

RCS2CR-SA6C

Cleanroom Robo Cylinder, Slider Type, Coupled, Actuator Width 58mm, 200V Servo Motor, Aluminum Base

Model Specification Items	RCS2CR-SA6C	—	Encoder type	30	—	Motor type	—	Lead	—	Stroke	—	Applicable controller	—	Cable length	—	Options
	Series	Type	I: Incremental A: Absolute	30: 30W Servo motor	20: 20mm 12: 12mm 6: 6mm 3: 3mm	50: 50mm 600: 600mm (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-SA6C-①-30-20-②-③-④-⑤	30	20	3	0.5	15.8	50~600 (every 50mm)
RCS2CR-SA6C-①-30-12-②-③-④-⑤		12	6	1.5	24.2	
RCS2CR-SA6C-①-30-6-②-③-④-⑤		6	12	3	48.4	
RCS2CR-SA6C-①-30-3-②-③-④-⑤		3	18	6	96.8	

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

Stroke Lead	50~450 (every 50mm)	500 mm	550 mm	600 mm	Suction Volume (N ₂ /min)
20	1300 <800>	1160 <800>	990 <800>	80	80
12	800	760	640	540	50
6	400	380	320	270	30
3	200	190	160	135	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	—	—
550	—	—
600	—	—

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.

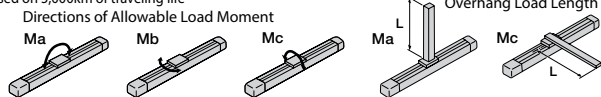
⑤ Options

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: 38.3 N·m, Mb: 54.7 N·m, Mc: 81.0 N·m
Allowable dynamic moment (*)	Ma: 8.9 N·m, Mb: 12.7 N·m, Mc: 18.6 N·m
Allowable overhang	220mm 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



- Slider Type
- Mini
- Standard
- Controllers Integrated
- Rod Type
- Mini
- Standard
- Controllers Integrated
- Table/ Arm/ Flat Type
- Mini
- Standard
- Gripper/ Rotary Type
- Linear Servo Type
- Clean-room Type
- Splash-Proof Type
- Pulse Motor
- Servo Motor (24V)
- Servo Motor (200V)
- Linear Servo Motor

Dimensional Drawings

CAD drawings can be downloaded from the website.

