

RCP2-RTCS/RTCSL

ROBO Cylinder Rotary Small Flat Type 72mm Width Pulse Motor

■ Configuration: **RCP2** - - **I** - **20P** - - - - -

Series - Type - Encoder - Motor - Deceleration Ratio - Oscillation Angle - Compatible Controllers - Cable Length - Option

RTCS : 330 degree I: Incremental rotation * The Simple absolute encoder is also considered type "I".
 RTCSL : Multi-rotational

28P : 28 □ size Pulse motor
 30: 1/30 deceleration ratio
 45: 1/45 deceleration ratio

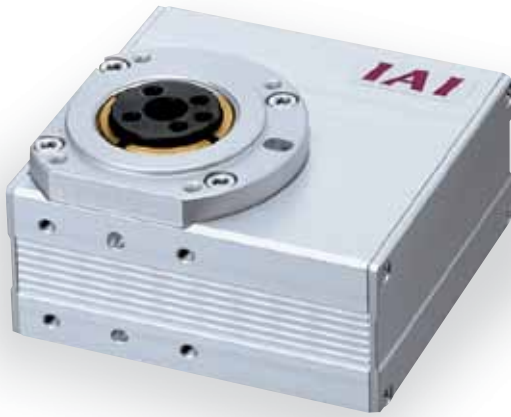
330: 330degrees (RTCS only)
 360: 360degrees (RTCSL only)

P1: PCON
 P2: RCON
 P3: PMEC
 PSEP

N : None
 P : 1m
 S : 3m
 M : 5m
 X□□ : Custom
 R □□ : Robot cable

NM : Reversed-rotation
 SA : Shaft adapter
 TA : Table adapter

* See page Pre-35 for an explanation of the naming convention.



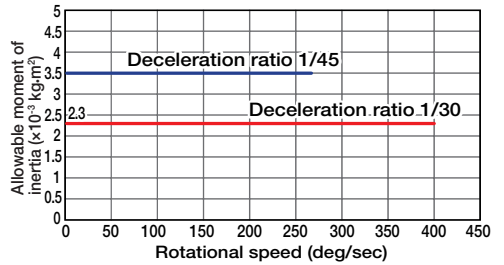
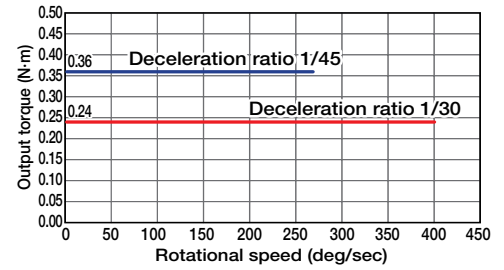
Technical References P. A-5



- (1) The output torque decreases as the rotational speed increases. Check the output torque graph on the right to see whether the speed required for your desired motion is supported.
- (2) The allowable moment of inertia of the rotated work piece varies with the rotational speed. Check the Allowable Moment of Inertia graph on the right to see if the moment of inertia required for your desired motion is within the allowable range.
- (3) The rated acceleration while moving is 0.2G.

Speed vs. Load Capacity

Due to the characteristics of the Pulse motor, the RCP2 series' load capacity decreases at high speeds. In the table below, check if your desired speed and load capacity are supported.



Actuator Specifications

Lead and Load Capacity

Model	Deceleration Ratio	Max. Torque (N·m)	Allowable Moment of Inertia (kg·m ²)	Oscillation Angle (deg)
RCP2-RTCS-I-20P-30-330-①-②-③	1/30	0.24	0.0023	330
RCP2-RTCS-I-20P-45-330-①-②-③	1/45	0.36	0.0035	
RCP2-RTCSL-I-20P-30-360-①-②-③	1/30	0.24	0.0023	360
RCP2-RTCSL-I-20P-45-360-①-②-③	1/45	0.36	0.0035	

Legend: ① Compatible controller ② Cable length ③ Options

Deceleration Ratio and Max. Speed

Deceleration Ratio	Stroke	330/360 (deg)
	1/30	400
1/45	266	

(Unit: degrees/s)

Stroke List

Type	Oscillation Angle (deg)	Standard Price
RTCS	330	-
RTCSL	360	-

② Cable List

Type	Cable Symbol	Standard Price
Standard Type (Robot Cables)	P (1m)	-
	S (3m)	-
	M (5m)	-
Special Lengths	X06 (6m) ~ X10 (10m)	-
	X11 (11m) ~ X15 (15m)	-
	X16 (16m) ~ X20 (20m)	-
		-

* The standard cable is the motor-encoder integrated robot cable.

* See page A-39 for cables for maintenance.

③ Option List

Name	Option Code	See Page	Standard Price
Reversed-rotation (*)	NM	→ A-33	-
Shaft adapter	SA	→ A-35	-
Table adapter	TA	→ A-37	-

* Reversed-rotation option can be selected on the multi-rotational model only.

Actuator Specifications

Item	Description
Drive System	Hypoid gear
Positioning Repeatability	±0.05 degrees
Homing Accuracy	±0.05 degrees
Lost Motion	±0.1 degrees
Allowable Thrust Load	30N
Allowable Load Moment	3.6N·m
Weight	0.52kg
Ambient Operating Temp./Humidity	0 ~ 40°C, 85% RH or less (non-condensing)

