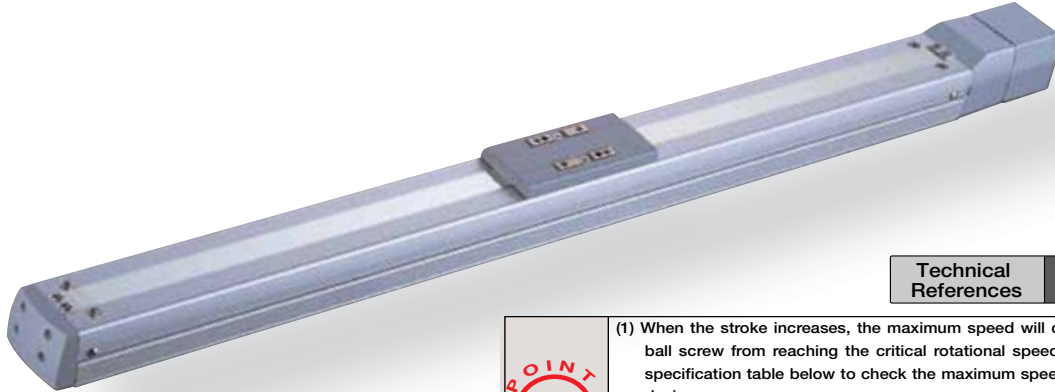


RCS2-SA5D

ROBO Cylinder Slider Type 52mm Width 200V Servo Motor
Motor Built-In (Direct Coupled)

■ Configuration:	RCS2	SA5D		20						
	Series	Type	Encoder	Motor	Lead	Stroke	Compatible Controllers	Cable Length	Option	
			I : Incremental A: Absolute	20: 20W Servo motor	12: 12mm 6: 6mm 3: 3mm	50: 50mm 500: 500mm (50mm pitch increments)	T1: XSEL-J/K T2: SCON SSEL XSEL-P/Q	N : None P : 1m S : 3m M : 5m X <input type="checkbox"/> : Custom Length R <input type="checkbox"/> : Robot Cable	BE : Brake (Cable exiting end) BL : Brake (Cable exiting left) BR : Brake (Cable exiting right) NM: Reversed-home SR: Slider Roller	

* See page Pre-35 for explanation of each code that makes up the configuration name.



Technical References P. A-5



(1) When the stroke increases, the maximum speed will drop to prevent the ball screw from reaching the critical rotational speed. Use the actuator specification table below to check the maximum speed at the stroke you desire.

(2) The load capacity is based on operation at an acceleration of 0.3G (0.2G for the 3mm-lead model).
These values are the upper limits for the acceleration.

Actuator Specifications

Lead and Load Capacity

Model	Motor Output (w)	Lead (mm)	Max. Load Capacity Horizontal (kg)	Max. Load Capacity Vertical (kg)	Rated Thrust (N)	Stroke (mm)
RCS2-SA5D-①-20-12-②-③-④-⑤	20	12	4	1	16.7	50 ~ 500 (50mm increments)
RCS2-SA5D-①-20-6-②-③-④-⑤		6	8	2	33.3	
RCS2-SA5D-①-20-3-②-③-④-⑤		3	12	4	65.7	

Legend ① Encoder ② Stroke ③ Compatible controller ④ Cable length ⑤ Options

Stroke and Maximum Speed

Stroke Lead	50 ~ 450 (50mm increments)	500 (mm)
12	800	760
6	400	380
3	200	190

(Unit: mm/s)

Encoder & Stroke List

② Stroke (mm)	Standard Price	
	① Encoder Type	
	Incremental	Absolute
	I	A
50	-	-
100	-	-
150	-	-
200	-	-
250	-	-
300	-	-
350	-	-
400	-	-
450	-	-
500	-	-

④ Cable List

Type	Cable Symbol	Standard Price
Standard	P (1m)	—
	S (3m)	—
	M (5m)	—
Special Lengths	X06 (6m) ~ X10 (10m)	—
	X11 (11m) ~ X15 (15m)	—
	X16 (16m) ~ X20 (20m)	—
Robot Cable	R01 (1m) ~ R03 (3m)	—
	R04 (4m) ~ R05 (5m)	—
	R06 (6m) ~ R10 (10m)	—
	R11 (11m) ~ R15 (15m)	—
	R16 (16m) ~ R20 (20m)	—
		—

* For cables for maintenance, see page A-39.

