

RCA2-SD4NA

ROBO Cylinder Mini Rod Type Short-Length, Double-Guide Slide Unit Type Actuator Width 72 mm
24V Servo Motor Ball Screw Specification/Lead Screw Specification

Model Description	RCA2	SD4NA	I	20					
	Series	Type	Encoder type	Motor type	Lead	Stroke	Compatible controllers	Cable length	Option
			I: Incremental specification * Model number is "I" when used with simple absolute unit.	20: Servo motor 20W	6: Ball screw 6mm 4: Ball screw 4mm 2: Ball screw 2mm 6S: Lead screw 6mm 4S: Lead screw 4mm 2S: Lead screw 2mm	25: 25mm 50: 50mm 75: 75mm	A3: ACON-CYB/PLB/POB A5: ACON-CB/CGB A6: RCON RSEL	N: None P: 1 m S: 3 m M: 5 m X□□: Length Designation	LA: Power-saving specification

* See page 14 for details on the model descriptions.

Power-saving specification



- POINT**
選定上の注意
- (1) The horizontal payload is the value when used in combination with a guide so that a radial load 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.
 - (2) The payload is the value when the actuator is operated at an acceleration of 0.3 G (0.2G for lead 2, 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	Rated thrust (N)	Positioning repeatability (mm)	Stroke (mm)
				Horizontal (kg)	Vertical (kg)		
RCA2-SD4NA-I-20-6-①-②-③-④	20	Ball screw	6	2	0.5 (* 1)	33.8	25 50 75
RCA2-SD4NA-I-20-4-①-②-③-④			4	3	0.75 (* 1)	50.7	
RCA2-SD4NA-I-20-2-①-②-③-④			2	6	1.5 (* 1)	101.5	
RCA2-SD4NA-I-20-6S-①-②-③-④	20	Lead screw	6	0.25	0.125 (* 1)	19.9	25 50 75
RCA2-SD4NA-I-20-4S-①-②-③-④			4	0.5	0.25 (* 1)	29.8	
RCA2-SD4NA-I-20-2S-①-②-③-④			2	1	0.5 (* 1)	59.7	

Legend ① Stroke ② Compatible Controllers ③ Cable length ④ Option

(*1) When the main unit side is fixed

Stroke and Maximum Speed

Stroke		25 (mm)	50~75 (mm)
Lead			
Ball screw	6	240 <200>	300
	4	200	
	2	100	
Lead screw	6	200	300
	4	200	
	2	100	

* < > Indicates vertical use

(unit: mm/s)

① Stroke list

Stroke (mm)	Standard price	
	Feed screw	
	Ball screw	Lead screw
25	—	—
50	—	—
75	—	—

④ Options

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

③ Cable Length

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

* The standard cable for the RCA2 is the robot cable.

