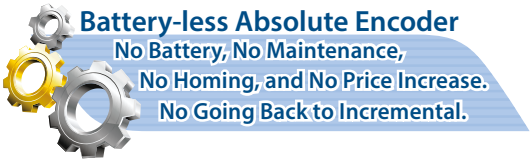
Single-Axis Robot / Table

RCP6-TA series



RCP6-TA4C RCP6-TA4R RCP6-TA6C RCP6-TA6R RCP6-TA7C RCP6-TA7R

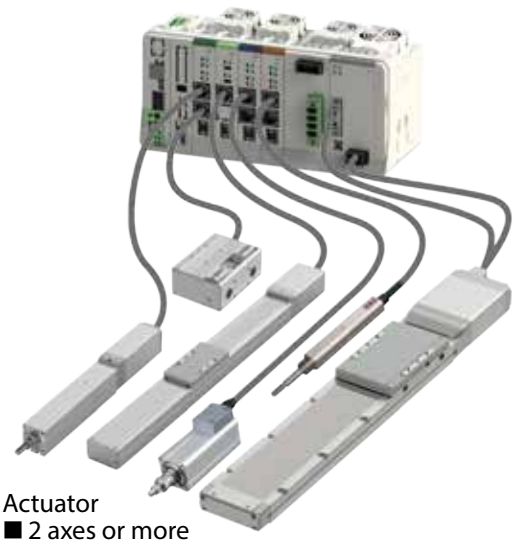
Applicable controller

1 axis	2 axes or more	Complicated movement (program type)

PCON controller

Actuator
■ 1 axis

RCON controller



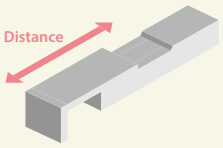
Actuator
■ 2 axes or more

RSEL controller

■Operations with a 2D/3D trajectory
■Palletizing operations
■Registration of multi-axis operations

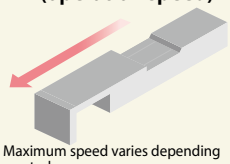
How to read the table and search the reference page

1 Stroke



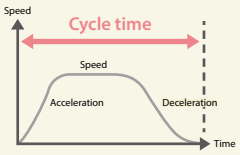
* The belt length shows selectable strokes.
Ex.) TA4C can select from 25 to 150mm.

2 Maximum speed (operation speed)



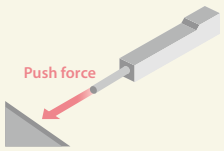
* Maximum speed varies depending on stroke.
Ex.) Max. speed is 680mm/s for TA4C <Double block> with lead of 10mm and stroke of 240mm.
* Figures in < > represent operations in vertical use.

3 Cycle time



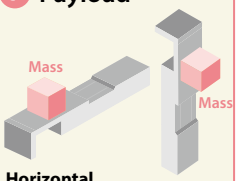
* One-way travel time of an operation with maximum stroke and horizontal mount, at maximum speed and maximum acceleration/deceleration.
Does not represent operations with the maximum payload.

4 Maximum push force



* Push force is guide values.

5 Payload



* Payload changes depending on acceleration and mounting posture.

Type	Stroke (mm) and maximum speed (mm/s) * Belt length = stroke * Figures in the belt are max. speed by stroke. Figures in < > represent operations in vertical use.	Lead (mm)	Rated thrust force (N)	Max. push force (N)	Payload (kg) Horizontal	Payload (kg) Vertical
TA4C TA4R (Single block)	980〈700〉 0.355 seconds	16	—	48	3	1
	785〈700〉 0.373 seconds	10	—	77	4	2.5
	390 0.522 seconds	5	—	155	5	5
	195 0.877 seconds	2.5	—	310	5	10
TA4C (Double block)	785〈700〉 680 0.524 seconds	10	—	77	8	2.5
	390 340 0.836 seconds	5	—	155	10	5
	195 170 1.515 seconds	2.5	—	310	10	10
TA4R (Double block)	700〈525〉 680〈525〉 0.524 seconds	10	—	77	8	2.5
	390 340 0.836 seconds	5	—	155	10	5
	195 170 1.515 seconds	2.5	—	310	10	10
TA6C (Single block)	1120〈800〉 0.395 seconds	20	—	56	5	1
	800 0.433 seconds	12	—	93	8	3
	400 0.638 seconds	6	—	185	10	6
	200 1.109 seconds	3	—	370	10	12
TA6R (Single block)	1120〈800〉 0.395 seconds	20	—	56	5	1
	800〈680〉 0.433 seconds	12	—	93	8	3
	400 0.638 seconds	6	—	185	10	6
	200 1.109 seconds	3	—	370	10	12
TA6C TA6R (Double block)	800〈680〉 735〈680〉 575 0.715 seconds	12	—	93	15	3
	400 365 285 1.245 seconds	6	—	185	20	6
	200 185 140 2.381 seconds	3	—	370	20	12
TA7C TA7R (Single block)	1080〈860〉 0.529 seconds	24	—	139	10	3
	700〈560〉 0.601 seconds	16	—	209	12	7
	420〈350〉 1.012 seconds	8	—	418	15	16
	210 1.688 seconds	4	—	836	15	20
TA7C TA7R (Double block)	700〈560〉 600〈560〉 0.854 sec.	16	—	209	25	7
	420〈350〉 365〈350〉 300 1.444 sec.	8	—	418	30	16
	210 180 150 2.707 sec.	4	—	836	30	24

