RCS2-RTC10L

Robo Cylinder, Hollow Rotary, Medium Type, Actuator Width 99mm, 200V Servo Motor

Model Specification Items

RCS2 — **RTC10L** — □ — **60** — □ — **360** — **T2** — □ — □

Series	Type	Encoder type	Motor type	Deceleration Ratio	Oscillation Angle	Applicable controller	Cable length	Options
	RTC10L: Medium type	I: Incremental A: Absolute	60: 60W Servo motor	15: 1/15 deceleration ratio 24: 1/24 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□□: Custom length R□□: Robot cable	See Options below.

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

CE RoHS

*CE compliance is optional.

Technical References Appendix P.5

POINT Notes on selection

(1) The rated and maximum acceleration is 0.3G.
(2) Positioning mode can move between 0 to 9,999.99 deg (0 to 7,670.99 deg with reduction ratio of 1/24).
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.)
(3) 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·m²)	Oscillation Angle (deg)
RCS2-RTC10L-①-60-15-360-T2-②-③	60	1/15	1.7	0.033	360 (*)
RCS2-RTC10L-①-60-24-360-T2-②-③		1/24	2.8	0.054	

Code explanation ① Encoder type ② Cable length ③ Options

* Refer to "POINT Notes on Selection" above.

■ Deceleration Ratio and Max. Speed

Deceleration ratio \ Stroke	360 (deg)
1/15	1200
1/24	750

(Unit: degrees/s)

①Encoder Type

Type	Standard price	
	①Encoder Type	
	Incremental	Absolute
RTC10L	—	—

②Cable 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.

③Options

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	600N
Allowable load moment	10 N·m
Brake retention torque	0.45 N·m
Weight	3.5kg
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (Non-condensing)

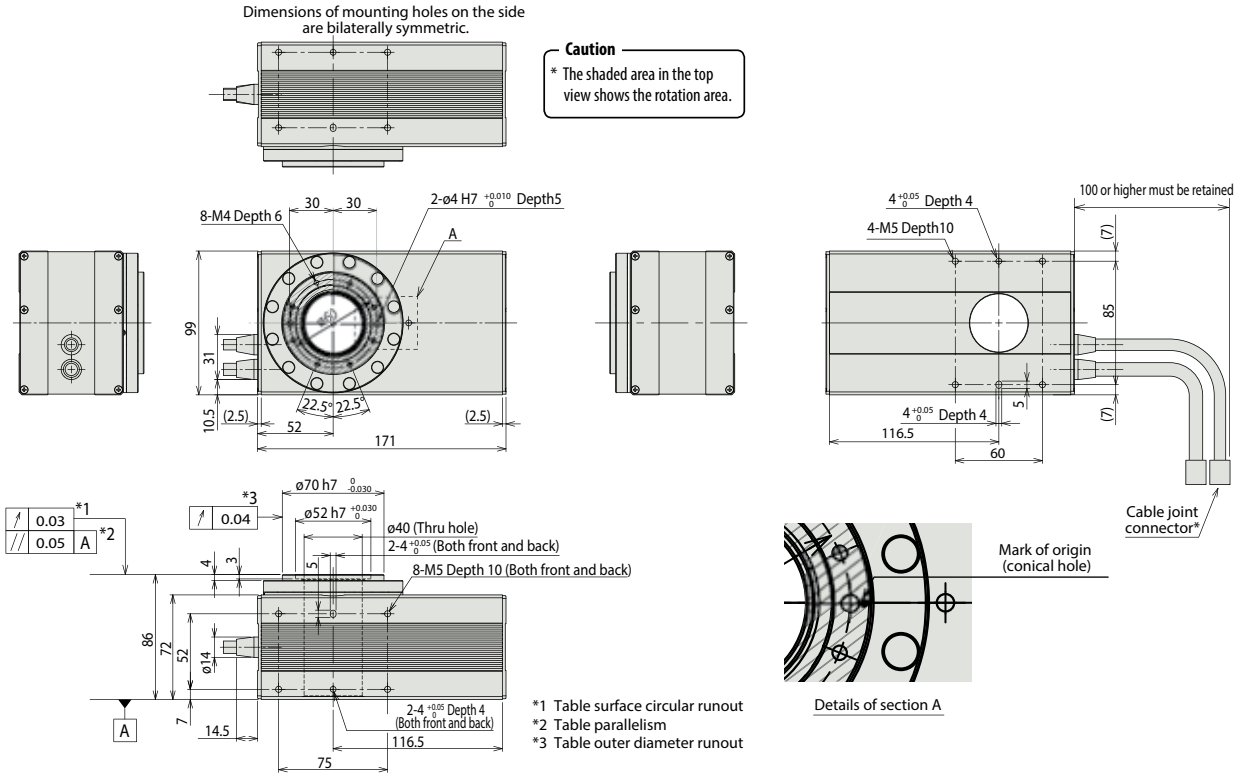
Dimensional Drawings

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

For Special Orders Appendix P.15

2D CAD 3D CAD

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



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-60Ⓘ-NP-2-Ⓘⅈ	Up to 512 positioning points are supported.	512 points	Single-phase 100VAC Single-phase 200VAC 3-phase 200VAC (XSEL-P/Q/R/S ONLY)	218 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-1-60Ⓘ-Ⓥ-0-Ⓘⅈ	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-1-60Ⓘ-NP-2-Ⓘⅈ	Program operation is supported. Up to 2 axes can be operated.	20,000 points			—	→ P685
Program control type, 1 to 8 axes		XSEL-Ⓙ-1-60Ⓘ-N1-EEE-2-Ⓥ	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.
* Ⓘ indicates the encoder type (I: Incremental / A: Absolute).
* Ⓙ indicates the power-supply voltage type (1: 100V / 2: Single-phase 200V).
* Ⓙ indicates the XSEL type (J / K / P / Q / R / S).
* Ⓥ indicates the power-supply voltage type (1: 100 V / 2: Single-phase 200V / 3: Three-phase 200V).
* Ⓥ indicates field network specification symbol.