

RCS2-SS8C

ROBO Cylinder Slider Type 80mm Width 200V Servo Motor Coupled Steel Base

■ Configuration: **RCS2** — **SS8C** — [] — [] — [] — [] — [] — [] — []

Series — Type — Encoder — Motor — Lead — Stroke — Compatible Controllers — Cable Length — Option

I : Incremental
A: Absolute

100: 100W Servo motor
150: 150W Servo motor

20:20mm
10:10mm

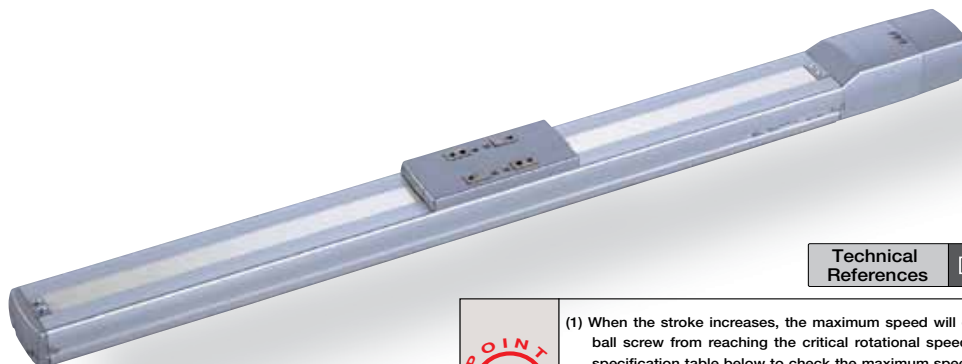
50: 50mm
1000:1000mm (50mm pitch increments)

T1: XSEL-J/K
T2: SCON
SSEL
XSEL-P/Q

N : None
P : 1m
S : 3m
M : 5m
X []: Custom Length
R []: Robot Cable

B : Brake
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

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		Rated Thrust (N)	Stroke (mm)
			Horizontal (kg)	Vertical (kg)		
RCS2-SS8C-①-100-20-②-③-④-⑤	100	20	20	4	84.9	50 ~ 1000 (50mm increments)
RCS2-SS8C-①-100-10-②-③-④-⑤		10	40	8		
RCS2-SS8C-①-150-20-②-③-④-⑤	150	20	30	6	128	
RCS2-SS8C-①-150-10-②-③-④-⑤		10	60	12		

Stroke and Maximum Speed

Stroke / Lead	50 ~ 600 (50mm increments)	~ 700 (mm)	~ 800 (mm)	~ 900 (mm)	~ 1000 (mm)
	20	1000	960	765	625
10	500	480	380	310	255

(Unit: mm/s)

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

Encoder & Stroke List

② Stroke (mm)	Standard Price			
	① Encoder Type			
	Incremental		Absolute	
	Motor power output		Motor power output	
	100W	150W	100W	150W
50/100	-	-	-	-
150/200	-	-	-	-
250/300	-	-	-	-
350/400	-	-	-	-
450/500	-	-	-	-
550/600	-	-	-	-
650/700	-	-	-	-
750/800	-	-	-	-
850/900	-	-	-	-
950/1000	-	-	-	-

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)	—
	R01 (1m) ~ R03 (3m)	—
Robot Cable	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

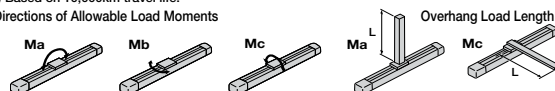
Name	Option Code	See Page	Standard Price
Brake	B	→ A-25	—
Reversed-home	NM	→ A-33	—
Slider Roller	SR	→ A-36	—

Actuator Specifications

Item	Description
Drive System	Ball screw ϕ 16mm C10 grade
Positioning Repeatability	\pm 0.02mm
Lost Motion	0.1mm or less
Base	Material: Special alloy steel
Allowable Static Moment	Ma: 198.9 N-m Mb: 198.9 N-m Mc: 416.7 N-m
Allowable Dynamic Moment (*)	Ma: 36.3 N-m Mb: 36.3 N-m Mc: 77.4 N-m
Overhang Load Length	Ma direction: 450mm or less Mb-Mc direction: 450mm 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



