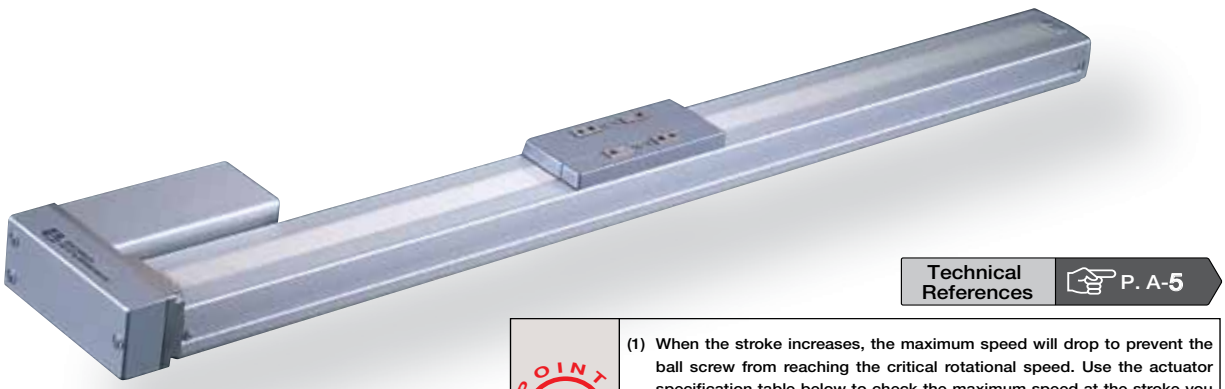
RCS2-SS7R

ROBO Cylinder Slider Type 60mm Width 200V Servo Motor
Side Mounted Motor Steel Base

■ Configuration: RCS2 — SS7R — ☐ — 60 — ☐ — ☐ — ☐ — ☐ — ☐ — ☐

Series	Type	Encoder	Motor	Lead	Stroke	Compatible Controllers	Cable Length	Option
RCS2	SS7R	I : Incremental A : Absolute	60: 60W Servo motor	12:12mm 6: 6mm	50: 50mm 〜 600:600mm (50mm pitch increments)	T1: XSEL-J/K T2: SCON SSEL XSEL-P/Q	N : None P : 1m S : 3m M : 5m X☐☐: Custom Length R☐☐: Robot Cable	See Options below * Be sure to specify which side the motor is to be mounted (ML/MR).

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



Pictured: Left-mounted motor model (ML).

Technical References P. A-5

POINT Notes on Selection

(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. 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-SS7R-①-60-12-②-③-④-⑤	60	12	15	4	85	50 〜 600 (50mm increments)
RCS2-SS7R-①-60-6-②-③-④-⑤		6	30	8	170	

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

■ Stroke and Maximum Speed

Lead \ Stroke	50 〜 500 (50mm increments)	〜 600 (mm)
12	600	470
6	300	230

(Unit: mm/s)

Encoder & Stroke List

② Stroke (mm)	Standard Price ① Encoder Type Incremental I	Standard Price ① Encoder Type Absolute A
50/100	-	-
150/200	-	-
250/300	-	-
350/400	-	-
450/500	-	-
550/600	-	-

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

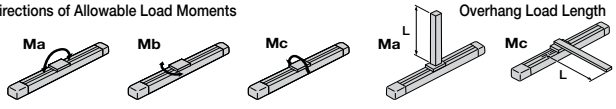
Name	Option Code	See Page	Standard Price
Brake	B	→ A-25	—
Reversed-home	NM	→ A-33	—
Left-Mounted Motor (Standard)	ML	→ A-33	—
Right-Mounted Motor	MR	→ A-33	—
Slider Roller	SR	→ A-36	—

Actuator Specifications

Item	Description
Drive System	Ball screw Ø10mm C10 grade
Positioning Repeatability	±0.02mm
Lost Motion	0.1mm or less
Base	Material: Special alloy steel
Allowable Static Moment	Ma: 79.4N·m Mb: 79.4N·m Mc: 172.9N·m
Allowable Dynamic Moment (*)	Ma: 14.7N·m Mb: 14.7N·m Mc: 33.3N·m
Overhang Load Length	Ma direction: 300mm or less Mb·Mc direction: 300mm or less
Ambient Operating Temp./Humidity	0〜40°C, 85% RH or less (Non-condensing)

(*) Based on 10,000km travel life.

