

RCP3-TA7R ROBO Cylinder Table Type Side-Mounted Motor 75mm Width Pulse Motor Ball Screw

■ Configuration: **RCP3** — **TA7R** — **I** — **42P** — — — — —

Series	Type	Encoder	Motor	Lead	Stroke	Compatible Controllers	Cable Length	Option
I: Incremental * The simple absolute encoder is also considered type "I".		42P: Pulse motor 42 □ size	12 : 12mm 6 : 6mm 3 : 3mm	25: 25mm 200: 200mm (25mm pitch increments)	P1: PCON RCON PSEL P3: PMEC PSEP	N : None P : 1m S : 3m M : 5m X □ □ : Custom	See Options below * Be sure to specify which side the motor is to be mounted (ML/MR).	

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

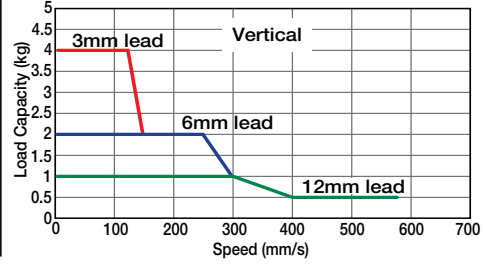
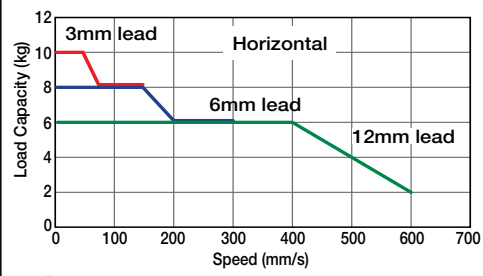


Technical References P. A-5



- Since the RCP3 series use a pulse motor, the load capacity decreases at high speeds. Check in the Speed vs. Load Capacity graph below to see if your desired speed and load capacity are supported.
- Please note that the maximum speed is different when used horizontally versus vertically.
- The load capacity is based on operation at an acceleration of 0.3G (0.2G for the 3mm-lead model, or when used vertically). This 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					Stroke and Maximum Speed	
■ Lead and Load Capacity					25 ~ 200 (25mm increments)	
Model	Lead (mm)	Max. Load Capacity Horizontal (kg)	Max. Load Capacity Vertical (kg)	Maximum Push Force (N)	Stroke (mm)	Speed (mm/s)
RCP3-TA7R-I-42P-12-①-②-③-④	12	~ 6	~ 1	47	25 ~ 200 (25mm increments)	600 <580>
RCP3-TA7R-I-42P-6-①-②-③-④	6	~ 8	~ 2	95		300
RCP3-TA7R-I-42P-3-①-②-③-④	3	~ 10	~ 4	189		150

Legend ① Stroke ② Compatible controller ③ Cable length ④ Options

* The values enclosed in "< >" apply to vertical usage. (Unit: mm/s)

① Stroke List

Stroke (mm)	Standard Price
25	-
50	-
75	-
100	-
125	-
150	-
175	-
200	-

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 standard cable is the motor-encoder integrated robot cable.
* See page A-39 for cables for maintenance.

④ Option List

Name	Option Code	See Page	Standard Price
Brake	B	→ A-25	-
Cable exit direction (Top)	CJT		
Cable exit direction (Outside)	CJO	→ A-25	-
Cable exit direction (Bottom)	CJB		
Left-Mounted Motor (Standard)	ML	→ A-33	-
Right-Mounted Motor	MR	→ A-33	-
Reversed-home	NM	→ A-33	-

Actuator Specifications

Item	Description
Drive System	Ball screw ø10mm C10 grade
Positioning Repeatability	±0.02mm
Lost Motion	0.1mm or less
Base	Material: Material: Aluminum (special alumite treated)
Allowable Static Load Moment	Ma: 42.6 N·m Mb: 60.8 N·m Mc: 123.2 N·m
Allowable Dynamic Load Moment	Ma: 9.91 N·m Mb: 14.13 N·m Mc: 28.65 N·m
Overhang Load Length	Within the load moment range
Ambient Operating Temp./Humidity	0~40°C, 85% RH or less (non-condensing)