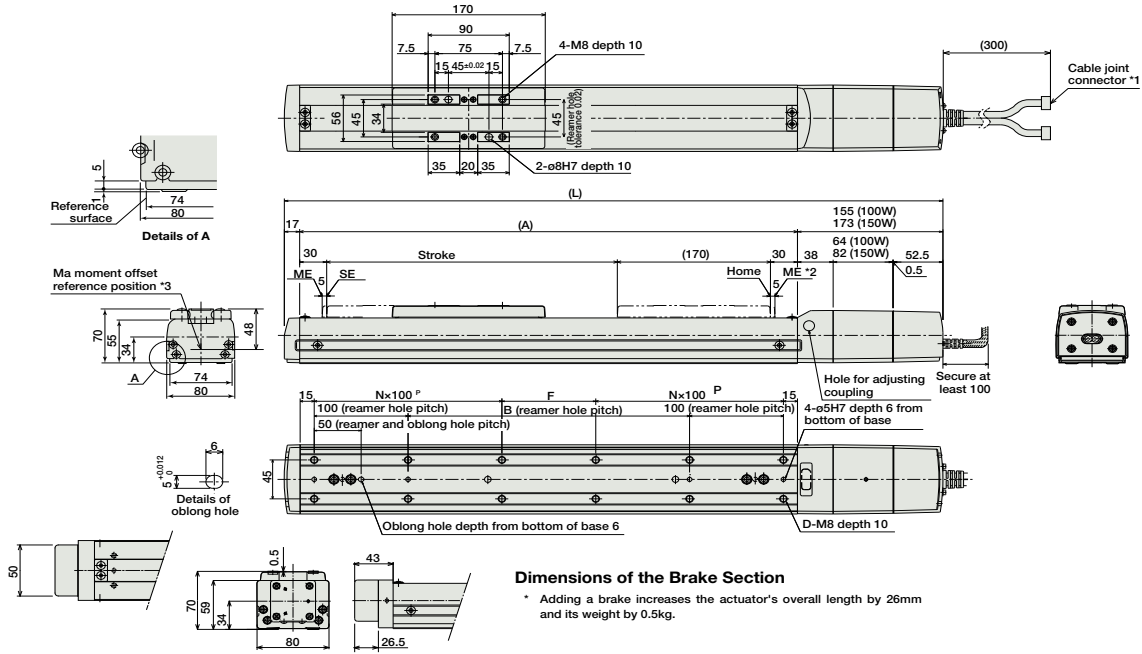
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Dimensions

For Special Orders P. A-9

- *1 A motor-encoder cable is connected here. See page A-39 for details on cables.
- *2 When homing, the slider moves to the ME; therefore, please watch for any interference with the surrounding objects.
ME: Mechanical end SE: Stroke end
- *3 Reference position for calculating the moment Ma.



Dimensions of the Brake Section

* Adding a brake increases the actuator's overall length by 26mm and its weight by 0.5kg.

■ Dimensions/Weight by Stroke

Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
L (100W)	452	502	552	602	652	702	752	802	852	902	952	1002	1052	1102	1152	1202	1252	1302	1352	1402
L (150W)	470	520	570	620	670	720	770	820	870	920	970	1020	1070	1120	1170	1220	1270	1320	1370	1420
A	280	330	380	430	480	530	580	630	680	730	780	830	880	930	980	1030	1080	1130	1180	1230
B	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
D	8	8	8	10	12	12	12	14	16	16	16	18	20	20	22	24	24	24	24	26
F	50	100	150	0	50	100	150	0	50	100	150	0	50	100	150	0	50	100	150	0
N	1	1	1	2	2	2	3	3	3	3	4	4	4	4	4	5	5	5	5	6
Weight (kg)	6.0	6.5	7.1	7.6	8.2	8.7	9.3	9.8	10.4	10.9	11.5	12.0	12.6	13.1	13.7	14.2	14.8	15.3	15.9	16.4

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-100①-NP-2-② SCON-C-150①-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-1-100①-NP-2-② SSEL-C-1-150①-NP-2-②	Programmed operation is possible Can operate up to 2 axes	20000 points			—	→ P577
Program Control 1-6 Axis Type		XSEL-③-1-100①-N1-EEE-2-④ XSEL-③-1-150①-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 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).

IAI

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- Slider Type
- Mini
- Standard
- Controllers Integrated
- Rod Type
- Mini
- Standard
- Controllers Integrated
- Table/Arm /Flat Type
- Mini
- Standard
- Gripper/ Rotary Type
- Linear Servo Type
- Cleanroom Type
- Splash-Proof
- Controllers
- PMEC /AMEC
- PSEP /ASEP
- ROBO NET
- ERC2
- PCON
- ACON
- SCON
- PSEL
- ASEL
- SSEL
- XSEL
- Pulse Motor
- Servo Motor (24V)
- Servo Motor (200V)
- Linear Servo Motor