

# RCA-SRA4R

ROBO Cylinder Rod Type 45mm Diameter Servo Motor Short-Length Type  
Side-Mounted Motor

■ Configuration: **RCA** — **SRA4R** — **I** — **20** —  —  —  —  —

Series — Type — Encoder — Motor — Lead — Stroke — Compatible Controllers — Cable Length — Option

I: Incremental  
\* The Simple absolute encoder is also considered type "I".

20: 20W Servo Motor

Lead: 5 : 5mm  
2.5 : 2.5mm

Stroke: 50 : 50mm  
200 : 200mm (50mm pitch increments)  
\* Set in 50mm increments over 100mm

Compatible Controllers: A1 : ACON, RACON, ASEL, A3 : AMEC, ASEP

Cable Length: N : None, P : 1m, S : 3m, M : 5m, X  : Custom

Option: See Options below

\* See page Pre-35 for an explanation of the naming convention.

Power-saving



Technical References P. A-5



- (1) The load capacity is based on operation at an acceleration of 0.3G (0.2G for the 2.5mm-lead model, or when used vertically). This is the upper limit of the acceleration.
- (2) The horizontal load capacity is based on the use of an external guide. If an external force is exerted on the rod from a direction other than the motion of the rod, the detent may become damaged.

Actuator Specifications					
■ Lead and Load Capacity					
Model	Lead (mm)	Max. Load Capacity		Rated Thrust (N)	Stroke (mm)
		Horizontal (kg)	Vertical (kg)		
RCA-SRA4R-I-20-5-①-②-③-④	5	9	3	41	20~200 (10mm increments)
RCA-SRA4R-I-20-2.5-①-②-③-④	2.5	18	6.5	81	(Note 1)

Legend ① Stroke ② Compatible controllers ③ Cable length ④ Options (Unit: mm/s)

■ Stroke and Maximum Speed	
Stroke	20 ~ 200 (10mm increments)
5	250
2.5	125

① Stroke List	
Stroke (mm)	Standard Price
20~50	-
60~100	-
150	-
200	-

③ Cable List		
Type	Cable Symbol	Standard Price
Standard (Robot Cables)	P (1m)	-
	S (3m)	-
	M (5m)	-
Special Lengths	X06 (6m) ~ X10 (10m)	-
	X11 (11m) ~ X15 (15m)	-
	X16 (16m) ~ X20 (20m)	-
	-	-

\* The cable is a motor-encoder integrated cable, and is provided as a robot cable.  
\* See page A-39 for cables for maintenance.

④ Option List			
Name	Option Code	See Page	Standard Price
Brake	B	→ A-25	-
Flange bracket (front)	FL	→ A-27	-
Flange bracket (back)	FLR	→ A-28	-
Foot bracket 1 (base mounting)	FT	→ A-29	-
Foot bracket 2 (right/left side mounting)	FT2/FT4	→ A-31	-
Power-saving	LA	→ A-32	-
Reversed-home	NM	→ A-33	-

\* The brake is available for strokes of 70mm or more.

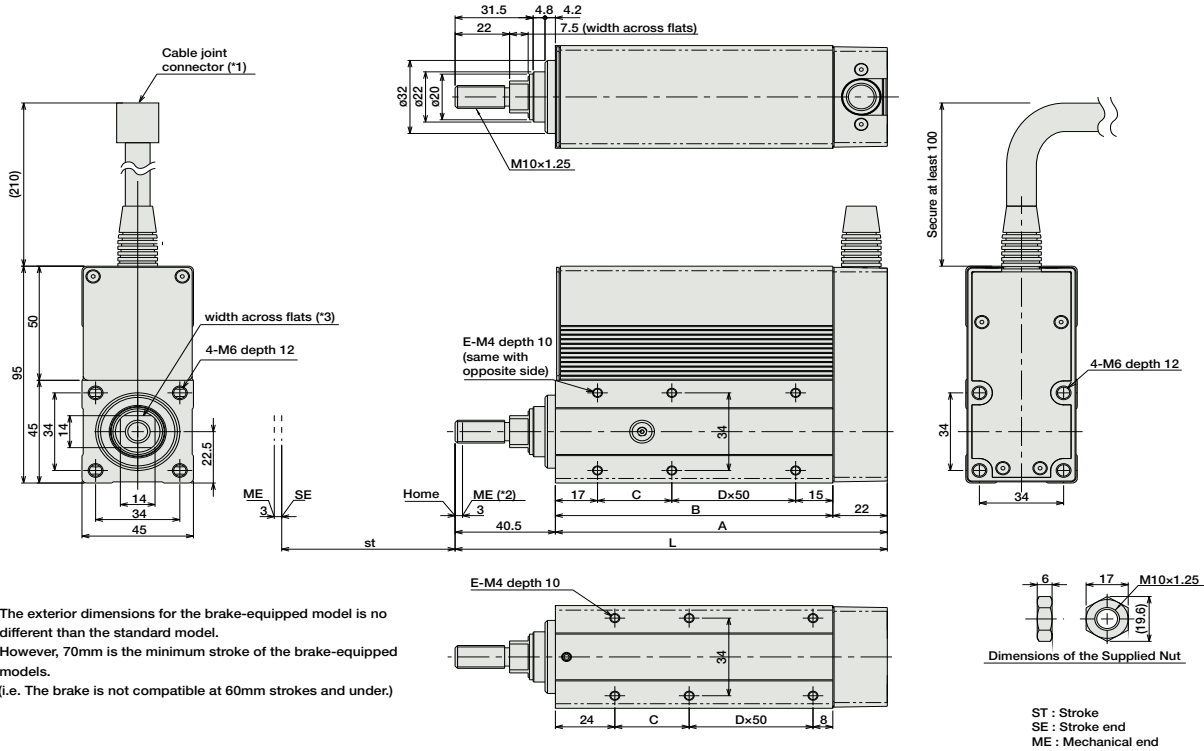
Actuator Specifications	
Item	Description
Drive System	Ball screw ø8mm C10 grade
Positioning Repeatability	±0.02mm
Lost Motion	0.1mm or less
Rod Diameter	ø22mm
Non-rotating accuracy of rod	-
Ambient Operating Temp./Humidity	0 ~ 40°C, 85% RH or less (non-condensing)

