

RCACR-SA6C

Cleanroom ROBO Cylinder, Slider Type, Actuator Width 58mm, 24V Built-in Servo Motor, Coupling Specification

Model Description	RCACR — SA6C	—	30	—	—	—	A1	—	—	—
Series	Type	Encoder type	Motor type	Lead	Stroke	Compatible Controllers	Cable length	Option		
I: Incremental specification A: Absolute specification			30: Servo motor 30W	12: 12mm 6: 6mm 3: 3mm	50:50mm To 600:600mm (Set steps every 50mm)	A1: ACON ASEL	N: None P: 1m S: 3m M: 5m X: Length designation R: Robot cable	B: Brake FT: Foot bracket HS: Home check sensor LA: Power saving NM: Reversed-home specification VR: Vacuum joint on opposite side		

See preceding section for model descriptions.

Power saving



Technical Reference P. 451

- POINT**
Notes on selection
- (1) As the stroke length increases, the maximum speed decreases due to hazardous ball screw RPMs. Confirm the maximum desired stroke speed in the Actuator Spec Table below.
 - (2) The payload is the value when operated at 0.3G acceleration (0.2G acceleration in vertical operation at lead 3). The above values are maximum acceleration.

Actuator Specifications Table

Leads and Payloads

Model	Motor output	Lead (mm)	Max. payload		Thrust (N)	Stroke (mm)
			Horizontal (kg)	Vertical (kg)		
RCACR-SA6C-①-30-12-②-A1-③④	30	12	6	1.5	24.2	50 to 600 (Every 50mm)
RCACR-SA6C-①-30-6-②-A1-③④		6	12	3	48.4	
RCACR-SA6C-①-30-3-②-A1-③④		3	18	6	96.8	

Legend: ① Encoder type ② Stroke ③ Cable length ④ Option

Stroke, Maximum Speed and Suction Volume

Stroke / Lead	Maximum Speed (mm/min)					Suction Volume (Nl/min)
	50 to 450 (every 50mm)	500 (mm)	550 (mm)	600 (mm)	600 (mm)	
12	800	760	640	540	50	
6	400	380	320	270	30	
3	200	190	160	135	15	

(Unit = mm/s)

① Pricing List By Encoder Type and ② Stroke

② Stroke (mm)	Type code	
	SA6C	
	① Encoder type	
	Incremental	Absolute
50	I	A
100	—	—
150	—	—
200	—	—
250	—	—
300	—	—
350	—	—
400	—	—
450	—	—
500	—	—
550	—	—
600	—	—

④ Option Price List

Title	Option code	See page	Standard price
Brake	B	P437	—
Foot bracket	FT	P440	—
Home check sensor	HS	P442	—
Power saving	LA	P442	—
Reversed-home specification	NM	P442	—
Vacuum joint on opposite side	VR	P446	—

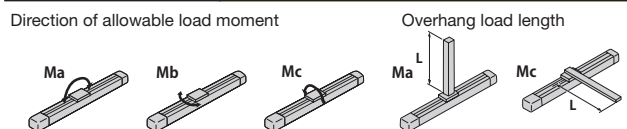
③ Cable Length Price List

Type	Cable symbol	Standard price
Standard type	P (1m)	—
	S (3m)	—
	M (5m)	—
Special length	X06 (6m) to X10 (10m)	—
	X11 (11m) to X15 (15m)	—
	X16 (16m) to X20 (20m)	—
Robot cable	R01 (1m) to R03 (3m)	—
	R04 (4m) to R05 (5m)	—
	R06 (6m) to R10 (10m)	—
	R11 (11m) to R15 (15m)	—
	R16 (16m) to R20 (20m)	—

*See P384 for maintenance cables.

