

RCS2-RTC12L

Robo Cylinder, Hollow Rotary, Large Type, Actuator Width 123mm, 200V Servo Motor

Model Specification Items	RCS2 — RTC12L — <input type="checkbox"/> — 150 — <input type="checkbox"/> — 360 — T2 — <input type="checkbox"/> — <input type="checkbox"/>
	Series — Type — Encoder type — Motor type — Deceleration Ratio — Oscillation Angle — Applicable controller — Cable length — Options
	RTC12L: Large type I: Incremental A: Absolute 150: 150W Servo motor 18: 1/18 deceleration ratio 30: 1/30 deceleration ratio 360: 360-degrees (multiple rotation) T2: SCON MSCON SSEL XSEL-P/Q XSEL-R/S N: None P: 1m S: 3m M: 5m X <input type="checkbox"/> : Custom length R <input type="checkbox"/> : Robot cable See Options below.

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



*CE compliance is optional.



Technical References Appendix P.5

- POINT** Notes on selection
- The rated and maximum acceleration is 0.3G.
 - Positioning mode can move between 0 to 9,999.99 deg (0 to 6,140.99 deg with reduction ratio of 1/30). Index rotation mode can move from 0 to 359.99 deg. (Once the actuator moves beyond 359.99 deg, it resets to 0 without having to rotate back to home.)
 - Actuator may vibrate as it moves if the speed is lower than 100 deg/s. Please drive the unit at or above 100mm/s.

Actuator Specifications

Leads and Payload

Model number	Motor Output (W)	Deceleration Ratio	Max. Torque (N·m)	Allowable Movement of Inertia (kg·m ²)	Oscillation Angle (deg)
RCS2-RTC12L-①-150-18-360-T2-②-③	150	1/18	5.2	0.1	360 (*)
RCS2-RTC12L-①-150-30-360-T2-②-③		1/30	8.6	0.17	

Deceleration Ratio and Max. Speed

Deceleration ratio	Stroke	360 (deg)
	1/18	800
1/30	600	600

Code explanation ① Encoder type ② Cable length ③ Options

* Refer to "POINT Notes on Selection" above.

(Unit: degrees/s)

① Encoder Type

Type	Standard price	
	① Encoder Type	
	Incremental	Absolute
RTC12L	—	—

② Cable Length

Type	Cable symbol	Standard Price
Standard	P (1m)	—
	S (3m)	—
	M (5m)	—
Special length	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)	—

* See page A-59 for cables for maintenance.

③ Options

Name	Option code	See page	Standard price
Brake	B	→ A-42	—
CE-compliant specification	CE	→ A-42	—
Limit switch (standard)	L	→ A-51	—
Reversed-rotation	NM	→ A-52	—

Actuator Specifications

Item	Description
Drive System	Timing belt drive system + hypoid gear
Positioning repeatability	±0.005 degrees
Backlash	±0.05 degrees or less
Allowable thrust load	800N
Allowable load moment	25 N·m
Brake retention torque	1.0 N·m
Weight	6.5kg
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (Non-condensing)

Dimensional Drawings

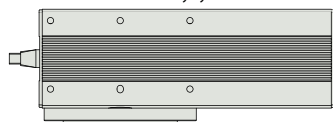
CAD drawings can be downloaded from the website. www.intelligentactuator.com

For Special Orders Appendix P.15

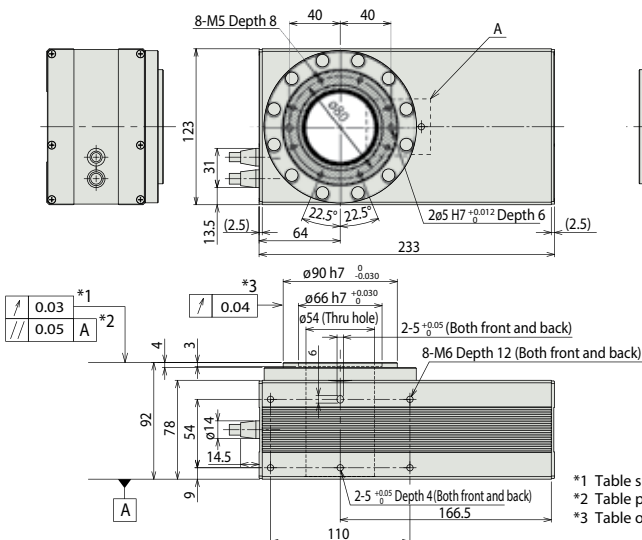


* Connect the motor and encoder cables here. (See page A-59 for details on cables.)

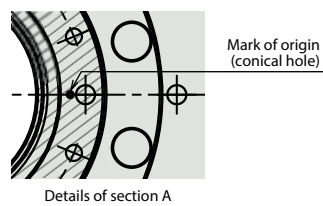
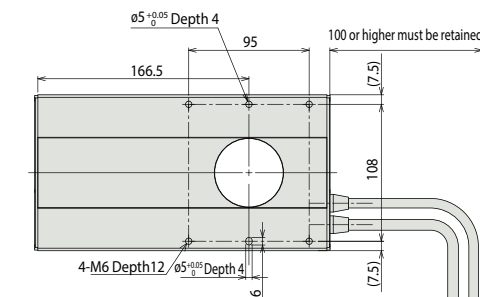
Dimensions of mounting holes on the side are bilaterally symmetric.



Caution
* The shaded area in the top view shows the rotation area.



*1 Table surface circular runout
*2 Table parallelism
*3 Table outer diameter runout



Note:
The position in the detail A drawing above is the homing location for both standard type/reversed rotation type (Option "-NM"). Looking from the above, the standard type will rotate counter clockwise during homing, and it moves clockwise afterward. Reverse rotation type will move clockwise during homing and moves counter clockwise afterward.

Applicable Controllers

RCS2-series actuators can be operated with the following controllers. Select an appropriate controller type according to your application.

Name	External view	Model number	Features	Maximum number of positioning points	Input power	Power supply capacity	Standard price	Reference page		
Positioner mode		SCON-CA-150①-NP-2-②	Up to 512 positioning points are supported.	512 points	Single-phase 100VAC Single-phase 200VAC 3-phase 200VAC (XSEL-P/Q/R/S ONLY)	408 VA max. *Power supply capacity will vary depending on the controller, so please refer to the instruction manual for details.	—	→ P643		
Solenoid valve mode			Actuators can be operated through the same control used for solenoid valves.	7 points						
Field network type			Movement by numerical specification is supported.	768 points						
Pulse-train input control type			Dedicated pulse-train input type	(—)						
Positioner multi-axis, network type		MSCON-C-1-150①-③-0-④	Up to 6 axes can be operated. Movement by numerical specification is supported.	256 points			—	→ P655		
Program control type, 1 to 2 axes		SSEL-CS-1-150①-NP-2-②	Program operation is supported. Up to 2 axes can be operated.	20,000 points					—	→ P685
Program control type, 1 to 8 axes		XSEL③-1-150①-N1-EEE-2-④	Program operation is supported. Up to 8 axes can be operated.	Varies depending on the number of axes connected					—	→ P695

* This is for the single-axis MSCON, SSEL, and XSEL.
 * ① indicates the power-supply voltage type (1: 100V / 2: Single-phase 200V).
 * ② indicates the power-supply voltage type (1: 100V / 2: Single-phase 200V / 3: Three-phase 200V).
 * ③ indicates the encoder type (I: Incremental / A: Absolute).
 * ④ indicates the XSEL type (J / K / P / Q / R / S).
 * ⑤ 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