

RCA2-TA5C

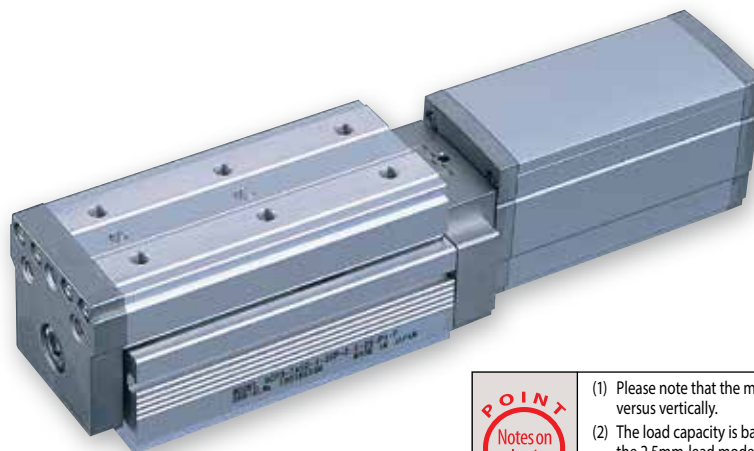
Robo Cylinder, Table Type, Actuator Width 55mm, Servo Motor, Coupled

Model Specification Items	RCA2 — TA5C — I — 20 — <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 * The Simple absolute encoder is also considered type "I".	20: 20W Servo motor 10: 10mm 5: 5mm 2.5: 2.5mm	25: 25mm 100: 100mm (25mm pitch increments)	A1: ACON ASEL A3: AMEC ASEP MSEP	N: None P: 1m S: 3m M: 5m X□□: Custom Length

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



Power-saving



Technical References Appendix P.5

- POINT** Notes on selection
- Please note that the maximum speed is different when used horizontally versus vertically.
 - The load capacity is based on operation at an acceleration of 0.3G (0.2G for the 2.5mm-lead model, or when used vertically.) This is the upper limit of the acceleration.
 - See page A-71 for details on push motion.

Actuator Specifications

Leads and Payloads

Model number	Motor output (W)	Lead (mm)	Max. Load Capacity		Rated thrust (N)	Stroke (mm)
			Horizontal (kg)	Vertical (kg)		
RCA2-TA5C-I-20-10-①-②-③-④	20	10	2	1	34	25~100 (every 25mm)
RCA2-TA5C-I-20-5-①-②-③-④		5	3.5	2	68	
RCA2-TA5C-I-20-2.5-①-②-③-④		2.5	5	3	137	

Stroke and Maximum Speed

Stroke / Lead	25~200 (every 25mm)
	10
5	250
2.5	125

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

① Stroke (mm)	Standard price
25	—
50	—
75	—
100	—

③ Cable Length

Type	Cable symbol	Standard price
Standard (Robot Cables)	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.
* See page A-59 for cables for maintenance.

④ Options

Name	Option code	See page	Standard price
Brake	B	→ A-42	—
Cable exit direction (top)	CJT	→ A-42	—
Cable exit direction (right)	CJR	→ A-42	—
Cable exit direction (left)	CJL	→ A-42	—
Cable exit direction (bottom)	CJB	→ A-42	—
Power-saving specification	LA	→ A-52	—
Non-motor end specification	NM	→ A-52	—

Actuator Specifications

Item	Description
Drive System	Ball screw, ø8mm, rolled C10
Positioning Repeatability	±0.02mm
Lost Motion	0.1mm or less
Base	Material: Aluminum, special alumite treated
Allowable static moment	Ma: 25.5 N·m, Mb: 36.5 N·m, Mc: 56.1 N·m
Allowable dynamic moment (*)	Ma: 6.57 N·m, Mb: 9.32 N·m, Mc: 14.32 N·m
Overhang load length	Within the load moment range
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (Non-condensing)