Actuator Specification

Item	Description
Drive method	Ball screw φ10mm rolled C10
Positioning Repeatability	±0.02mm
Backlash	0.1mm or less
Base	Material Aluminum White alumite treated
Allowable load moment	Ma: 8.9N·m Mb: 12.7N·m Mc: 18.6N·m
Overhang load length	Ma direction: 220mm or less, Mb-Mc direction: 220mm or less
Grease	Low-dust-raising grease (both ball screw and guide)
Cleanliness class	Class 10 (0.1μm)
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)
Service life	5000km



- Controller-Integrated
- Slider Type
- Rod Type
- Table Arm/Flat
- Gripper/Rotary Type
- Cleanroom
- Splash-resistant
- Controller mounted
- Coupling
- Built-in (Direct)
- Reverse-mounted
- Pulse Motor 20P
- Pulse Motor 28P
- Pulse Motor 35P
- Pulse Motor 42P
- Pulse Motor 56P
- Pulse Motor 86P
- Servo Motor 10W
- Servo Motor 20W
- Servo Motor 30W
- Servo Motor 60W
- Servo Motor 100W
- Servo Motor 150W
- Servo Motor 750W

Dimensional Drawings

CAD drawings can be downloaded from the website. www.intelligentactuator.com

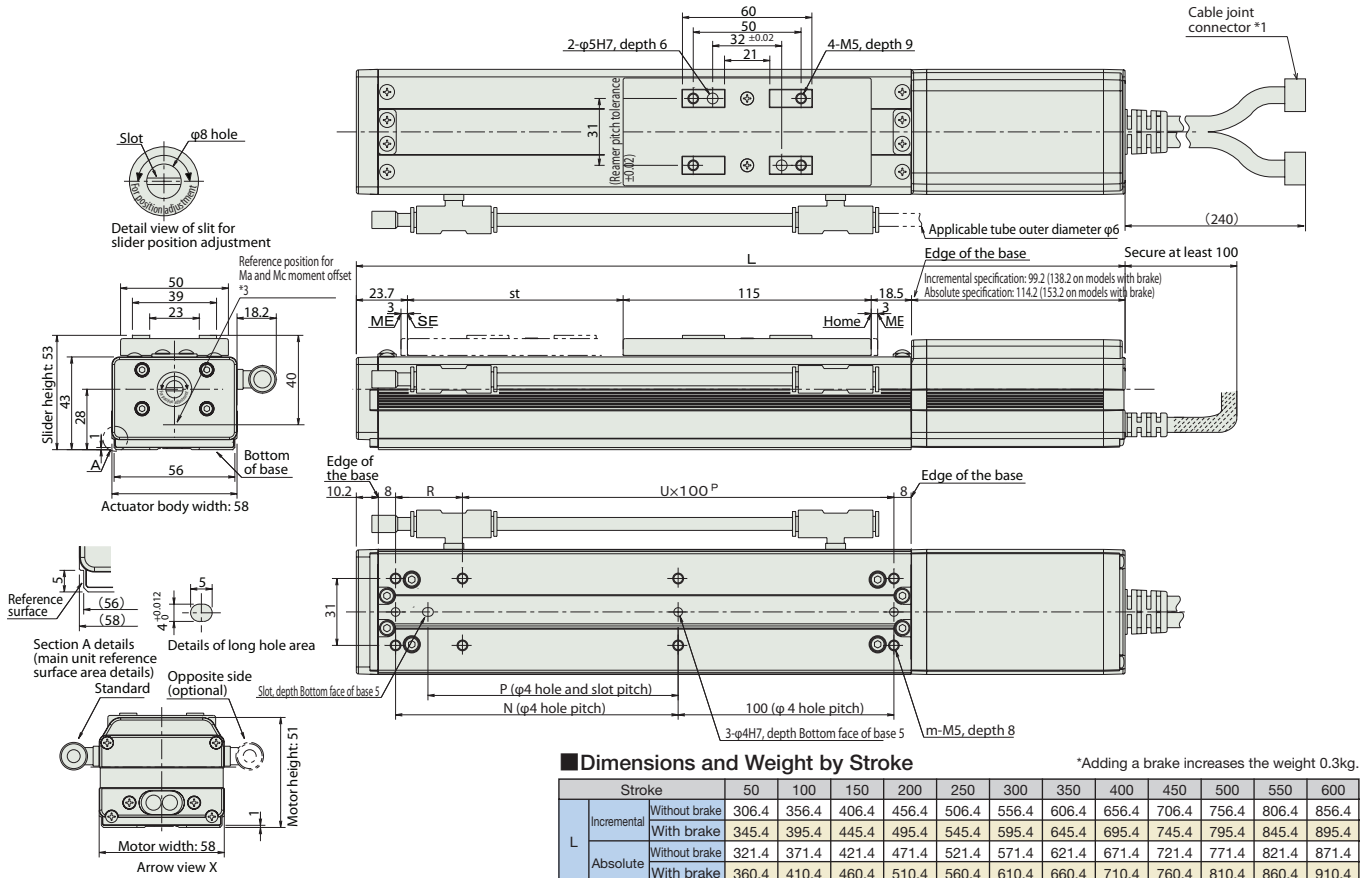
2D CAD

3D CAD

- *1. Connect the motor-encoder cable. See P384 for cable details.
- *2. Watch out for interference with peripheral objects since the slider moves as far as the ME when returning home.
- *3. Offset reference position for Ma moment.

Information on special orders

P. 454



■ Dimensions and Weight by Stroke

*Adding a brake increases the weight 0.3kg.

L	Stroke	Stroke											
		50	100	150	200	250	300	350	400	450	500	550	600
Incremental	Without brake	306.4	356.4	406.4	456.4	506.4	556.4	606.4	656.4	706.4	756.4	806.4	856.4
	With brake	345.4	395.4	445.4	495.4	545.4	595.4	645.4	695.4	745.4	795.4	845.4	895.4
Absolute	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
	N	81	131	181	231	281	331	381	431	481	531	581	631