Actuator Specifications

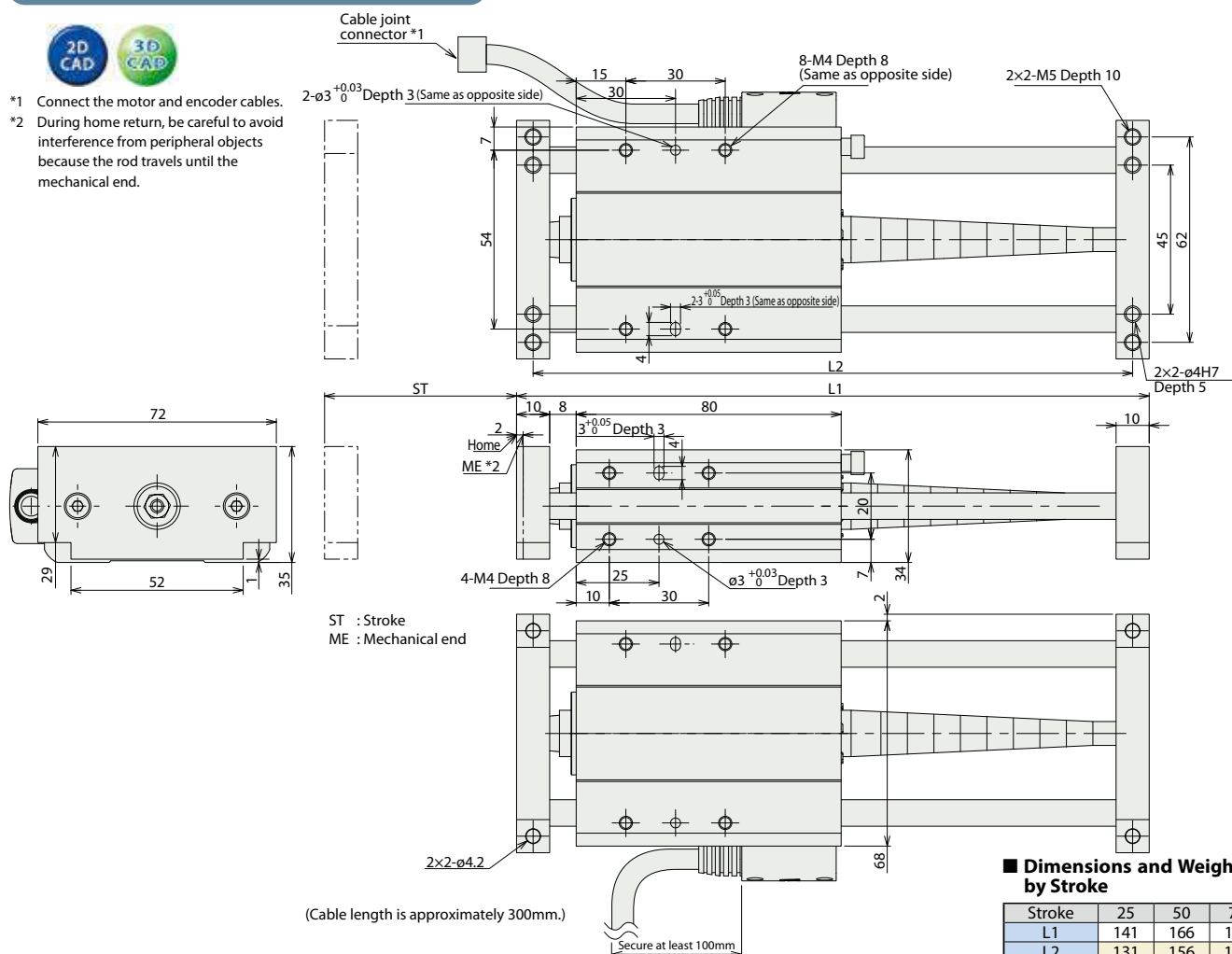
Item	Description
Drive System	Ball screw/Lead screw, ø6mm, rolled C10
Lost motion	Ball screw: 0.1mm or less Lead screw: 0.3 mm or less
Frame	Material: Aluminum, white alumite treated
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (Non-condensing)
Service life	Horizontal specification: 10 million cycles Vertical specification: 5 million cycles

Dimensional Drawings

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



- *1 Connect the motor and encoder cables.
*2 During home return, be careful to avoid interference from peripheral objects because the rod travels until the mechanical end.









































Dimensions and Weight by Stroke

Stroke	25	50	75
L1	141	166	191
L2	131	156	181
Mass (kg)	0.73	0.75	0.77

Applicable Controllers

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

Name	External view	Max. number of connectable axes	Power supply voltage	Positioner	Pulse-train	Program	Control method											Maximum number of positioning points	Reference page		
							Network option *1														
ACON-CB/CGB		1	24VDC	 * Option	 * Option	-											-	-	512 (768 for network spec.)	Please contact IAI for more information.	
ACON-CYB/PLB/POB		1		 * Option	 * Option	-	-	-	-	-	-	-	-	-	-	-	-	-	-		64
RCON		16 (ML3, SSN, ECM are 8)		-	-	-					-	-									128 (No position data for ML3, SSN, ECM),
RSEL		8		-	-						-	-	-					-	-		36000

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

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