* Figures in <> represent operations in vertical use.

Single-Axis Robot / Table

RCP3-TA series

Motor straight | Side-mounted motor | 24V stepper motor

Battery-less Absolute Encoder
No Battery, No Maintenance,
No Homing, and No Price Increase.
No Going Back to Incremental.

RCP3-TA3C

RCP3-TA3R

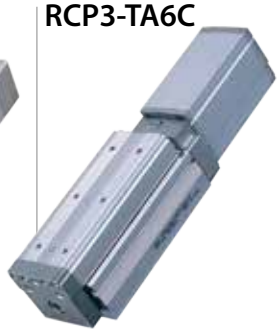
RCP3-TA4C

RCP3-TA4R

RCP3-TA5C

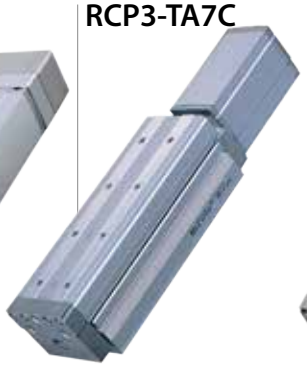
RCP3-TA5R

RCP3-TA6C



RCP3-TA6R

RCP3-TA7C



RCP3-TA7R

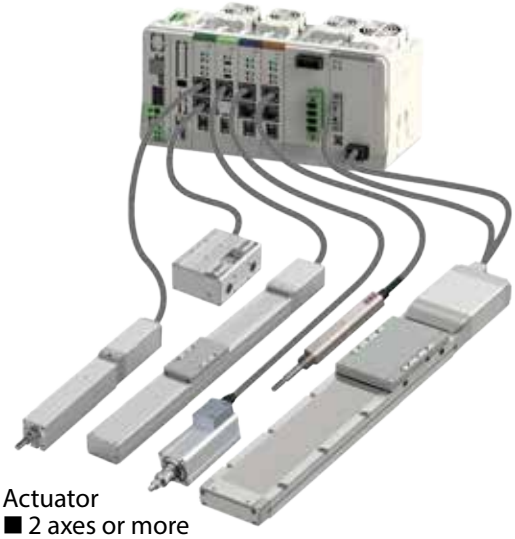
Applicable controller

1 axis	2 axes or more	Complicated movement (program type)

PCON controller

Actuator
■ 1 axis

RCON controller



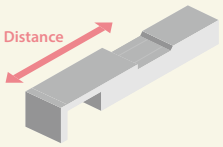
Actuator
■ 2 axes or more

RSEL controller

■Operations with a 2D/3D trajectory
■Palletizing operations
■Registration of multi-axis operations

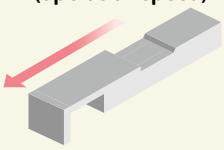
How to read the table and search the reference page

1 Stroke



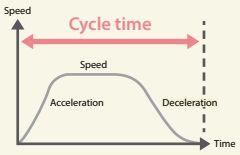
* The belt length shows selectable strokes.
Ex.) TA3C can select from 20 to 100mm.

2 Maximum speed (operation speed)



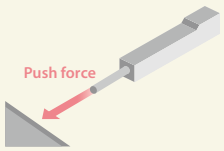
* Figures in < > represent operations in vertical use.

