

# RCA2-TWA3NA

Robo Cylinder, Mini Table Type, Short-Length Wide Type, Actuator Width 50mm, 24V Servo Motor, Ball Screw Specification/Lead Screw Specification

Model Specification Items	<b>RCA2</b>	<b>— TWA3NA</b>	<b>— I</b>	<b>— 10</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Series	Type	Encoder type	Motor type	Lead	Stroke	Applicable controller	Cable length	Options
	I: Incremental	10:10W Servo motor	* The Simple absolute encoder is also considered type "I".	4: Ball screw 4mm 2: Ball screw 2mm 1: Ball screw 1mm 4S: Lead screw 4mm 2S: Lead screw 2mm 1S: Lead screw 1mm	30: 30mm 50: 50mm	A1: ACON ASEL A3: AMEC ASEP MSEP	N: None P: 1m S: 3m M: 5m X□□: Custom Length	See options below.	

\* See page Pre-47 for details on the model descriptions.



Power-saving

Technical References Appendix P.5



- (1) The payload is the value when the actuator is operated at an acceleration of 0.3 G (0.2G for 1mm-lead, if used vertically and for lead screw specification). The acceleration limit is the value indicated above.
- (2) If the actuator is used vertically, pay attention to rod contact because the rod will come down when the power is turned off.
- (3) See page A-71 for details on push motion.

## Actuator Specifications

### Leads and Payloads

Model number	Motor output (W)	Feed screw	Lead (mm)	Max. Load Capacity		Rated thrust (N)	Positioning Repeatability (mm)	Stroke (mm)
				Horizontal (kg)	Vertical (kg)			
RCA2-TWA3NA-I-10-4-①-②-③-④	10	Ball screw	4	0.75	0.25	42.7	±0.02	30 50
RCA2-TWA3NA-I-10-2-①-②-③-④			2	1.5	0.5	85.5		
RCA2-TWA3NA-I-10-1-①-②-③-④			1	3	1	170.9		
RCA2-TWA3NA-I-10-4S-①-②-③-④	10	Lead screw	4	0.25	0.125	25.1	±0.05	30 50
RCA2-TWA3NA-I-10-2S-①-②-③-④			2	0.5	0.25	50.3		
RCA2-TWA3NA-I-10-1S-①-②-③-④			1	1	0.5	100.5		

### Stroke and Maximum Speed

Lead	Stroke	
	30 (mm)	50 (mm)
Ball screw	4	200
	2	100
	1	50
Lead screw	4	200
	2	100
	1	50

Code explanation ① Stroke ② Applicable controller ③ Cable length ④ Options \*See page A-71 for details on push motion. \* The values enclosed in < > apply to vertical settings. (Unit: mm/s)

### ① Stroke

Stroke (mm)	Standard price	
	Feed screw	
	Ball screw	Lead screw
30	—	—
50	—	—

### ③ Cable Length

\* The standard cable for the RCA2 is the robot cable.  
\* See page A-59 for cables for maintenance.

### ④ Options

Name	Option code	See page	Standard price
Brake	<b>B</b>	→ A-42	—
Connector cable exits from the left	<b>K1</b>	→ A-51	—
Connector cable exits from the front	<b>K2</b>	→ A-51	—
Connector cable exits from the right	<b>K3</b>	→ A-51	—
Power-saving specification	<b>LA</b>	→ A-52	—

### Actuator Specifications

Item	Description
Drive System	Ball screw/Lead screw, ø4mm, rolled C10
Lost Motion	Ball screw: 0.1mm or less Lead screw: 0.3mm or less (initial value)
Frame	Material: Aluminum, white alumite treated
Allowable dynamic moment (Note)	Ma: 9.9 N·m, Mb: 9.9 N·m, Mc: 9.4 N·m
Allowable static moment	Ma: 14.1 N·m, Mb: 14.1 N·m, Mc: 19.1 N·m
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (Non-condensing)
Service life	Lead screw specification
	Ball screw specification
	Horizontal specification: 10 million cycles, Vertical specification: 5 million cycles
	5,000km or 50 million cycles

(Note) For cases when the guide service life has been set to 5,000km.  
(\*) For 1mm-lead: 3,000km or 50 million cycles.

