CA2-TFA3NA ROBO Cylinder Mini Table Type Short-Length Flat Type Actuator Width 61 mm 24V Servo Motor Ball Screw Specification/Lead Screw Specification ■ Model Description RCA2 - TFA3NA -10 Series **Encoder type** Motor type Lead Stroke Compatible controllers Cable length Option l: Incremental specification 10: Servo motor 10W 4: Ball screw 4mm 2: Ball screw 2mm 30: 30mm 50: 50mm K2: Connector cable exits from the A3: ACON-CYB/PLB/POB N: None P: 1 m S: 3 m A5: ACON-CB/CGB * Model number is "I" when used with 1: Ball screw 1mm front A6: RCON M: 5 m 4S: Lead screw 4mm LA: Power-saving RSEL X□□: Length Designation simple absolute unit. 2S: Lead screw 2mm specification * See page 14 for details on the model descriptions. 1S: Lead screw 1mm



Notes or

Power-saving specification

- (1) 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.
- (2) 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 Horizontal (kg)		Rated thrust (N)	Positioning repeatability (mm)	Stroke (mm)	
RCA2-TFA3NA-I-10-4-①-②-③-④			4	0.75	0.25	42.7			
RCA2-TFA3NA-I-10-2-①-②-③-④	10	Ball screw	2	1.5	0.5	85.5	±0.02	30 50	
RCA2-TFA3NA-I-10-1-①-②-③-④			1	3	1	170.9			
RCA2-TFA3NA-I-10-4S-①-②-③-④		Lead screw	4	0.25	0.125	25.1			
RCA2-TFA3NA-I-10-2S-①-②-③-④	10		2	0.5	0.25	50.3	±0.05	30 50	
RCA2-TFA3NA-I-10-1S-①-②-③-④			1	1	0.5	100.5			
Legend ①Stroke ②Compatible Controllers ③Cable length ④Option									

■ Stroke and Maximum Speed

Lead	Stroke	30 (mm)	50 (mm)						
W	4	20	00						
Ball screw	2	10	100						
Ba	1	5	0						
ew	4	20	00						
ead screw	2	10	100						
Leā	1	5	50						

(unit: mm/s)

① Stroke list

Churche	Standard price								
Stroke (mm)	Feed	screw							
(11111)	Ball screw	Lead screw							
30	_	_							
50	_	_							

4 Options

Title	Option code	See page	Standard price
Connector cable exits from th front	е к2	_	_
Power-saving specification	LA	_	_

3 Cable Length

_		a			
Type	Cable symbol	Standard price			
Standard type (Robot cable)	P (1m)	_			
	S (3m)	_			
(NODOL Cable)	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							
Dynamic allo	wable moment (see note)	Ma: 9.9 N·m Mb: 9.9 N·m Mc: 3.3 N·m							
Ambient ope	rating 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	5,000 km or 50 million cycles (*)							

(Note) For cases when the guide service life has been set to 5,000km.

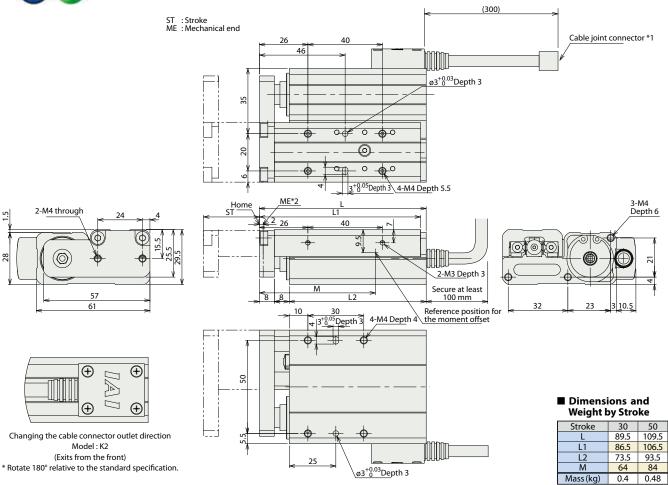
(*) For lead 1: 3,000 km or 50 million cycles

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Dimensional Drawings

- $^{*}1$ 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.



Applicable Controllers

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

	External	Max. number of	Power					Cor	ntrol i	neth	od								Maximum number of	Reference
Name	view	connectable axes	supply	Positioner	Positioner Pulse- Program Prog						positioning points	page								
	VICVV	connectable axes	voltage	1 Ositionei	train	riogram	DV	CC	CIE	PR	CN	ML	ML3	EC	EP	PRT	SSN	ECM	positioning points	puge
ACON-CB/CGB	E .	1		* Option	* Option	-	•	•	•	•	•	•	•	•	•	•	-	-	512 (768 for network spec.)	
ACON-CYB/PLB/POB		1		* Option	• * Option	-	-	-	-	-	-	-	-	-	-	-	-	-	64	Please contact
RCON	HOME IL	16 (ML3,SSN, ECM are 8)	24VDC	-	-	-	•	•	•	•	-	-	•	•	•	•	•	•	128 (No position data for ML3, SSN, ECM),	IAI for more information.
RSEL	THE REAL	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.