3 Cycle time



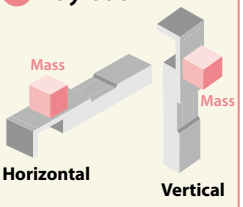
* One-way travel time of an operation with maximum stroke and horizontal mount, at maximum speed and maximum acceleration/deceleration.
Does not represent operations with the maximum payload.

4 Maximum push force



* Push force is guide values.

5 Payload



* Payload changes depending on acceleration and mounting posture.

Type	Stroke (mm) and maximum speed (mm/s) * Belt length = stroke * Figures in the belt are max. speed by stroke. Figures in < > represent operations in vertical use.	Lead (mm)	Rated thrust force (N)	Max. push force (N)	Payload (kg) Horizontal	Payload (kg) Vertical
	20 / 30 / 50 / 75 / 100 / 150 / 200 / 250 / 300 / 350					
TA3C TA3R	300〈200〉 0.47 seconds	6	—	15	0.7	0.3
	200〈133〉 0.603 seconds	4	—	22	1.4	0.6
	100〈67〉 1.078 seconds	2	—	45	2	1
TA4C TA4R	300 0.47 seconds	6	—	25	1	0.5
	200 0.603 seconds	4	—	37	2	1
	100 1.078 seconds	2	—	75	3	1.5
TA5C TA5R	465〈400〉 0.408 seconds	10	—	34	2	1
	250 0.52 seconds	5	—	68	4	1.5
	125 0.891 seconds	2.5	—	136	6	3
TA6C TA6R	560〈500〉 0.493 seconds	12	—	60	4	1
	300 0.637 seconds	6	—	110	6	2
	150 1.104 seconds	3	—	189	8	4
TA7C TA7R	600〈580〉 0.572 seconds	12	—	60	6	1
	300 0.803 seconds	6	—	110	8	2
	150 1.438 seconds	3	—	189	10	4

* Figures in <> represent operations in vertical use.

Single-Axis Robot / Table

RCA2 series

24V
AC servo motor

RCA2-TCA3NA
TCA4NA

RCA2-TWA3NA
TWA4NA

RCA2-TFA3NA
TFA4NA

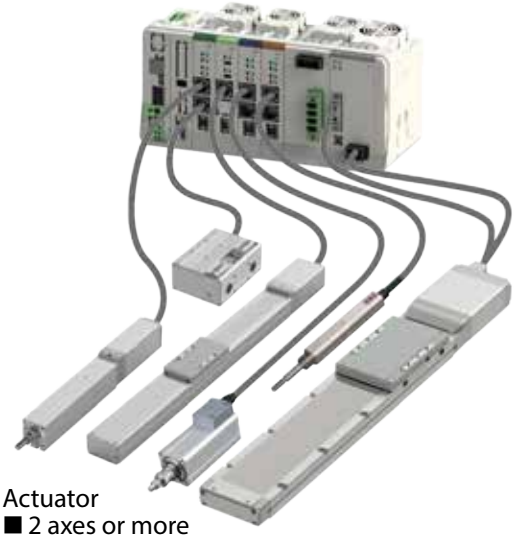
Applicable controller

1 axis	2 axes or more	Complicated movement (program type)

ACON controller

Actuator
■ 1 axis

RCON controller



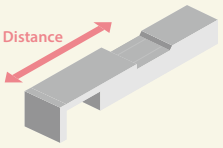
Actuator
■ 2 axes or more

RSEL controller

■Operations with a 2D/3D trajectory
■Palletizing operations
■Registration of multi-axis operations

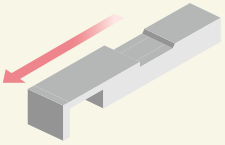
How to read the table and search the reference page

1 Stroke



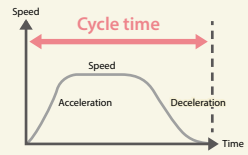
* The belt length shows selectable strokes.
Ex.) TCA3NA can select from 30 to 50mm.

2 Maximum speed (operation speed)



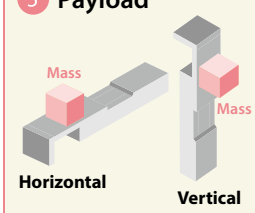
* Figures in < > represent operations in vertical use.