Directions of Allowable Load Moments



Overhang Load Length

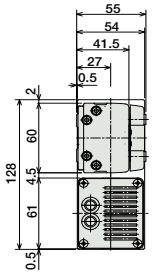
Dimensions

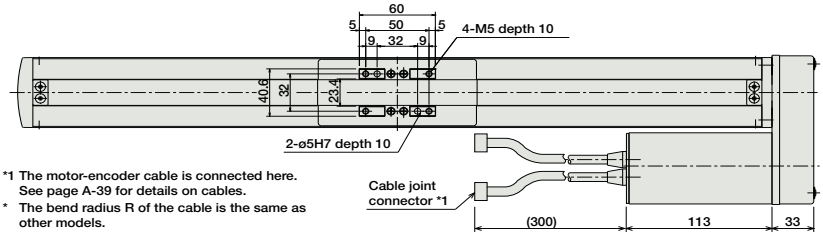
CAD drawings can be downloaded from IAI website. www.intelligentactuator.com

For Special Orders P. A-9

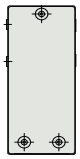
2D CAD

*The reference surface is the same as the SS7C type. (See P108)
*The offset reference position for the moment Ma is the same as the SS7C type. (See P108)



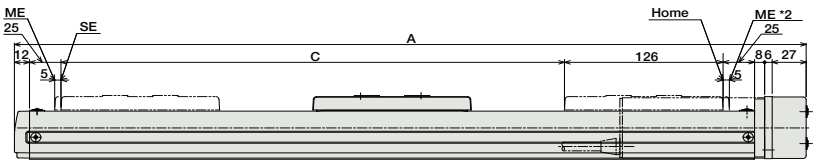


*1 The motor-encoder cable is connected here. See page A-39 for details on cables.
* The bend radius R of the cable is the same as other models.

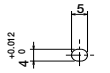


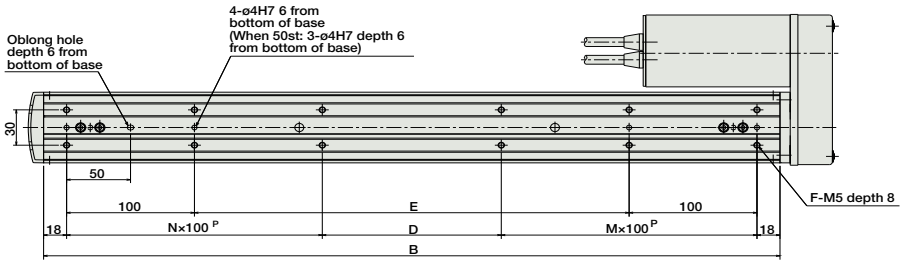
*2 When homing, the slider moves to the ME; therefore, please watch for any interference with the surrounding objects.
SE: Stroke end
ME: Mechanical end

* Note that in order to change the home orientation, arrangements must be made to send in the product to IAI.
* For the reversed-home model, the dimensions (distance from the ME to home) on the motor-side and that on the opposite side are flipped.

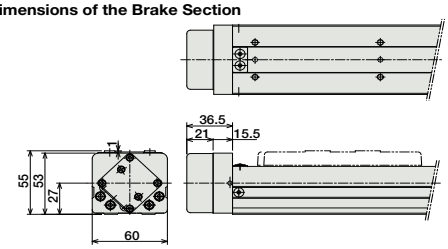


* Adding a brake increases the actuator's overall length by 24.5mm and its weight by 0.3kg.





Dimensions of the Brake Section



Dimensions/Weight by Stroke

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
A	279	329	379	429	479	529	579	629	679	729	779	829
B	226	276	326	376	426	476	526	576	626	676	726	776
C	50	100	150	200	250	300	350	400	450	500	550	600
D	90	40	90	140	190	40	90	140	190	40	90	140
E	0	40	90	140	190	240	290	340	390	440	490	540
F	6	8	8	8	8	12	12	12	12	16	16	16
M	1	1	1	1	1	2	2	2	2	3	3	3
N	0	1	1	1	1	2	2	2	2	3	3	3
Weight (kg)	3.7	4.0	4.3	4.6	4.9	5.2	5.5	5.8	6.1	6.4	6.7	7.0

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-60①-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-1-60①-NP-2-②	Programmed operation is possible Can operate up to 2 axes	20000 points			–	→P577
Program Control 1-6 Axis Type		XSEL-③-1-60①-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).