(*) Based on 5,000km of traveling life
Directions of allowable load moments

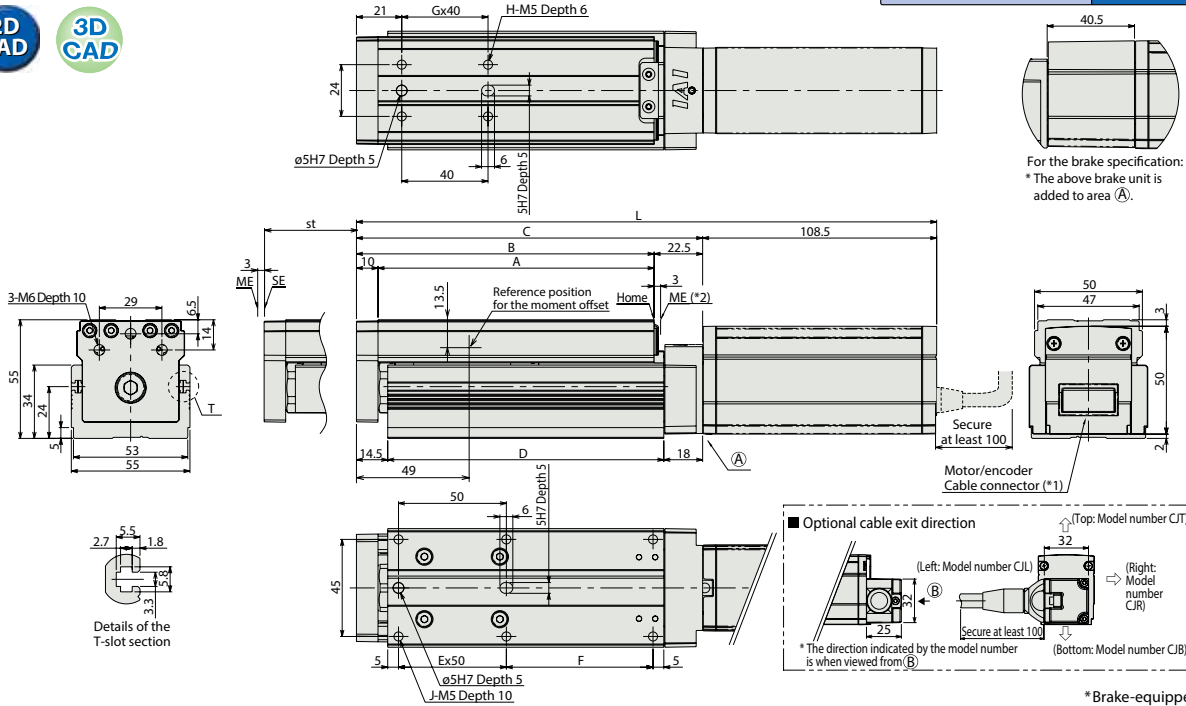


Dimensional Drawings

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



For Special Orders Appendix P.15



* Brake-equipped models are heavier by 0.3kg.

■ Dimensions and Weight by Stroke

Stroke	25	50	75	100
L Without brake	244	269	294	319
L With brake	284.5	309.5	334.5	359.5
A	103	128	153	178
B	113	138	163	188
C	135.5	160.5	185.5	210.5
D	103	128	153	178
E	1	1	2	2
F	43	68	43	68
G	1	1	2	2
H	4	4	6	6
J	6	6	8	8
Weight (kg)	1.2	1.4	1.5	1.7

(*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.
 ME : Mechanical end SE : Stroke end

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.

Name	External view	Model number	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	Reference page
Solenoid Valve Type		AMEC-C-20SI(①-②)-2-1	Easy-to-use controller, even for beginners	3 points	AC100V	2.4A rated	—	→ P537
		ASEP-C-20SI(①-②)-2-0	Simple controller operable with the same signal as a solenoid valve					→ P547
Solenoid valve multi-axis type PIO specification		MSEP-C-③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮⑯⑰⑱⑲⑳㉑㉒㉓㉔㉕㉖㉗㉘㉙㉚㉛㉜㉝㉞㉟㊱㊲㊳㊴㊵㊶㊷㊸㊹㊺㊻㊼㊽㊾㊿-2-0	Positioner type based on PIO control, allowing up to 8 axes to be connected	256 points	DC24V	(Standard) 1.7A rated 5.1A max. (Power-saving) 1.7A rated 3.4A max.	—	→ P563
Solenoid valve multi-axis type Network specification		MSEP-C-③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮⑯⑰⑱⑲⑳㉑㉒㉓㉔㉕㉖㉗㉘㉙㉚㉛㉜㉝㉞㉟㊱㊲㊳㊴㊵㊶㊷㊸㊹㊺㊻㊼㊽㊾㊿-0-0	Field network-ready positioner type, allowing up to 8 axes to be connected					→ P631
Positioner type		ACON-C-20SI(①-②)-2-0	Positioning is possible for up to 512 points	512 points	DC24V	(Standard) 1.7A rated 5.1A max. (Power-saving) 1.7A rated 3.4A max.	—	—
Safety-Compliant Positioner Type		ACON-CG-20SI(①-②)-2-0						
Pulse Train Input Type (Differential Line Driver)		ACON-PL-20SI(①-②)-2-0	Pulse train input type with differential line driver support	(—)	DC24V	(Standard) 1.7A rated 5.1A max. (Power-saving) 1.7A rated 3.4A max.	—	→ P631
Pulse Train Input Type (Open Collector)		ACON-PO-20SI(①-②)-2-0	Pulse train input type with open collector support					
Serial Communication Type		ACON-SE-20SI(①)-N-0-0	Dedicated Serial Communication	64 points	DC24V	(Standard) 1.7A rated 5.1A max. (Power-saving) 1.7A rated 3.4A max.	—	—
Program Control Type		ASEL-CS-1-20SI(①-②)-2-0	Programmed operation is possible. Can operate up to 2 axes	1,500 points	DC24V	(Standard) 1.7A rated 5.1A max. (Power-saving) 1.7A rated 3.4A max.	—	→ P675

* This is for the single-axis ASEL. * Enter the code "LA" in ① when the power-saving specification is specified. * ① indicates I/O type (NP/PN).
 * ③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮⑯⑰⑱⑲⑳㉑㉒㉓㉔㉕㉖㉗㉘㉙㉚㉛㉜㉝㉞㉟㊱㊲㊳㊴㊵㊶㊷㊸㊹㊺㊻㊼㊽㊾㊿ indicates number of axes (1 to 8). * ③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮⑯⑰⑱⑲⑳㉑㉒㉓㉔㉕㉖㉗㉘㉙㉚㉛㉜㉝㉞㉟㊱㊲㊳㊴㊵㊶㊷㊸㊹㊺㊻㊼㊽㊾㊿ indicates field network specification symbol.

- Slider Type
- Mini
- Standard
- Controllers Integrated
- Rod Type
- Mini
- Standard
- Controllers Integrated
- Table/ Arm/ Flat Type
- Mini
- Standard
- Gripper/ Rotary Type
- Linear Servo Type
- Clean-room Type
- Splash-Proof Type
- Pulse Motor
- Servo Motor (24V)
- Servo Motor (200V)
- Linear Servo Motor