⑤ Option List

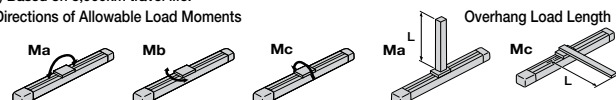
Name	Option Code	See Page	Standard Price
Brake (Cable exiting end)	BE	→ A-25	—
Brake (Cable exiting left)	BL	→ A-25	—
Brake (Cable exiting right)	BR	→ A-25	—
Reversed-home	NM	→ A-33	—
Slider Roller	SR	→ A-36	—

Actuator Specifications

Item	Description
Drive System	Ball screw Ø10mm C10 grade
Positioning Repeatability	±0.02mm
Lost Motion	0.1mm or less
Base	Material: Aluminum (white alumite treated)
Allowable Static Moment	Ma: 18.6N·m Mb: 26.6N·m Mc: 47.5N·m
Allowable Dynamic Moment (*)	Ma: 4.9N·m Mb: 6.8N·m Mc: 11.7N·m
Overhang Load Length	Ma direction: 150mm or less Mb-Mc direction: 150mm or less
Ambient Operating Temp./Humidity	0~40°C, 85% RH or less (Non-condensing)

(*) Based on 5,000km travel life.

Directions of Allowable Load Moments

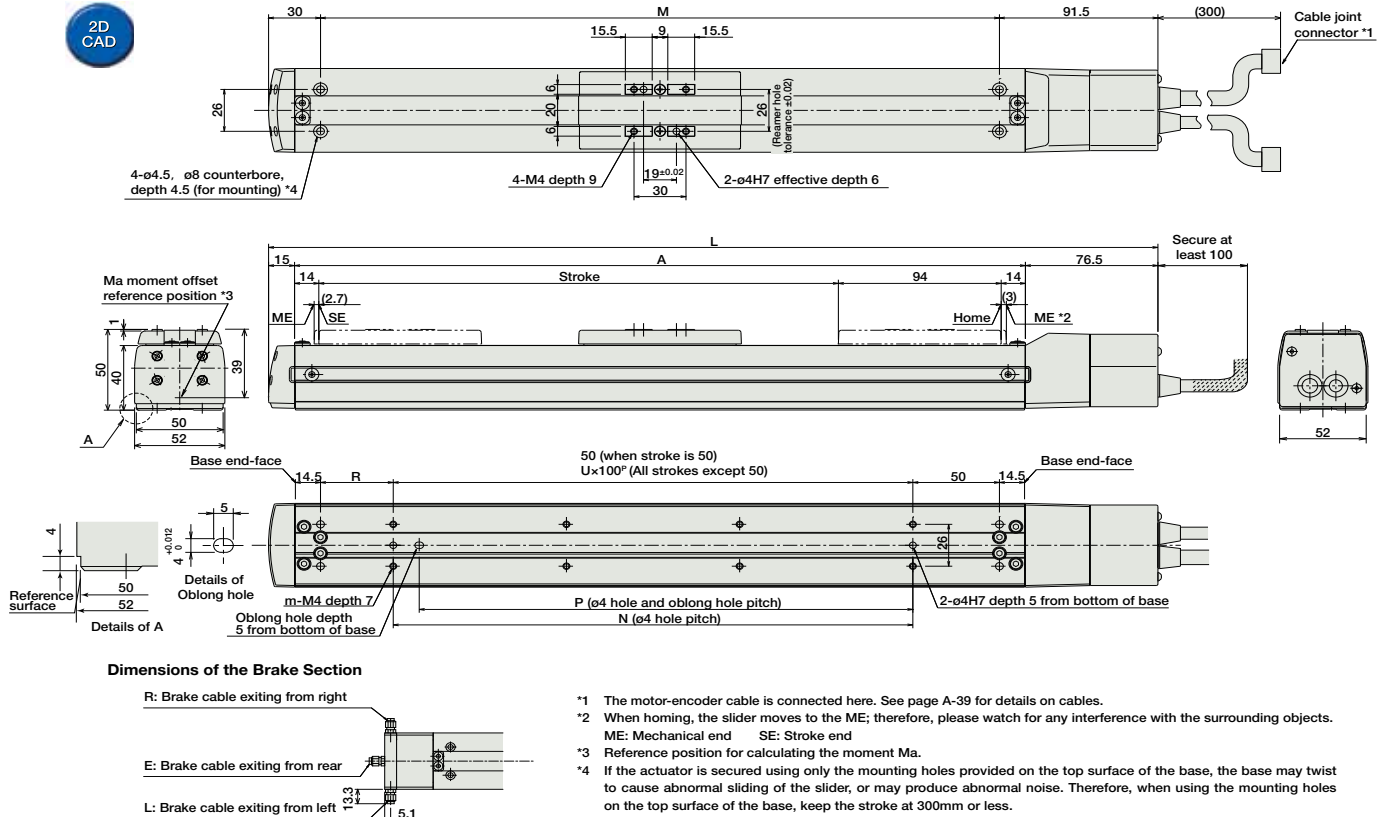


Dimensions

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

For Special Orders

P. A-9



■ Dimensions/Weight by Stroke

Stroke	50	100	150	200	250	300	350	400	450	500
L	263.5	313.5	363.5	413.5	463.5	513.5	563.5	613.5	663.5	713.5
A	172	222	272	322	372	422	472	522	572	622
M	142	192	242	292	342	392	442	492	542	592
N	50	100	100	200	200	300	300	400	400	500
P	35	85	85	185	185	285	285	385	385	485
R	42	42	92	42	92	42	92	42	92	42
U	—	1	1	2	2	3	3	4	4	5
m	4	4	4	6	6	8	8	10	10	12
Weight (kg)	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3

