

RCP2-SS8C

ROBO Cylinder, Slider Type, 80mm Width, Pulse Motor, Straight Type, Steel Base, Coupled

Model Specification Items	RCP2 — SS8C — I — 56P — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/> — <input type="checkbox"/>	Series — Type — Encoder type — Motor type — Lead — Stroke — Applicable controller — Cable length — Options
	I: Incremental * The Simple absolute encoder is also considered type "I".	56P: Pulse motor, 56□ size
	20 : 20mm 10 : 10mm 5 : 5mm	50: 50mm ? 1000: 1000mm (50mm pitch increments)
		P1: PCON-PL/PO/SE PSEL P3: PCON-CA PMEC/PSEP MSEP
		N: None P: 1m S: 3m M: 5m X□□: Custom length R□□: Robot cable
		B : Brake NM: Non-motor end SR : Slider Roller

* See page Pre-47 for details on the model descriptions.

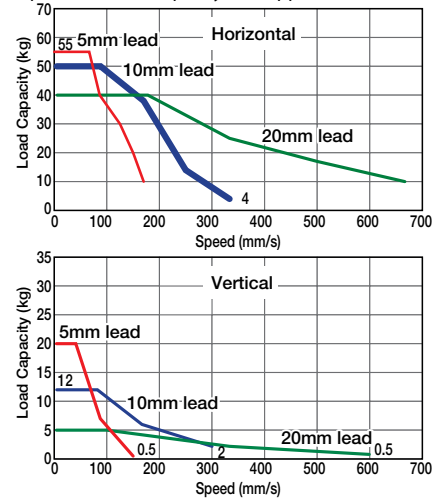


Technical References Appendix P.5

- POINT** Notes on selection
- (1) 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.
 - (2) 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.
 - (3) The load capacity is based on operation at an acceleration of 0.3G (0.2G for the 5mm-lead model, or when used vertically). These values are the upper limits for the acceleration.
 - (4) See page A-71 for details on push motion.

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

Leads and Payloads

(Note 1) Please note that the maximum load capacity decreases as the speed increases.

Model number	Lead (mm)	Max. Load Capacity (Note 1)		Stroke (mm)
		Horizontal (kg)	Vertical (kg)	
RCP2-SS8C-I-56P-20-①-②-③-④	20	~40	~5	50~1000 (every 50mm)
RCP2-SS8C-I-56P-10-①-②-③-④	10	~50	~12	
RCP2-SS8C-I-56P-5-①-②-③-④	5	~55	~20	

Code explanation ① Stroke ② Applicable Controller ③ Cable length ④ Options *See page A-71 for details on push motion.

Stroke and Maximum Speed

Stroke Lead	50~800 (every 50mm)	~900 (mm)	~1000 (mm)
20	666 <600>	625 <600>	515
10	333 <300>	310 <300>	255
5	165 <150>	155 <150>	125

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

① Stroke

① Stroke (mm)	Standard price
50/100	—
150/200	—
250/300	—
350/400	—
450/500	—
550/600	—
650/700	—
750/800	—
850/900	—
950/1000	—

③ Cable Length

Type	Cable symbol	Standard Price
Standard	P (1m)	—
	S (3m)	—
	M (5m)	—
Special 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)	—
	—	—

* See page A-59 for cables for maintenance.

④ Options

Name	Option code	See page	Standard price
Brake	B	→ A-42	—
Non-motor end specification	NM	→ A-52	—
Slider roller specification	SR	→ A-55	—

Actuator Specifications

Item	Description
Drive System	Ball screw, ϕ 16mm, rolled C10
Positioning repeatability	\pm 0.02mm
Lost Motion	0.1mm or less (initial value)
Base	Material: Special alloy steel
Allowable static moment	Ma: 198.9 N·m, Mb: 198.9 N·m, Mc: 416.7 N·m
Allowable dynamic moment (*)	Ma: 36.3 N·m, Mb: 36.3 N·m, Mc: 77.4 N·m
Allowable overhang	450mm or less in Ma, Mb and Mc directions
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (Non-condensing)

(*) Based on 10,000km of traveling life

