

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

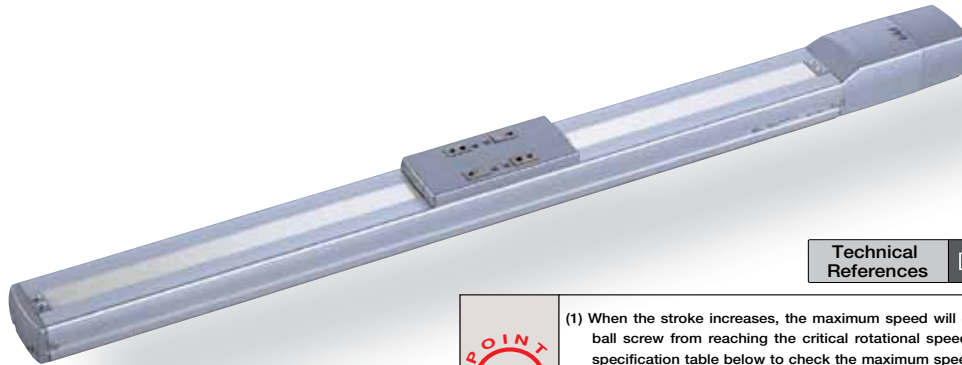
50: 50mm
1000:1000mm (50mm pitch increments)

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 | | |

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

■ 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)

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.

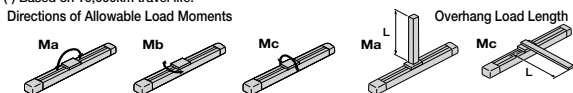
⑤ Option List

| 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 φ16mm C10 grade |
| Positioning Repeatability | ±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) |

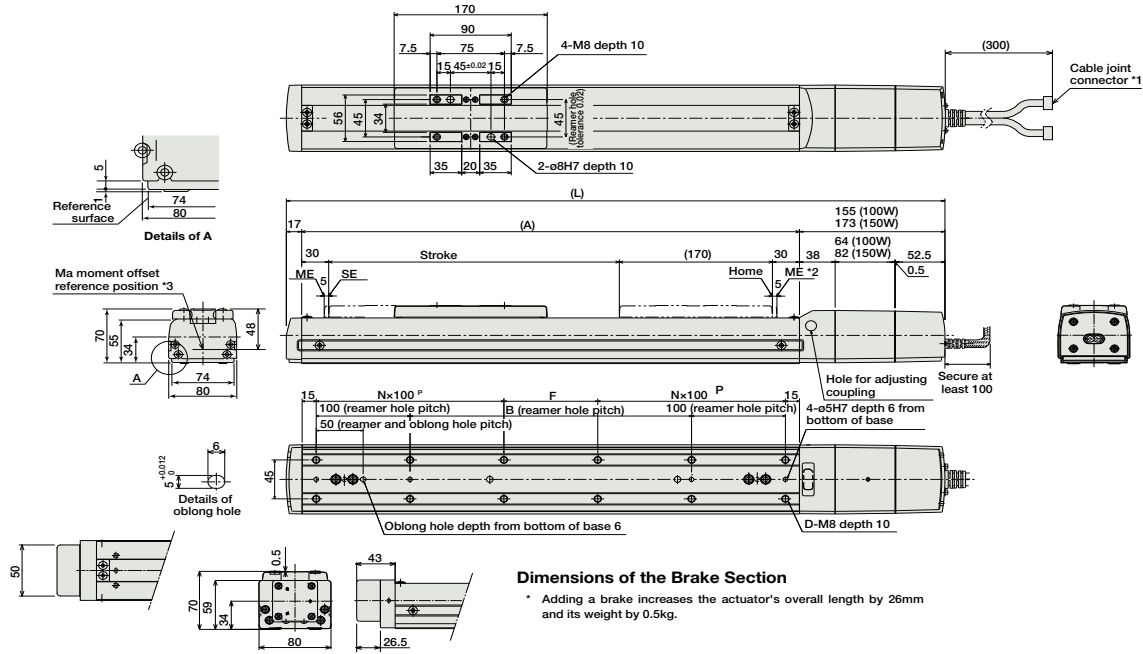
(*) Based on 10,000km travel life.



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/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 |

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).

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