CA2-SD3NA ROBO Cylinder Mini Rod Type Short-Length Double-Guide Slide Unit Type Actuator Width 60 mm 24V Servo Motor Ball Screw Specification/Lead Screw Specification ■ Model Description RCA2 – SD3NA 10 Series **Encoder type** Motor type Lead Stroke Compatible controllers Option Cable length 10: Servo motor 10W 4: Ball screw 4mm 2: Ball screw 2mm 25: 25mm A3: ACON-CYB/PLB/POB 50: 50mm A5: ACON-CB/CGB LA: Power-saving specification I: Incremental P: 1 m S: 3 m specification * Model number is "I" when used with 1: Ball screw 1mm A6: RCON M: 5 m 4S: Lead screw 4mm RSEL X□□: Length Designation simple absolute unit. 2S: Lead screw 2mm * See page 14 for details on the model descriptions. 1S: Lead screw 1mm

and moment load are not applied to the rod. See P129 for correlation diagrams of the end load and service life when a guide is not installed.

Power-saving specification

- (1) The horizontal payload is the value when used in combination with a guide so that a radial load
- (2) The payload is the value when the actuator is operated at an acceleration of 0.3 G (0.2G for lead 1, if used vertically and for lead screw specification). The acceleration limit is the value indicated above.
- (3) The vertical payload is the value when the actuator is mounted and side bracket is operated. Take note that in vertical operation, the side bracket cannot be mounted to operate the actuator.
- (4) If the actuator is used vertically, pay attention to rod contact because the rod will come down when the power is turned off.

Actuator Specifications Table

■ Leads and Payloads

Model	Motor output (W)	Feed screw	Lead (mm)	Maximum payload Horizontal (kg) Vertical (kg)		Rated thrust (N)	Positioning repeatability (mm)	Stroke (mm)
RCA2-SD3NA-I-10-4-①-②-③-④			4	0.75	0.25(*)	42.7	±0.02	
RCA2-SD3NA-I-10-2-①-②-③-④	10	Ball screw	2	1.5	0.5(*)	85.5		25 50
RCA2-SD3NA-I-10-1-①-②-③-④			4	3	1(*)	170.9		
RCA2-SD3NA-I-10-4S-①-②-③-④		Lead screw	4	0.25	0.125(*)	25.1		
RCA2-SD3NA-I-10-2S-①-②-③-④	10		2	0.5	0.25(*)	50.3	±0.05	25 50
RCA2-SD3NA-I-10-1S-①-②-③-④			1	1	0.5(*)	100.5		

■ Stroke and Maximum Speed

Lead	Stroke	25 (mm)	50 (mm)							
W	4	20	00							
Ball screw	2	100								
Ba	1	5	0							
Wei	4	20	00							
ead screw	2	2 100								
Le	1	5	0							

① Stroke list

Churche	Standa	rd price						
Stroke (mm)	Feed screw							
(11111)	Ball screw	Lead screw						
25	_	_						
50	_	_						

4 Options

Title	Option code	See page	Standard price
Power-saving specification	LA	_	_

(*) When the main unit side is fixed

(unit: mm/s)

3 Cable Length

Type	Cable symbol	Standard price
Ct I I t	P (1m)	_
Standard type (Robot cable)	S (3m)	_
(RODOL CADIE)	M (5m)	_
	X06 (6m) ~ X10 (10m)	_
Special length	X11 (11m) ~ X15 (15m)	_
	X16 (16m) ~ X20 (20m)	_

^{*} The standard cable for the RCA2 is the robot cable.

Actuator Specifications								
			•					
		Item	Description					
	Drive System		Ball screw/Lead screw, ø4mm, rolled C10					
	Lost motion		Ball screw: 0.1mm or less Lead screw: 0.3 mm or less					
	Frame		Material: Aluminum, white alumite treated					
	Ambient ope	rating temperature, humidity	0 to 40°C, 85% RH or less (Non-condensing					
İ	Service life	Lead screw specification	Horizontal specification: 10 million cycles, Vertical specification: 5 million cycles					

Stroke

L1

Mass (kg)

25

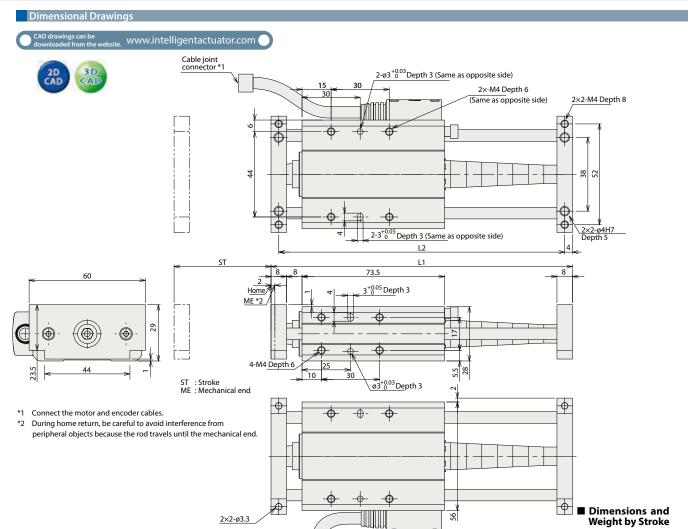
131 123

0.48 0.5

50

148

156



Applicable Controllers

The actuators on this page can be operated by the controllers indicated below. Please select the type depending on your intended use.

(Cable length is approximately 300mm.)

	F		Power				Control method				Manian and an af	D. 6								
Name	External view	Max. number of connectable axes	supply	Positioner	Pulse- Program														Maximum number of positioning points	Reference page
	v.c.,	connectable axes	voltage	1 Ositionei	train	riogram	DV	CC	CIE	PR	CN	ML	ML3	EC	EP	PRT	SSN	ECM	positioning points	page
ACON-CB/CGB		1		● * Option	* Option	-	•	•	•	•	•	•	•	•	•	•	-	-	512 (768 for network spec.)	
ACON-CYB/PLB/POB		1		* Option	• * Option	-	-	-	-	-	-	-	-	-	-	-	-	-	64	Please contact
RCON	HEM IL	16 (ML3,SSN, ECM are 8)	24VDC	-	-	-	•	•	•	•	-	-	•	•	•	•	•	•	128 (No position data for ML3, SSN, ECM),	IAI for more information.
RSEL	THE TO	8		-	-	•	•	•	•	•	-	-	-	•	•	•	-	-	36000	

Secure at least 100mm

More controller info is available in the General Controller Catalog PDF.



^{*1} For network abbreviations such as DV and CC, please contact IAI.