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

# RCA2-TWA3NA

I: Incremental

encoder is also

considered type "I".

The Simple absolute motor

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

Model Specification Items

[C €] RoHS

RCA2 — TWA3NA — Series — Type

10

— Encoder type — Motor type — Lead

2: Ball screw 2mm 50: 50mm

Stroke 10:10W Servo 4: Ball screw 4mm 30:30mm

A1:ACON

Applicable controller — Cable length N: None

Options See options below.

ASEL P: 1m A3:AMEC S: 3m ASEP M:5m

MSEP X□□: Custom Length

4S: Lead screw 4mm 2S: Lead screw 2mm 1S: Lead screw 1mm

Ball screw 1mm

**Power-saving** 



**Technical** References



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 Horizontal (kg)	Capacity Vertical (kg)	Rated thrust (N)	Positioning Repeatability (mm)	Stroke (mm)	Lea	Stroke d	30 (mm)	50 (mm)
RCA2-TWA3NA-I-10-4-①-②-③-④	10	Ball screw	4	0.75	0.25	42.7	±0.02		×	4	200	
RCA2-TWA3NA-I-10-2-①-②-③-④			2	1.5	0.5	85.5		30 50	III screw	2	10	00
RCA2-TWA3NA-I-10-1-①-②-③-④			1	3	1	170.9			Ball	1	50	
RCA2-TWA3NA-I-10-4S-①-②-③-④	10		4	0.25	0.125	25.1			screw	4	20	00
RCA2-TWA3NA-I-10-2S-①-②-③-④		Lead screw	2	0.5	0.25	50.3	±0.05	30 50		2	10	00
RCA2-TWA3NA-I-10-1S-①-②-③-④			1	1	0.5	100.5			Lead	1	50	0
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)												

■ Stroke and Maximum Speed

Lea	Stroke	30 50 (mm)					
*	4	20	00				
Ball screw	2	100					
Ba	1	5	0				
ew	4	20	00				
Cead screw	2	10	00				
	5	0					

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

③Cable Length

## **4** Options

Name	Option code	See page	Standard price		
Brake	В	→ A-42			
Connector cable exits from the left	K1	→ A-51	_		
Connector cable exits from the front	K2	→ A-51	_		
Connector cable exits from the right	К3	→ A-51	_		
Power-saving specification	LA	→ A-52			

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

# Actuator Specifications

Account of the contraction of th							
	Item	Description					
Drive System	1	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	Horizontal specification: 10 million cycles, Vertical specification: 5 million cycles					
	Ball screw specification	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.

\*Brake-equipped models

50

109.5

106.5

93.5

84

0.58

are heavier by 0.1kg.

30 89.5

86.5

73.5

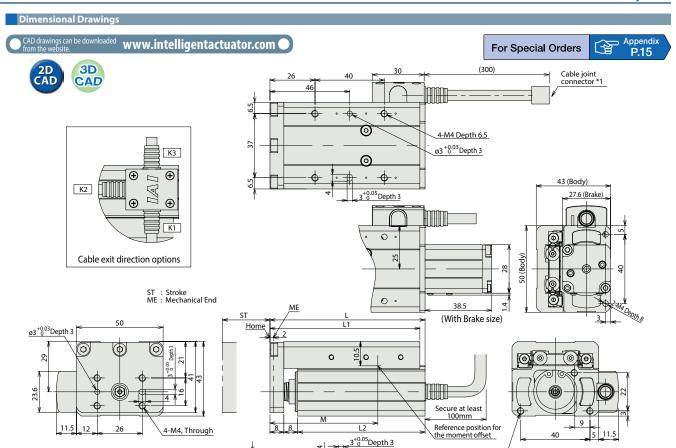
64

0.52

■ Dimensions and Weight by Stroke

Stroke

12



Ф

3-M4 Depth 6/

(\*1) Connect the motor-encoder integrated cable here. See page A-59 for details on cables.

(\*2) After homing, the slider moves to the ME, therefore, please watch for any interference with surrounding objects.

#### 4-M4 Depth 6 10 М ø3 <sup>+0.03</sup> Depth 3 Weight (kg) ② Applicable Controllers RCA2 series actuators can be operated with the controllers indicated below. Select the type according to your intended application. \* ACON-CY also can be used.

ncaz series actuators can be operated with the controllers indicated below. Select the type according to your interiord application.								
	External view	Model number	Features	Maximum number of positioning points	Input power	Power- supply capacity	Standard price	Reference page
Solenoid Valve Type		AMEC-C-10I①-①-2-1	Easy-to-use controller, even for beginners		AC100V	2.4A rated	_	→ P537
		ASEP-C-10I①-①-2-0	Simple controller operable with the same signal as a solenoid valve	3 points			_	→ P547
Solenoid valve multi-axis type PIO specification		MSEP-C-(  )-~-(  )-2-0	Positioner type based on PIO control, allowing up to 8 axes to be connected		DC24V	(Standard) 1.3A rated 4.4A max. (Power-saving) 1.3A rated 2.5A max.	_	, DEC2
Solenoid valve multi-axis type Network specification		MSEP-C-(  )-~-( \vec{V}-0-0	Field network-ready positioner type, allowing up to 8 axes to be connected	256 points				→ P563
Positioner type	I.	ACON-C-10I①-①-2-0	Positioning is possible for up to 512	512 points			_	→ P631
Safety-Compliant Positioner Type		ACON-CG-10I①-(V)-2-0	points				_	
Pulse Train Input Type (Differential Line Driver)	O.	ACON-PL-10I①-①-2-0	Pulse train input type with differential line driver support	(—)			_	
Pulse Train Input Type (Open Collector)	è	ACON-PO-10I①-①-2-0	Pulse train input type with open collector support				_	
Serial Communication Type		ACON-SE-10I①-N-0-0	Dedicated Serial Communication	64 points			_	
Program Control Type		ASEL-CS-1-10I①-①-2-0	Programmed operation is possible. Can operate up to 2 axes	1,500 points			_	→ P675

\* (indicates number of axes (1 to 8). \* (indicates field network specification symbol.