

- 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

RCP2-BA6/BA6U ROBO Cylinder Belt Type 58mm Width Pulse Motor

Top-Mounted Motor / Bottom-Mounted Motor

■ Configuration: **RCP2** — — **I** — **42P** — **54** — — — —

Series — Type — Encoder — Motor — Lead — Stroke — Compatible Controllers — Cable Length — Option

BA6 :Belt type Top-mounted motor
 BA6U:Belt type Botom-mounted motor
 I: Incremental * The Simple absolute encoder models are labeled as "I".
 42P: Pulse motor 42 □ size equivalent
 54:54mm 500: 500mm 1000:1000mm (50mm pitch increments)
 P1: PCON RPCON PSEL P3: PMEC PSEP
 N : None P : 1m S : 3m M : 5m X □ : Custom Length R □ : Robot cable
 NM : Reversed-home

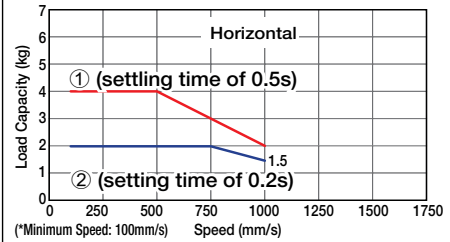
* See page Pre-35 for explanation of each code that makes up the configuration name.



Technical References A-5

- POINT** Notes on Selection
- Operating the belt type actuator at low speeds may cause vibration and/or resonance. Therefore, please set the speed at 100mm/s or faster.
 - Since the RCP2 series use a pulse motor, the load capacity decreases at high speeds. Check in the Speed vs. Load Capacity graph to see if your desired speed and load capacity are supported.
 - The load capacity is based on operation at an acceleration of 0.5G. 0.5G is the upper limit for the acceleration.

■ 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.



Note:
 Graph ① is for standard specifications, with settling time of 0.5s for calculating the positioning time.
 Graph ② reflects some changes in the controller settings. The load capacity is lower, however the settling time is decreased to 0.2s.
 If the load capacity is lower than graph ②, and you want to shorten the positioning time, change the controller settings. (See the manual for details.)
 (Vertical operation is not possible.)

Actuator Specifications									
Lead and Load Capacity			Stroke and Maximum Speed						
(Note 1) Please note that the maximum load capacity decreases as the speed increases.									
Model	Motor Mounting Direction	Lead (mm)	Max. Load Capacity (Note 1)		Stroke (mm)				
RCP2-BA6-I-42P-54-①-②-③-④	Top	54 equivalent	Horizontal (kg)	Vertical (kg)	500 ~ 1000 (50mm increments)				
RCP2-BA6U-I-42P-54-①-②-③-④	Bottom		~ 4	Not Allowed					
Legend ① Stroke ② Compatible controller ③ Cable length ④ Options			<table border="1"> <thead> <tr> <th>Stroke</th> <th>500 ~ 1000 (50mm increments)</th> </tr> </thead> <tbody> <tr> <td>54 equivalent</td> <td>1000</td> </tr> </tbody> </table>			Stroke	500 ~ 1000 (50mm increments)	54 equivalent	1000
Stroke	500 ~ 1000 (50mm increments)								
54 equivalent	1000								

(Unit: mm/s)

① Stroke List

Stroke (mm)	Standard Price
500	-
550	-
600	-
650	-
700	-
750	-
800	-
850	-
900	-
950	-
1000	-

③ 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)	-

* See page A-39 for cables for maintenance.

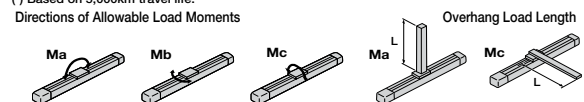
④ Option List

Name	Option Code	See Page	Standard Price
Reversed-home	NM	→ A-33	-

Actuator Specifications

Item	Description
Drive System	Timing Belt
Positioning Repeatability	±0.1mm
Lost Motion	0.1mm or less
Allowable Dynamic Moment (*)	Ma: 8.9 N·m Mb: 12.7 N·m Mc: 18.6 N·m
Overhang Load Length	Ma direction: 150mm or less; Mb-Mc direction: 150mm or less
Ambient Operating Temp./Humidity	0~40°C, 85% RH or less (Non-condensing)

(*) Based on 5,000km travel life.



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