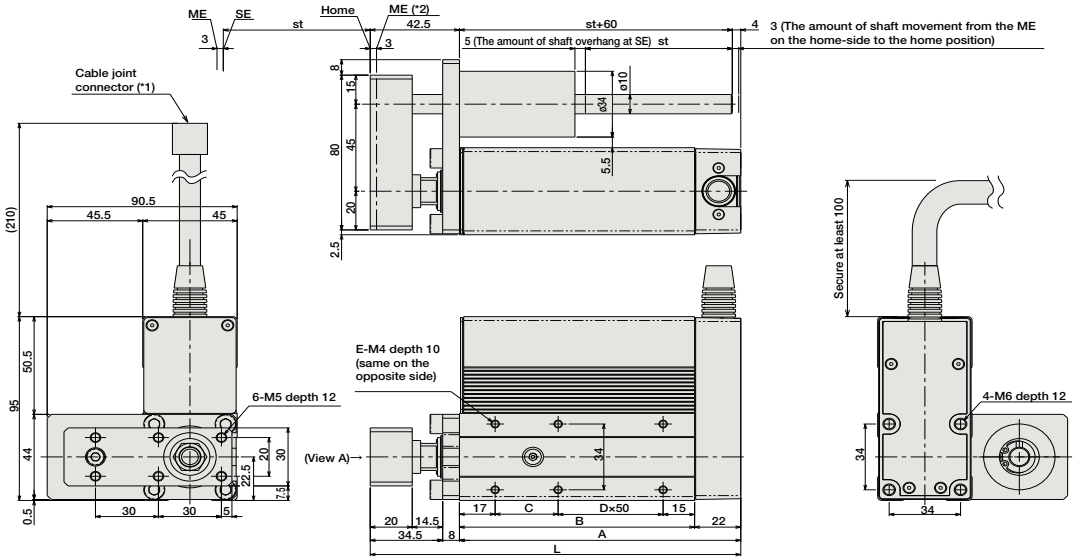
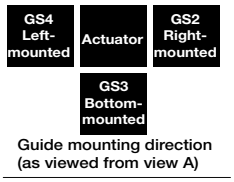
Dimensions

For Special Orders P. A-9





* The exterior dimensions for the brake-equipped model is no different than the standard model. However, 70mm is the minimum stroke of the brake-equipped models. (i.e. The brake is not compatible at 60mm strokes and under.)

ST : Stroke
SE : Stroke end
ME: Mechanical end

(*1) The motor-encoder cable is connected here. See page A-39 for details on cables.
(*2) When homing, the rod moves to the mechanical end position; therefore, please watch for any interference with the surrounding objects.

■ Dimensions/Weight by Stroke (Add 0.2kg for brake equipped)

Stroke	20	30	40	50	60	70	80	90	100	150	200
L	126.5	136.5	146.5	156.5	166.5	176.5	186.5	196.5	206.5	256.5	306.5
A	84	94	104	114	124	134	144	154	164	214	264
B	62	72	82	92	102	112	122	132	142	192	242
C	30	40	50	60	70	30	40	50	60	60	60
D	0	0	0	0	0	1	1	1	1	2	3
E	4	4	4	4	4	6	6	6	6	8	10
Weight (kg)	1.2	1.27	1.34	1.41	1.48	1.54	1.61	1.68	1.75	2.09	2.43

② Compatible Controllers

The RCP2 series actuators can operate with the controllers below. Select the controller according to your usage.

Name	External View	Model	Description	Max. Positioning Points	Input Voltage	Power Supply Capacity	Standard Price	See Page
Solenoid Valve Type		PMEC-C-35PI-NP-2-①	Easy-to-use controller, even for beginners	3 points	AC100V AC200V	See P481	–	→ P477
		PSEP-C-35PI-NP-2-0	Operable with same signal as solenoid valve. Supports both single and double solenoid types. No homing necessary with simple absolute type.		DC24V	2A max.	–	→ P487
Splash-Proof Solenoid Valve Type		PSEP-CW-35PI-NP-2-0					–	
Positioner Type		PCON-C-35PI-NP-2-0	Positioning is possible for up to 512 points	512 points			–	→ P525
Safety-Compliant Positioner Type		PCON-CG-35PI-NP-2-0					–	
Pulse Train Input Type (Differential Line Driver)		PCON-PL-35PI-NP-2-0	Pulse train input type with differential line driver support	(–)			–	
Pulse Train Input Type (Open Collector)		PCON-PO-35PI-NP-2-0	Pulse train input type with open collector support				–	
Serial Communication Type		PCON-SE-35PI-N-0-0	Dedicated to serial communication	64 points			–	
Field Network Type		RPCON-35P	Dedicated to field network	768 points			–	→ P503
Program Control Type		PSEL-C-1-35PI-NP-2-0	Programmed operation is possible Operation is possible on up to 2 axes	1500 points			–	→ P557

* This is for the single-axis PSEL.
* ① is a placeholder for the power supply voltage (1: 100V, or 2: 100～240V).

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