3 Cycle time



* One-way travel time of an operation with maximum stroke and horizontal mount, at maximum speed and maximum acceleration/deceleration.
Does not represent operations with the maximum payload.

5 Payload



* Payload changes depending on acceleration and mounting posture.

Type	Stroke (mm) and maximum speed (mm/s) * Belt length = stroke * Figures in the belt are max. speed by stroke. Figures in < > represent operations in vertical use.							Lead (mm)	Rated thrust force (N)	Max. push force (N)	Payload (kg) Horizontal	Payload (kg) Vertical
	25	30	50	75	100	150	200					
TCA3NA (ball screw)		200		0.353 seconds				4	42.7	—	0.75	0.25
		100		0.635 seconds				2	85.5	—	1.5	0.5
		50		1.107 seconds				1	170.9	—	3	1
TCA3NA (sliding screw)		200		0.379 seconds				4	25.1	—	0.25	0.12
		100		0.645 seconds				2	50.3	—	0.5	0.25
		50		1.107 seconds				1	100.5	—	1	0.5
TCA4NA (ball screw)		270 〈220〉	300	0.304 seconds				6	33.8	—	2	0.5
		200		0.353 seconds				4	50.7	—	3	0.75
		100		0.645 seconds				2	101.5	—	6	1.5
TCA4NA (sliding screw)		220	300	0.347 seconds				6	19.9	—	0.25	0.12
		200		0.379 seconds				4	29.8	—	0.5	0.25
		100		0.645 seconds				2	59.7	—	1	0.5
TWA3NA (ball screw)		200		0.353 seconds				4	42.7	—	0.75	0.25
		100		0.635 seconds				2	85.5	—	1.5	0.5
		50		1.107 seconds				1	170.9	—	3	1
TWA3NA (sliding screw)		200		0.379 seconds				4	25.1	—	0.25	0.12
		100		0.645 seconds				2	50.3	—	0.5	0.25
		50		1.107 seconds				1	100.5	—	1	0.5
TWA4NA (ball screw)		270 〈220〉	300	0.304 seconds				6	33.8	—	2	0.5
		200		0.353 seconds				4	50.7	—	3	0.75
		100		0.645 seconds				2	101.5	—	6	1.5
TWA4NA (sliding screw)		220	300	0.347 seconds				6	19.9	—	0.25	0.12
		200		0.379 seconds				4	29.8	—	0.5	0.25
		100		0.645 seconds				2	59.7	—	1	0.5
TFA3NA (ball screw)		200		0.353 seconds				4	42.7	—	0.75	0.25
		100		0.635 seconds				2	85.5	—	1.5	0.5
		50		1.107 seconds				1	170.9	—	3	1
TFA3NA (sliding screw)		200		0.379 seconds				4	25.1	—	0.25	0.12
		100		0.645 seconds				2	50.3	—	0.5	0.25
		50		1.107 seconds				1	100.5	—	1	0.5
TFA4NA (ball screw)		270 〈220〉	300	0.304 seconds				6	33.8	—	2	0.5
		200		0.353 seconds				4	50.7	—	3	0.75
		100		0.645 seconds				2	101.5	—	6	1.5
TFA4NA (sliding screw)		220	300	0.347 seconds				6	19.9	—	0.25	0.12
		200		0.379 seconds				4	29.8	—	0.5	0.25
		100		0.645 seconds				2	59.7	—	1	0.5

* Figures in <> represent operations in vertical use.

Single-Axis Robot / Table

RCS4-TA series

±10 μm Standard | Battery absolute | Motor straight | Side-mounted motor | 200V AC servo motor

Battery-less Absolute Encoder
No Battery, No Maintenance,
No Homing, and No Price Increase.
No Going Back to Incremental.

