

RCS3CR-SA8C

Cleanroom Robo Cylinder, Slider Type, Actuator Width 80mm, 200V Servo Motor, Aluminum Base, Coupled

RCS3PCR-SA8C

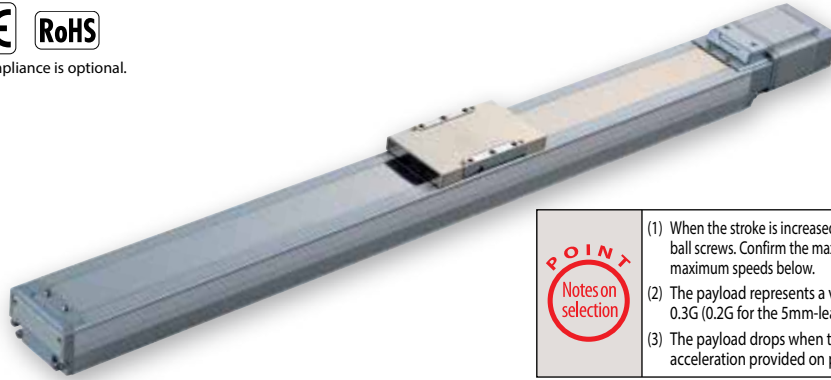
Cleanroom Robo Cylinder, Slider Type, Actuator Width 80mm, 200V Servo Motor, Aluminum Base, Coupled **High-precision specification**

Model Specification Items	Series	Type	Encoder type	Motor type	Lead	Stroke	Applicable controller	Cable length	Options
	RCS3CR : Standard specification RCS3PCR: High-precision specification	SA8C	I: Incremental A: Absolute	100: Servo motor, 100W 150: Servo motor, 150W	30: 30mm 20: 20mm 10: 10mm 5: 5mm	50: 50mm ? 1100: 1100mm (50mm pitch increments)	T1: XSEL-J/K T2: SCON M: SCON SSEL XSEL-P/Q XSEL-R/S	N: None P: 1m S: 3m M: 5m X□□: Custom length R□□: Robot cable	See Options below. *Be sure to specify a code indicating your desired cable exit direction.

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



*CE compliance is optional.



Technical References Appendix P.5

- POINT**
Notes on selection
- When the stroke is increased, the maximum speed will drop to prevent reaching dangerous speeds of ball screws. Confirm the maximum speed at the desired stroke by referring to the table of strokes and maximum speeds below.
 - The payload represents a value when the actuator is operated at a horizontal acceleration of 0.3G (0.2G for the 5mm-lead model) and vertical acceleration of 0.2G.
 - The payload drops when the acceleration is raised. For details, refer to the list of payloads by acceleration provided on page A-108.

Actuator Specifications

Lead and Payload

Model number	Motor output (W)	Lead (mm)	Maximum payload		Rated thrust (N)	Stroke (mm)	
			Horizontal (kg)	Vertical (kg)			
RCS3CR[RCS3PCR]-SA8C-①-100-30-②-③-④-⑤	100	30	8	2	56.6	50 ~ 1100 (every 50mm)	
RCS3CR[RCS3PCR]-SA8C-①-100-20-②-③-④-⑤		20	20	4	84.9		
RCS3CR[RCS3PCR]-SA8C-①-100-10-②-③-④-⑤		10	40	8	169.8		
RCS3CR[RCS3PCR]-SA8C-①-100-5-②-③-④-⑤		5	80	16	339.7		
RCS3CR[RCS3PCR]-SA8C-①-150-30-②-③-④-⑤		150	30	12	3		85.1
RCS3CR[RCS3PCR]-SA8C-①-150-20-②-③-④-⑤			20	30	6		127.6
RCS3CR[RCS3PCR]-SA8C-①-150-10-②-③-④-⑤	10		60	12	255.3		

Code explanation ① Encoder type ② Stroke ③ Applicable Controller ④ Cable length ⑤ Options

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

Stroke Lead	50 to 650 (every 50mm)										Suction Rate N _L /min
	700	750	800	850	900	950	1000	1050	1100		
30	1800	1510	1340	1190	1070	960	870	790	720	660	130 (160) (*)
20	1200	1010	890	790	710	640	580	530	480	440	110
10	600	500	440	390	350	320	290	260	240	220	60
5	300	260	220	190	170	160	140	130	120	110	30

(*) 130N_L/min if the speed is 1,500mm/s or below, or 160N_L/min if the speed exceeds 1,500mm/s.

① Encoder Type / ② Stroke

② Stroke (mm)	Standard Prices							
	RCS3CR-SA8C				RCS3PCR-SA8C			
	① Encoder Type							
	Incremental		Absolute		Incremental		Absolute	
Motor wattage		Motor wattage		Motor wattage		Motor wattage		
	100W	150W	100W	150W	100W	150W	100W	150W
50/100	—	—	—	—	—	—	—	—
150/200	—	—	—	—	—	—	—	—
250/300	—	—	—	—	—	—	—	—
350/400	—	—	—	—	—	—	—	—
450/500	—	—	—	—	—	—	—	—
550/600	—	—	—	—	—	—	—	—
650/700	—	—	—	—	—	—	—	—
750/800	—	—	—	—	—	—	—	—
850/900	—	—	—	—	—	—	—	—
950/1000	—	—	—	—	—	—	—	—
1050/1100	—	—	—	—	—	—	—	—

④ Cable Length

Type	Cable symbol	Standard price
Standard type	P (1m)	—
	S (3m)	—
	M (5m)	—
Special length	X06 (6m) ~ X10 (10m)	—
	X11 (11m) ~ X15 (15m)	—
	X16 (16m) ~ X20 (20m)	—
Robot cable	R01 (1m) ~ R03 (3m)	—
	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	Page	Standard Price
Cables exit from back left	A1E	→ A-41	—
Cables exit from left side	A1S	→ A-41	—
Cables exit from back right	A3E	→ A-41	—
Cables exit from right side	A3S	→ A-41	—
Brake	B	→ A-42	—
CE compliance	CE	→ A-42	—
Non-motor end specification	NM	→ A-52	—
L-shaped suction joint	VL	→ A-58	—
No suction joint specification	VN	→ A-58	—

Actuator Specifications RCS3PCR specifications are shown in []. (Other items are the same.)

Item	Description
Drive method	Ball screw, ø16mm, rolled C10 [rolled C5]
Positioning repeatability	±0.02mm [±0.01mm]
Lost motion	0.1mm [0.05mm] or less
Base	Material: Aluminum, white alumite treatment
Allowable static moment	Ma: 113.5 N·m, Mb: 177 N·m, Mc: 266 N·m
Allowable dynamic moment (*)	Ma: 23.1 N·m, Mb: 32.9 N·m, Mc: 54.1 N·m
Allowable overhang	390mm or less in Ma, Mb and Mc directions
Grease	Low dust-raising grease is used (for both the ball screw and guide)
Cleanliness class	Class 10 (0.1µm)
Ambient operating temperature/humidity	0 to 40°C, 85% RH max. (Non-condensing)

(*) When the traveling life is assumed as 10,000km.

Direction of allowable load moment.