	P	66	116	166	216	266	316	366	416	466	516	566	616
	R	81	31	81	31	81	31	81	31	81	31	81	31
	U	1	2	2	3	3	4	4	5	5	6	6	7
	m	6	8	8	10	10	12	12	14	14	16	16	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

Compatible Controllers

RCA Series actuators can be operated with the following controllers. Select the type that is compatible with your application.

Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page		
Positioner type		ACON-C-30I-NP-2-0	Up to 512-point positioning possible	512 points	DC24V	Rated 1.3A Peak 5.1A	-	P375		
Safety category compatible Positioner type		ACON-CG-30I-NP-2-0								
Solenoid valve type		ACON-CY-30I-NP-2-0	Same as solenoid valve Controlled operation enabled	3 points						
Pulse series input type (Differential line driver specification)		ACON-PL-30I-NP-2-0	Compatible with differential line driver Pulse train input type	(-)						
Pulse series input type (Open collector specification)		ACON-PO-30I-NP-2-0	Open collector compatible Pulse series input type							
Serial communication type		ACON-SE-30I-0-0	Serial communications Special Type	64 points						
Field network type		RACON-30	Field network Dedicated type	768 points					-	P343
Program control type		ASEL-C-1-30I-NP-2-0	Programmable type capable of operating up to 2 axes	1500 points					-	P405

*ASEL is for 1-axis specification.

① For entering the encoder type (I: incremental/A: absolute).

Controller-Integrated
Slider Type
Rod Type
Table Arm/Flat
Gripper/Rotary Type
Cleanroom
Splash-resistant
Controller
Coupling
Built-in Direct
Reverse-mounted
Pulse Motor 20P
Pulse Motor 28P
Pulse Motor 35P
Pulse Motor 42P
Pulse Motor 56P
Pulse Motor 86P
Servo Motor 10W
Servo Motor 20W
Servo Motor 30W
Servo Motor 60W
Servo Motor 100W
Servo Motor 150W
Servo Motor 750W