

RCS2CR-SA5C

Cleanroom Robo Cylinder, Slider Type, Coupled, Actuator Width 52mm, 200W Servo Motor, Aluminum Base

Model Specification Items	RCS2CR-SA5C	—	□	—	20	—	□	—	□	—	□	—	□	—	□	—	□	—	□	Options
	Series	—	Type	—	Encoder type	—	Motor type	—	Lead	—	Stroke	—	Applicable controller	—	Cable length	—	Options			
					I: Incremental A: Absolute		20: 20W Servo motor		20: 20mm 12: 12mm 6: 6mm 3: 3mm		50: 50mm / 500: 500mm (50mm pitch increments)		T1: XSEL-J/K T2: SCON MSCON SSEL XSEL-P/Q XSEL-R/S		N: None P: 1m S: 3m M: 5m X□: Custom length R□: Robot cable					See options below.

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



*CE compliance is optional.



Technical References Appendix P.5



- (1) When the stroke increases, the maximum 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) The load capacity is based on operation at an acceleration of 0.3G (0.2G for the 3mm-lead model). These values are the upper limits for the acceleration.
- (3) See page A-71 for details on push motion.

*This product is equipped with a position adjusting screw at the A area shown above. (See dimensional drawing on the page to the right.)

Actuator Specifications

Lead and Payload

Model number	Motor output (W)	Lead (mm)	Max. Load Capacity		Rated thrust (N)	Stroke (mm)
			Horizontal (kg)	Vertical (kg)		
RCS2CR-SA5C-①-20-20-②-③-④-⑤	20	20	2	0.5	10.7	50~500 (every 50mm)
RCS2CR-SA5C-①-20-12-②-③-④-⑤		12	4	1	16.7	
RCS2CR-SA5C-①-20-6-②-③-④-⑤		6	8	2	33.3	
RCS2CR-SA5C-①-20-3-②-③-④-⑤		3	2	4	65.7	

Stroke and Max. Speed/Suction Volume by Lead (Unit: mm/s)

Stroke Lead	50~450 (every 50mm)	500 (mm)	Suction Volume (Nℓ/min)
20	1300 <800>	1300 <800>	80
12	800	760	50
6	800	380	30
3	200	190	15

Code explanation ① Encoder ② Stroke ③ Applicable Controller ④ Cable length ⑤ Options *See page A-71 for details on push motion. *The values enclosed in < > apply to vertical settings.

① Encoder type/② Stroke

② Stroke (mm)	Standard price	
	① Encoder Type	
	Incremental	Absolute
	I	A
50	—	—
100	—	—
150	—	—
200	—	—
250	—	—
300	—	—
350	—	—
400	—	—
450	—	—
500	—	—

④ 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.

⑤ Options

Name	Option code	See page	Standard price
Brake	B	→ A-42	—
CE compliance	CE	→ A-42	—
Foot bracket	FT	→ A-48	—
Home sensor	HS	→ A-50	—
Non-motor end specification	NM	→ A-52	—
Vacuum port on opposite side	VR	→ A-58	—

Actuator Specifications

Item	Description
Drive System	Ball screw, ø10mm, rolled C10
Positioning repeatability	±0.02mm
Lost Motion	0.1mm or less
Base	Material: Aluminum, white alumite treated
Allowable static moment	Ma: 18.6 N·m, Mb: 26.6 N·m, Mc: 47.5 N·m
Allowable dynamic moment (*)	Ma: 4.9 N·m, Mb: 6.8 N·m, Mc: 11.7 N·m
Allowable overhang	150mm or less in Ma, Mb and Mc directions
Grease Type	Low dust generation grease (both ball screw and guide)
Cleanliness	Class 10 (0.1µm)
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (Non-condensing)

(*) Based on 5,000km of traveling life



