

RCA2-SD3N

ROBO Cylinder Mini Rod Type Short-Length Mounting Slide Unit Type with Double Guide
60mm Width 24V Servo Motor Lead Screw

■ Configuration: **RCA2** — **SD3N** — **I** — **10** — — — — —

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

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

10: 10W Servo Motor

4S: 4mm lead screw
2S: 2mm lead screw
1S: 1mm lead screw

25: 25mm
50: 50mm

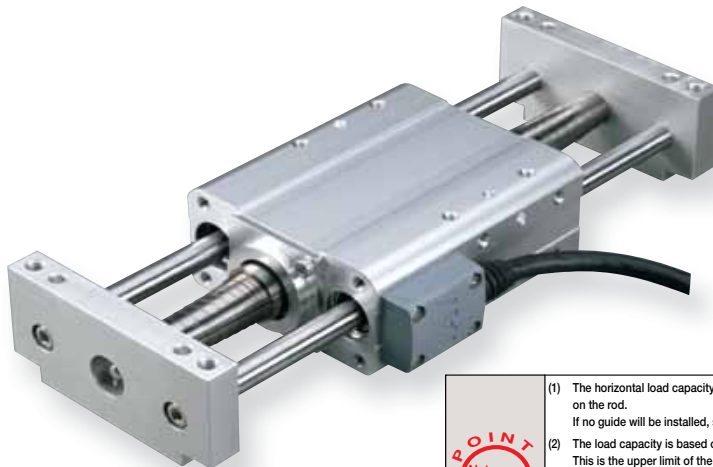
A1: ACON
RACON
ASEL
A3: AMEC
ASEP

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

LA: Power-saving

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

Power-saving



Technical References P. A-5

- Notes on Selection**
- The horizontal load capacity is based on the use of a guide to prevent any radial and/or moment load on the rod. If no guide will be installed, see the Tip Load vs. Service Life graph (→ page A-82).
 - The load capacity is based on operation at an acceleration of 0.2G. This is the upper limit of the acceleration.
 - The values for the vertical load capacity are based on a setup in which the actuator is secured and the side bracket is moved. Please note that moving the actuator against the secured side bracket is not possible.
 - This model uses a lead screw. Please ensure that your usage is appropriate for its characteristics. (See page Pre-42 for more information.)

Actuator Specifications

Lead and Load Capacity

Model	Motor Output (w)	Feed Screw	Lead (mm)	Max. Load Capacity		Rated Thrust (N)	Positioning Repeatability (mm)	Stroke (mm)
				Horizontal (kg)	Vertical (kg)			
RCA2-SD3N-I-10-4S-①-②-③-④	10	Lead screw	4	0.25	0.125 (*1)	25.1	±0.05	25 50
RCA2-SD3N-I-10-2S-①-②-③-④			2	0.5	0.25 (*1)	50.3		
RCA2-SD3N-I-10-1S-①-②-③-④			1	1	0.5 (*1)	100.5		

Legend ① Stroke ② Compatible controller ③ Cable length ④ Options

(*1) When the actuator is fixed

Stroke and Maximum Speed

Lead	Stroke	
	25/50 (mm)	25/50 (mm)
Lead Screw	4	200
	2	100
	1	50

(Unit: mm/s)

① Stroke List

Stroke (mm)	Standard Price	
	Feed Screw	Lead Screw
25	-	-
50	-	-

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 RCA2 comes standard with a robot cable.

* See page A-39 for cables for maintenance.

④ Option List

Name	Option Code	See Page	Standard Price
Power-saving	LA	→ A-32	-

Actuator Specifications

Item	Description
Drive System	Lead Screw ø4mm C10 grade
Lost Motion	0.3mm or less (initial value)
Frame	Material: Aluminum (white alumite treated)
Ambient Operating Temp./Humidity	0~40°C, 85% RH or less (non-condensing)
Service Life	Horizontal: 10 million cycles Vertical: 5 million cycles

