

# RCP3-TA3C

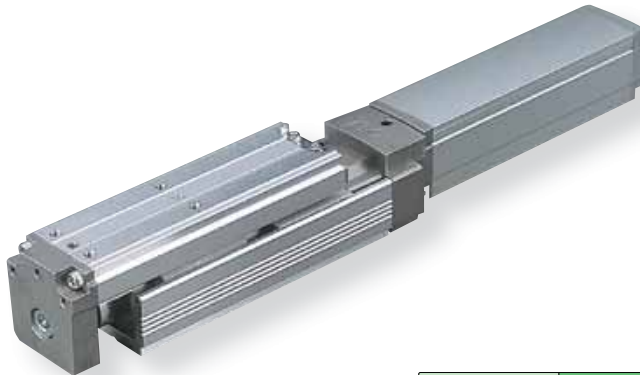
ROBO Cylinder Mini Table Type Motor Unit Coupled 36mm Width Pulse Motor Ball Screw

■ Configuration: **RCP3** — **TA3C** — **I** — **20P** —  —  —  —  —

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

I: Incremental \* The simple absolute encoder is also considered type "I".  
 20P: Pulse motor 20 □ size  
 6: 6mm 20: 20mm  
 4: 4mm  
 2: 2mm 100: 100mm (10mm pitch increments)  
 P1: PCON RPCON PSEL P3: PMEC PSEP  
 N: None P: 1m S: 3m M: 5m  
 X □ □ : Custom See Options below

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



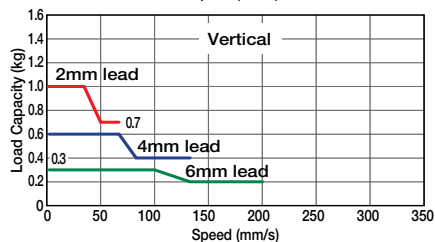
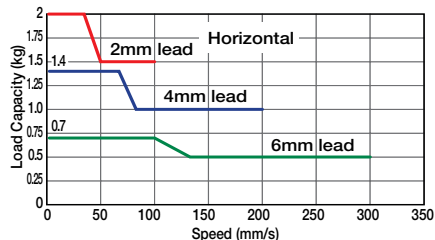
Technical References P. A-5



(1) The load capacity is based on operation at an acceleration of 0.3G (0.2G for the 2mm-lead model, or when used vertically). 0.3G (0.2G for 2mm lead) is the upper limit of the acceleration.

### Speed vs. Load Capacity

Due to the characteristics of the Pulse motor, the RCP3 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

(Note 1) Please note that the maximum load capacity decreases as the speed increases.

Model	Feed Screw	Lead (mm)	Max. Load Capacity (Note 1)		Maximum Push Force (N) (Note 2)	Positioning Repeatability (mm)	Stroke (mm)
			Horizontal (kg)	Vertical (kg)			
RCP3-TA3C-I-20P-6-①-②-③-④	Ball Screw	6	~ 0.7	~ 0.3	9	±0.02	20~100 (10mm increments)
RCP3-TA3C-I-20P-4-①-②-③-④		4	~ 1.4	~ 0.6	14		
RCP3-TA3C-I-20P-2-①-②-③-④		2	~ 2	~ 1	28		

Legend ① Stroke ② Compatible controller ③ Cable length ④ Options (Note 2) See page A-66 for pushing force graphs. \* The values enclosed in "< >" apply to vertical usage. (Unit: mm/s)

#### Stroke and Maximum Speed

Lead	Stroke	
	20 ~ 100 (mm)	200 ~ 300 (mm)
Ball Screw	6	300 <200>
	4	200 <133>
	2	100 <67>

#### ① Stroke List

Stroke (mm)	Standard Price
20	-
30	-
40	-
50	-
60	-
70	-
80	-
90	-
100	-

#### ③ Cable List

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

\* The RCP3 comes standard with a robot cable.  
 \* See page A-39 for cables for maintenance.

#### ④ Option List

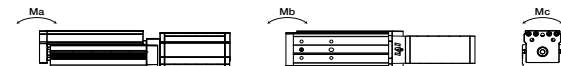
Name	Option Code	See Page	Standard Price
Brake	B	→ A-25	-
Reversed-home	NM	→ A-33	-

#### Actuator Specifications

Item	Description
Drive System	Ball screw ø6mm C10 grade
Lost Motion	0.1mm or less
Base	Material: Aluminum (white alumite treated)
Allowable Dynamic Moment (Note 3)	Ma: 3.2 N-m Mb: 4.6 N-m Mc: 5.1 N-m
Ambient Operating Temp./Humidity	0~40°C, 85% RH or less (non-condensing)

(Note 3) Based on a 5,000km service life.

#### Directions of Allowable Load Moments



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