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RCA-SRA4R

Dimensions

For Special Order P. A-9



\* The exterior dimensions for the brake-equipped model is no different than the standard model. However, 70mm is the minimum stroke of the brake-equipped models. (i.e. The brake is not compatible at 60mm strokes and under.)

■ Dimensions/Weight by Stroke (Add 0.2kg for brake equipped)

Stroke	20	30	40	50	60	70	80	90	100	150	200
L	124.5	134.5	144.5	154.5	164.5	174.5	184.5	194.5	204.5	254.5	304.5
A	84	94	104	114	124	134	144	154	164	214	264
B	62	72	82	92	102	112	122	132	142	192	242
C	30	40	50	60	70	80	90	100	110	160	210
D	0	0	0	0	0	1	1	1	1	2	3
E	4	4	4	4	4	4	6	6	6	8	10
Weight (kg)	0.78	0.84	0.9	0.96	1.03	1.09	1.15	1.21	1.27	1.59	1.9

- (\*1) The motor-encoder cable is connected here. See page A-39 for details on cables.
- (\*2) When homing, the rod moves to the mechanical end position; therefore, please watch for any interference with the surrounding objects.
- (\*3) The orientation of the bolt will vary depending on the product.

② Compatible Controllers

The RCA series actuators can operate with the controllers below. Select the controller according to your usage.

Name	External View	Model	Description	Max. Positioning Points	Input Voltage	Power Supply Capacity	Standard Price	See Page
Solenoid Valve Type		AMEC-C-20SI ① -NP-2-1	Easy-to-use controller, even for beginners	3 points	AC100V	2.4A rated	-	→ P477
		ASEP-C-20SI ① -NP-2-0	Operable with same signal as solenoid valve. Supports both single and double solenoid types. No homing necessary with simple absolute type.					→ P487
Splash-Proof Solenoid Valve Type		ASEP-CW-20SI ① -NP-2-0						
Positioner Type		ACON-C-20SI ① -NP-2-0	Positioning is possible for up to 512 points	512 points	DC24V	1.7A rated 5.1A peak	-	
Safety-Compliant Positioner Type		ACON-CG-20SI ① -NP-2-0						
Pulse Train Input Type (Differential Line Driver)		ACON-PL-20SI ① -NP-2-0	Pulse train input type with differential line driver support	(-)	DC24V	1.7A rated 5.1A peak	-	→ P535
Pulse Train Input Type (Open Collector)		ACON-PO-20SI ① -NP-2-0	Pulse train input type with open collector support					
Serial Communication Type		ACON-SE-20SI ① -N-0-0	Dedicated to serial communication	64 points				
Field Network Type		RACON-20S ①	Dedicated to field network	768 points				→ P503
Program Control Type		ASEL-C-1-20SI ① -NP-2-0	Programmed operation is possible. Operation is possible on up to 2 axes	1500 points				→ P567

\* This is for the single-axis ASEL.  
\* ① is a placeholder for the code "LA" if the power-saving option is specified.

- Slider Type
- Mini
- Standard
- Controllers Integrated
- Rod Type
- Mini
- Standard
- Controllers Integrated
- Table/Arm /Flat Type
- Mini
- Standard
- Gripper/ Rotary Type
- Linear Servo Type
- Cleanroom Type
- Splash Proof
- Controllers
- PMEC /AMEC
- PSEP /ASEP
- ROBO NET
- ERC2
- PCON
- ACON
- SCON
- PSEL
- ASEL
- SSEL
- XSEL
- Pulse Motor
- Servo Motor (24V)
- Servo Motor (200V)
- Linear Servo Motor