

RCP2-RTBL

RCP2-RTCL

Multiple rotation rotary that
can spin continually in a
single direction



Model
RCP2-RTBL



Model
RCP2-RTCL

1 Positioning of 360 degrees and beyond is possible

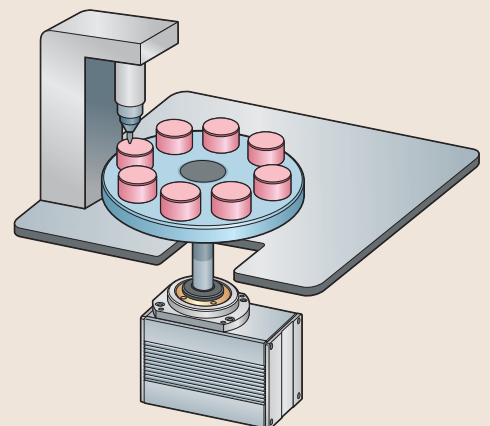
As there is no stopper, positioning of 360 degrees and beyond is possible. Capable of continuous back-to-back movement maximized at 9999 degrees.

2 Unlimited rotary operation is possible

As with a conveyer, due to an ability to operate in a single rotating direction, the machine is able to continually feed in a single direction to allow for a continual workflow. (※However, the distance of a single rotation during an unlimited rotation operation is ± 360 degrees or less)

3 A short-cut control can be used

It becomes possible to reduce the cycle time when the short-cut control is used.



(Examples of use)

Used for component manufacturing index table
(Linked rotation)

Type

RCP2	I	28P	360	P1		
Series	Type	Encoder type	Motor type	Reduction ratio	Oscillating angle	Adaptive controller
RTBL: Vertical Multiple rotation type	RTCL: Flat type Multiple rotation type	I: Incremental Specification	28P: Pulse motor 28 opening size	20: Reduction ratio 1/20 30: Reduction ratio 1/30	360: 360 degrees	P1: PCON PSEL
						Cable length N: None, P: 1m S: 3m, M: 5m X□□: Length specification R□□: Robot cable
						Option NM: Negative rotation specification SA: Shaft adapter TA: Table adapter

Specifications

Items		Contents			
Model		RCP2-RTBL		RCP2-RTCL	
Speed reducing ratio		1/20	1/30	1/20	1/30
Maximum torque		1.1N·m	1.7N·m	1.1N·m	1.7N·m
Maximum speed		600 degrees/s	400 degrees/s	600 degrees/s	400 degrees/s
Operating range (※1)	Index mode	0 ~ 359.99 degrees			
	Normal mode	Unlimited (However, the movement of a single rotation is ±360 degrees or less)			
		-9999 ~ 9999 degrees (※2)			
Positioning accuracy		±0.01 degrees			
Origin return precision		Within or equal to ±0.05 degrees			
Backlash		±0.1 degrees			
Permissible moment of inertia		0.01kg·m ²	0.015kg·m ²	0.01kg·m ²	0.015kg·m ²
Motor cable		CB-RCP2-MA□□□			
Encoder cable		CB-RCP2-PB□□□ (Caution: The encoder cable is different from the other RCP2 cable and exclusive to this actuator)			
Use environment		Temperature: 0~40°C, level of humidity: 20~85% RH or less (Non condensing)			
Actuator mass		0.86kg		0.92kg	

(※1)The standard operation is a clockwise rotation when viewed from above. (It is also possible to select a counterclockwise rotation option) (※2)When the parameter's soft limit value is maximized. (The standard is set between 0 ~ 359.99 degrees)

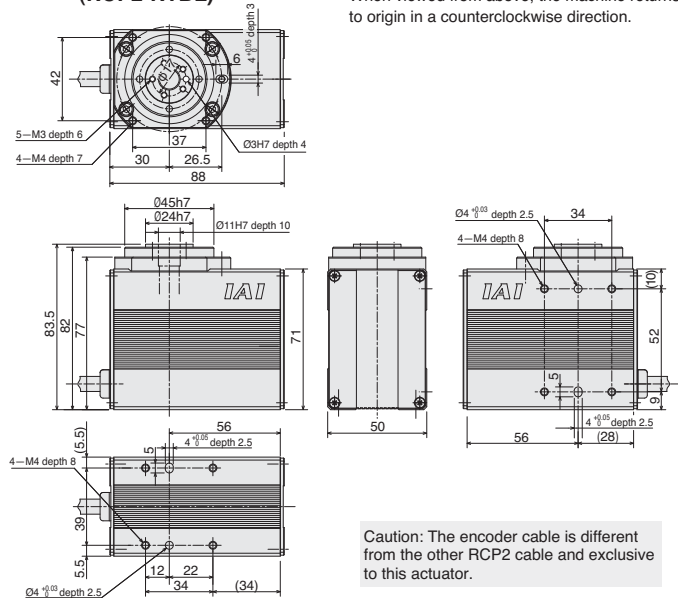
Operation mode

The RCP2 rotary multiple rotation specification can operate using the following 2 modes.

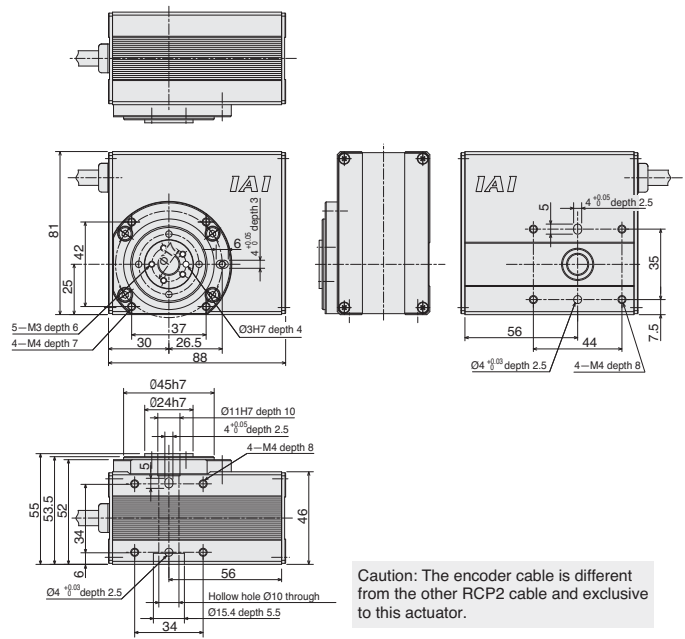
Contents	Short-cut operation control
Index mode (Standard setting) Although the range (position movement) during normal operation is between 0 ~ 359.99 degrees, in pitch feeding movement cases, unlimited rotation is possible. (However, a single movement is ±360 degrees or less) When the coordinate value exceeds 359.99 degrees, there is a return to "0".	Usable in cases of positional movement
Normal mode From a starting point of "0", the encoder's counter can be controlled to the maximum possible value under the same principle as a direct actuator. (It is also possible to operate in the negative direction) However, the pitch feeding movement can only rotate a maximum of 9999 degrees in a single direction.	Not usable

Outline view

(RCP2-RTBL)



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