

RCA-SA6D

ROBO Cylinder Slider Type 52mm Width 24V Servo Motor
Motor Built-In (Direct-Coupled)

■ Configuration: **RCA** — **SA6D** — — **30** — — — — —

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

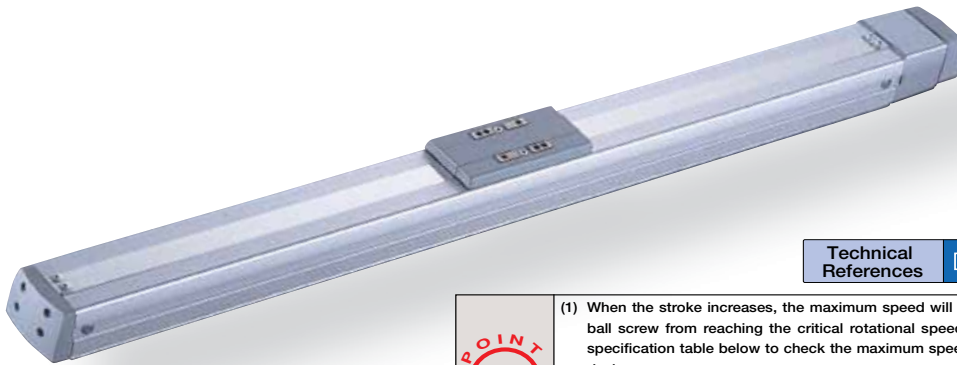
I: Incremental A: Absolute 30: 30W Servo motor
* Absolute encoder models can only use ASEL. When the actuator is used with the simple absolute encoder, the model is considered an incremental model.

12: 12mm 6: 6mm 3: 3mm 50: 50mm 600: 600mm (50mm pitch increments)

A1: ACON RACON ASEL A3: AMEC ASEP N: None P: 1m S: 3m M: 5m X : Custom Length R : Robot Cable

* See page Pre-35 for explanation of each code that makes up the configuration name.

Power-saving



Technical References P. A-5

- POINT** Notes on Selection
- (1) When the stroke increases, the maximum speed 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.

Actuator Specifications

Lead and Load Capacity

| Model | Motor Output (W) | Lead (mm) | Max. Load Capacity | | Rated Thrust (N) | Stroke (mm) |
|--------------------------|------------------|-----------|--------------------|---------------|------------------|----------------------------|
| | | | Horizontal (kg) | Vertical (kg) | | |
| RCA-SA6D-①-30-12-②-③-④-⑤ | 30 | 12 | 6 | 1.5 | 24.2 | 50 ~ 600 (50mm increments) |
| RCA-SA6D-①-30-6-②-③-④-⑤ | | 6 | 12 | 3 | 48.4 | |
| RCA-SA6D-①-30-3-②-③-④-⑤ | | 3 | 18 | 6 | 96.8 | |

Stroke and Maximum Speed

| Stroke / Lead | 50 ~ 450 (50mm increments) | 500 (mm) | 550 (mm) | 600 (mm) |
|---------------|----------------------------|----------|----------|----------|
| | 12 | 800 | 760 | 640 |
| 6 | 400 | 380 | 320 | 270 |
| 3 | 200 | 190 | 160 | 135 |

Legend ① Encoder ② Stroke ③ Compatible controller ④ Cable length ⑤ Option (Unit: mm/s)

Encoder & Stroke List

| ② Stroke (mm) | Standard Price | |
|---------------|----------------|----------|
| | ① Encoder Type | |
| | Incremental | Absolute |
| 50 | - | A |
| 100 | - | - |
| 150 | - | - |
| 200 | - | - |
| 250 | - | - |
| 300 | - | - |
| 350 | - | - |
| 400 | - | - |
| 450 | - | - |
| 500 | - | - |
| 550 | - | - |
| 600 | - | - |

④ Cable List

| Type | Cable Symbol | Standard Price |
|-----------------|-----------------------|----------------|
| Standard | P (1m) | — |
| | S (3m) | — |
| | M (5m) | — |
| Special Lengths | 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-39 for cables for maintenance.

⑤ Option List

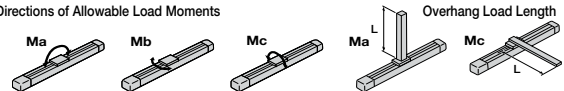
| Name | Option Code | See Page | Standard Price |
|-----------------------------|-------------|----------|----------------|
| Brake (Cable exiting end) | BE | → A-25 | — |
| Brake (Cable exiting left) | BL | → A-25 | — |
| Brake (Cable exiting right) | BR | → A-25 | — |
| Foot bracket | FT | → A-29 | — |
| Power-saving | LA | → A-32 | — |
| Reversed-home | NM | → A-33 | — |
| Slider Roller | SR | → A-36 | — |

Actuator Specifications

| Item | Description |
|----------------------------------|--|
| Drive System | Ball screw Ø10mm C10 grade |
| Positioning Repeatability | ±0.02mm |
| Lost Motion | 0.1mm or less |
| Base | Material: Aluminum (white alumite treated) |
| Allowable Static Moment | Ma: 38.3N·m Mb: 54.7N·m Mc: 81.0N·m |
| Allowable Dynamic 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 |
| Ambient Operating Temp./Humidity | 0~40°C, 85% RH or less (non-condensing) |

(*) Based on 5,000km travel life.

Directions of Allowable Load Moments



85 RCA-SA6D