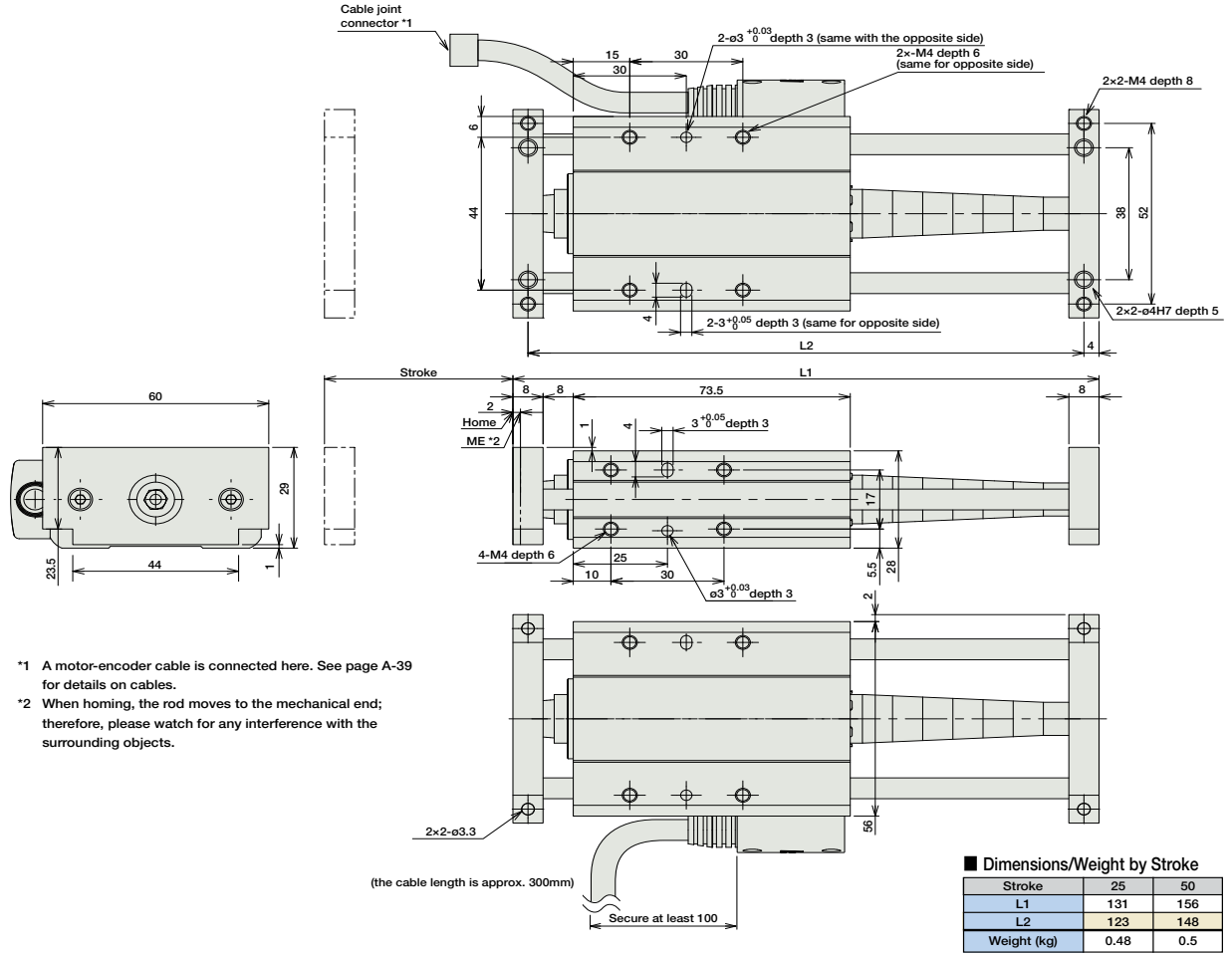
193

RCA2-SD3N

- 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 Orders P. A-9



- *1 A motor-encoder cable is connected here. See page A-39 for details on cables.
- *2 When homing, the rod moves to the mechanical end; therefore, please watch for any interference with the surrounding objects.

② Compatible Controllers

The RCA2 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-10①-NP-2-1	Easy-to-use controller, even for beginners	3 points	AC100V	2.4A rated	-	→ P477
		ASEP-C-10①-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-10①-NP-2-0					-	
Positioner Type		ACON-C-10①-NP-2-0	Positioning is possible for up to 512 points	512 points	DC24V	(Standard) 1.3A rated 4.4A max. (Power-saving) 1.3A rated 2.5A max.	-	→ P535
Safety-Compliant Positioner Type		ACON-CG-10①-NP-2-0					-	
Pulse Train Input Type (Differential Line Driver)		ACON-PL-10①-NP-2-0	Pulse train input type with differential line driver support	(-)	DC24V	(Standard) 1.3A rated 4.4A max. (Power-saving) 1.3A rated 2.5A max.	-	→ P535
Pulse Train Input Type (Open Collector)		ACON-PO-10①-NP-2-0	Pulse train input type with open collector support				-	
Serial Communication Type		ACON-SE-10①-N-0-0	Dedicated to serial communication	64 points			-	
Field Network Type		RACON-10①	Dedicated to field network	768 points			-	→ P503
Program Control Type		ASEL-C-1-10①-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