

RCA-SRGS4R

ROBO Cylinder Rod Type with Single Guide 45mm Width Servo Motor
Short-Length Model Side-Mounted Motor

■ Configuration: **RCA** — **SRGS4R** — **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

5 : 5mm
2.5 : 2.5mm

20 : 20mm
200 : 200mm
(10mm pitch increments)
* Set in 50mm increments over 100mm

A1 : ACON
RACON
ASEL
A3 : AMEC
ASEP

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

See Options below

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

Power-saving



Technical References P. A-5

POINT
Notes on Selection

- (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 values for the horizontal load capacity reflect the use of an external guide. See the technical resources (page A-82) for the allowable weight using the supplied guide alone.

Actuator Specifications

Lead and Load Capacity

Model	Lead (mm)	Max. Load Capacity		Rated Thrust (N)	Stroke (mm)
		Horizontal (kg)	Vertical (kg)		
RCA-SRGS4R-I-20-5-①-②-③-④	5	9	2	41	20 ~ 200 (10mm increments) (Note 1)
RCA-SRGS4R-I-20-2.5-①-②-③-④	2.5	18	5.5	81	

Stroke and Maximum Speed

Stroke Lead	20 ~ 200 (10mm increments)	
	5	250
2.5	125	

Legend ① Stroke ② Compatible controllers ③ Cable length ④ Options

(Note 1) 50mm increments over 100mm.

(Unit: mm/s)

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 (back)	FLR	→ A-28	—
Foot bracket 1 (base mounting)	FT	→ A-29	—
Foot bracket 2 (right/left side mounting)	FT2/FT4	→ A-31	—
Guide mounting direction	GS2 ~ GS4	→ A-32	—
Power-saving	LA	→ A-32	—
Reversed-home	NM	→ A-33	—

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

* Please be sure that the mounting direction of the guide is specified in the product name.

* The guide and the foot bracket cannot be mounted in the same direction.

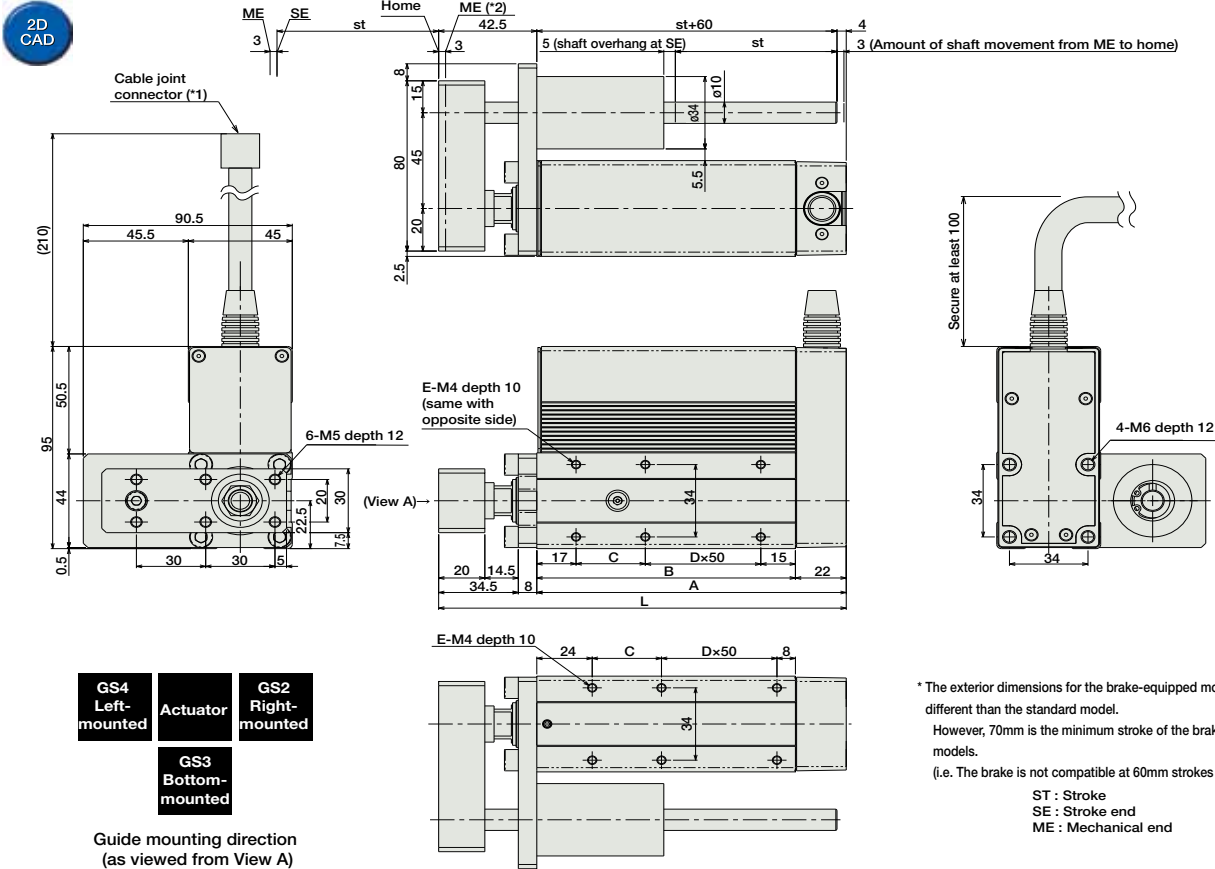
Actuator Specifications

Item	Description
Drive System	Ball screw ø8mm C10 grade
Positioning Repeatability	±0.02mm
Lost Motion	0.1mm or less
Rod Diameter	ø22 mm
Non-rotating accuracy of rod	±0.05 deg
Ambient Operating Temp./Humidity	0 ~ 40°C, 85% RH or less (non-condensing)

Dimensions

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

For Special Order P. A-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.

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

Stroke	20	30	40	50	60	70	80	90	100	150	200
L	126.5	136.5	146.5	156.5	166.5	176.5	186.5	196.5	206.5	256.5	306.5
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	30	40	50	60	60	60
D	0	0	0	0	0	1	1	1	1	2	3
E	4	4	4	4	4	6	6	6	6	8	10
Weight (kg)	1.15	1.21	1.28	1.35	1.42	1.49	1.56	1.62	1.69	2.03	2.38

② Compatible controller

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-20SI①-NP-2-1	Easy-to-use controller, even for beginners	3 points	AC100V	2.4A rated	-	→ P477
		ASEP-C-20SI①-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-20SI①-NP-2-0						
Positioner Type		ACON-C-20SI①-NP-2-0	Positioning is possible for up to 512 points	512 points				
Safety-Compliant Positioner Type		ACON-CG-20SI①-NP-2-0						
Pulse Train Input Type (Differential Line Driver)		ACON-PL-20S①-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-20SI①-NP-2-0	Pulse train input type with open collector support					
Serial Communication Type		ACON-SE-20SI①-N-0-0	Dedicated to serial communication	64 points				
Field Network Type		RACON-20S①	Dedicated to field network	768 points				→ P503
Program Control Type		ASEL-C-1-20SI①-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