* Adding a brake increases the actuator's overall length (L) by 26.5mm (39.8mm with the cable coming out its end), and its weight by 0.3kg.

③ Compatible Controllers

The RCS2 series actuators can operate with the controllers below. Select the controller according to your usage.

Name	External View	Model	Description	Max. Positioning Points	Input Voltage	Power Supply Capacity	Standard Price	See Page
Positioner Mode		SCON-C-20①-NP-2-②	Positioning is possible for up to 512 points	512 points	Single-Phase AC 100V Single-Phase AC 200V 3-Phase AC 200V (XSEL-P/Q only)	360VA max. * When operating a 150W single-axis model	—	→ P547
Solenoid Valve Mode			Operable with same controls as solenoid valve.	7 points				
Serial Communication Type			Dedicated to serial communication	64 points				
Pulse Train Input Control Type			Dedicated to Pulse Train Input	(—)				
Program Control 1-2 Axis Type		SSEL-C-1-20①-NP-2-②	Programmed operation is possible Can operate up to 2 axes	20000 points			—	→ P577
Program Control 1-6 Axis Type		XSEL-③-1-20①-N1-EEE-2-④	Programmed operation is possible Can operate up to 6 axes	20000 points			—	→ P587

* For SSEL and XSEL, only applicable to the single-axis model.

* ① is a placeholder for the encoder type (I: incremental, A: absolute).

* ② is a placeholder for the power supply voltage (1: 100V, 2: single-phase 200V, 3: 3-phase 200V).

* ③ is a placeholder for the XSEL type name (J, K, P, or Q).

* ④ is a placeholder for the power supply voltage (1: 100V, 2: single-phase 200V, 3: 3-phase 200V).