

RCA-SRGS4R

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

■ Configuration: **RCA** — **SRGS4R** — **I** — **20** — — — — —

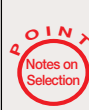
| Series | Type | Encoder | Motor | Lead | Stroke | Compatible Controllers | Cable Length | Option |
|--------|------|--|---------------------|----------------------|--|---|--|-------------------|
| | | I: Incremental * The Simple absolute encoder is also considered type "I". | 20: 20W Servo Motor | 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 <input type="checkbox"/> <input type="checkbox"/> : Custom | 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 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 | (Note 1) |

Legend ① Stroke ② Compatible controllers ③ Cable length ④ Options

(Note 1) 50mm increments over 100mm.

Stroke and Maximum Speed

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

(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) |

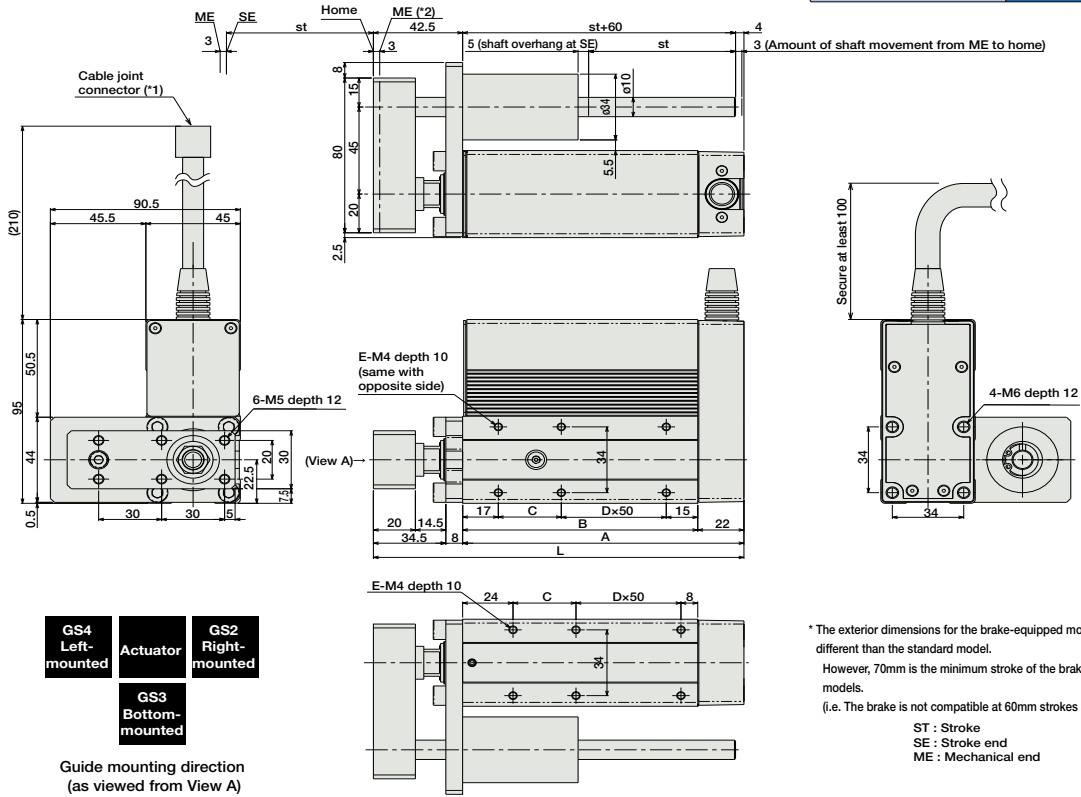
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RCA-SRGS4R

- 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

Dimensions

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 | 80 | 90 | 100 | 110 | 160 | 210 |
| 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 | DC24V | 1.7A rated 5.1A peak | - | → P535 |
| Safety-Compliant Positioner Type | | ACON-CG-20SI①-NP-2-0 | | | | | | |
| Pulse Train Input Type (Differential Line Driver) | | ACON-PL-20SI①-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.

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- Standard
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