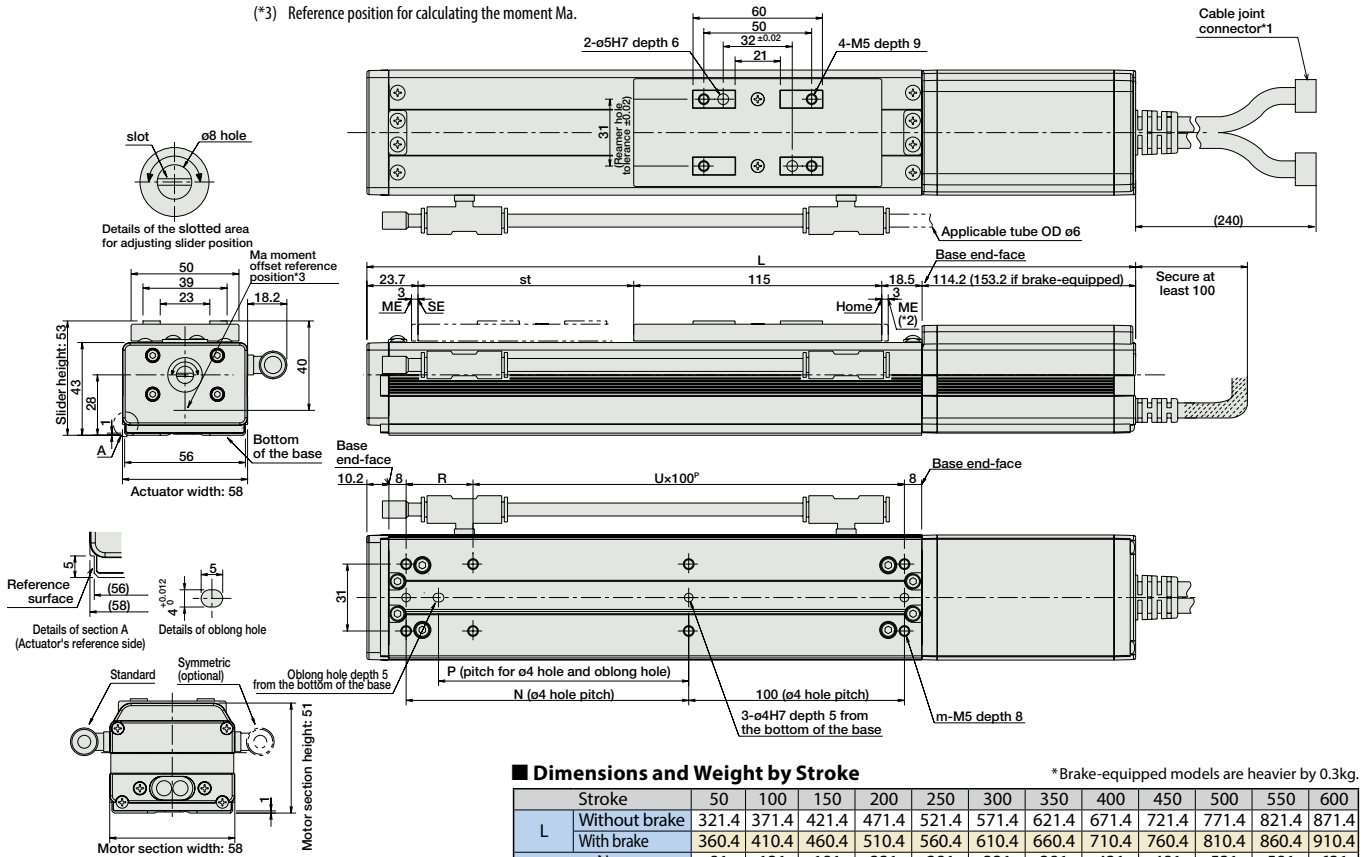
www.intelligentactuator.com

For Special Orders

Appendix P.15



- (*1) Connect the motor and encoder cables here. See page A-59 for details on cables.
- (*2) After homing, the slider moves to the ME, therefore, please watch for any interference with surrounding objects.
ME: Mechanical end SE: Stroke end
- (*3) Reference position for calculating the moment Ma.



Dimensions and Weight by Stroke

*Brake-equipped models are heavier by 0.3kg.

L	Stroke	50	100	150	200	250	300	350	400	450	500	550	600
	Without brake	321.4	371.4	421.4	471.4	521.4	571.4	621.4	671.4	721.4	771.4	821.4	871.4
With brake	360.4	410.4	460.4	510.4	560.4	610.4	660.4	710.4	760.4	810.4	860.4	910.4	910.4
N	81	131	181	231	281	331	381	431	481	531	581	631	631
P	66	116	166	216	266	316	366	416	466	516	566	616	616
R	81	31	81	31	81	31	81	31	81	31	81	31	31
U	1	2	12	3	3	4	4	5	5	6	6	7	7
m	6	8	8	10	10	12	12	14	14	16	16	18	18
Weight (kg)	1.4	1.6	1.8	2	2.2	2.4	2.6	2.8	3	3.2	3.4	3.6	3.6

Applicable Controllers

RCS2CR-series actuators can be operated with the following controllers. Select an appropriate controller type according to your application.

Name	External view	Model number	Features	Maximum number of positioning points	Input power	Power supply capacity	Standard price	Reference page
Positioner mode		SCON-CA-30D①-NP-2-②	Up to 512 positioning points are supported.	512 points	Single-phase 100VAC	126 VA max.	—	→ P643
Solenoid valve mode			Actuators can be operated through the same control used for solenoid valves.	7 points				
Field network type			Movement by numerical specification is supported.	768 points				
Pulse-train input control type			Dedicated pulse-train input type	(—)				
Positioner multi-axis, network type		MSCON-C-1-30D①-V-0-②	Up to 6 axes can be operated. Movement by numerical specification is supported.	256 points	3-phase 200VAC (XSEL-P/Q/R/S ONLY)	*Power supply capacity will vary depending on the controller, so please refer to the instruction manual for details.	—	→ P655
Program control type, 1 to 2 axes		SSEL-CS-1-30D①-NP-2-②	Program operation is supported. Up to 2 axes can be operated.	20,000 points	—		→ P685	
Program control type, 1 to 8 axes		XSEL-③-1-30D①-N1-EEE-2-④	Program operation is supported. Up to 8 axes can be operated.	Varies depending on the number of axes connected	—		→ P695	

* This is for the single-axis MSCON, SSEL, and XSEL.

* ① indicates the power-supply voltage type (1: 100V / 2: Single-phase 200V).

* ② indicates the power-supply voltage type (1: 100V / 2: Single-phase 200V / 3: Three-phase 200V).

* ③ indicates the encoder type (I: Incremental / A: Absolute).

* ④ indicates the XSEL type (J / K / P / Q / R / S).

* ⑤ indicates field network specification symbol.