RCS4-TA4C | **RCS4-TA4R** | **RCS4-TA6C** | **RCS4-TA6R** | **RCS4-TA7C** | **RCS4-TA7R**

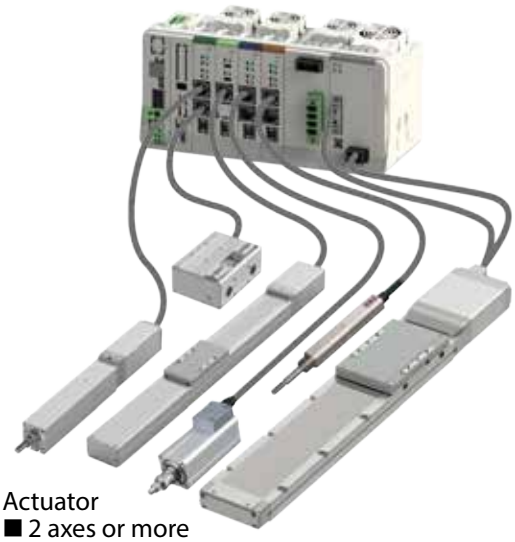
Applicable controller

1 axis	2 axes or more	Complicated movement (program type)

SCON controller

Actuator
■ 1 axis

RCON controller



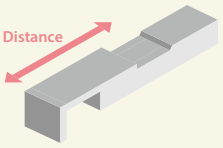
Actuator
■ 2 axes or more

RSEL controller

■ Operations with a 2D/3D trajectory
■ Palletizing operations
■ Registration of multi-axis operations

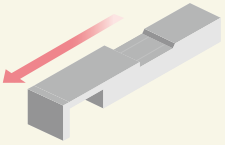
How to read the table and search the reference page

1 Stroke



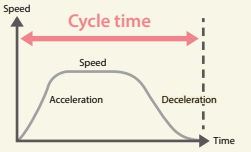
* The belt length shows selectable strokes.
Ex.) TA4C can select 25 to 150mm.

2 Maximum speed (operation speed)



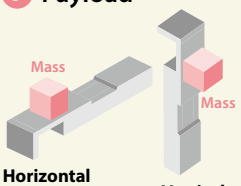
* Maximum speed varies depending on stroke.
Ex.) Max. speed is 575mm/s for TA6C <Double block> with lead of 12mm and stroke of 320mm.

3 Cycle time



* One-way travel time of an operation with maximum stroke and horizontal mount, at maximum speed and maximum acceleration/deceleration.
Does not represent operations with the maximum payload.

5 Payload



* Payload changes depending on acceleration and mounting posture.

Type	Stroke (mm) and maximum speed (mm/s) * Belt length = stroke * Figures in the belt are max. speed by stroke.	Lead (mm)	Rated thrust force (N)	Max. push force (N)	Payload (kg) Horizontal	Payload (kg) Vertical
	25 30 50 150 200 250 300 350 400 450					
TA4C (Single block)	900 0.402 seconds	16	53	—	4	1.5
	600 0.455 seconds	10	85	—	5	3
	300 0.67 seconds	5	170	—	5	6
	150 1.142 seconds	2.5	340	—	5	9
TA4R (Single block)	800 0.422 seconds	16	53	—	4	1.5
	600 0.462 seconds	10	85	—	5	3
	300 0.67 seconds	5	170	—	5	6
	150 1.142 seconds	2.5	340	—	5	9
TA4C TA4R (Double block)	600 0.605 seconds	10	85	—	8	3
	300 0.97 seconds	5	170	—	10	6
	150 1.742 seconds	2.5	340	—	10	9
TA6C (Single block)	1100 0.435 seconds	20	85	—	8	4
	720 0.496 seconds	12	142	—	8	6
	360 0.735 seconds	6	283	—	8	10
	180 1.261 seconds	3	566	—	10	12
TA6R (Single block)	1000 0.457 seconds	20	85	—	8	4
	720 0.503 seconds	12	142	—	8	6
	360 0.735 seconds	6	283	—	8	10
	180 1.261 seconds	3	566	—	10	10
TA6C TA6R (Double block)	720 575 0.759 seconds	12	142	—	14	6
	360 285 1.29 seconds	6	283	—	20	10
	180 140 2.424 seconds	3	566	—	20	12
TA7C (Single block)	1300 0.502 seconds	24	142	—	12	5
	960 0.553 seconds	16	214	—	15	10
	480 0.822 seconds	8	427	—	15	18
	240 1.415 seconds	4	855	—	15	20
TA7R (Single block)	1200 0.528 seconds	24	142	—	12	5
	960 0.565 seconds	16	214	—	15	10
	480 0.822 seconds	8	427	—	15	18
	240 1.415 seconds	4	855	—	15	20
TA7C TA7R (Double block)	960 730 600 0.855 sec.	16	214	—	25	8
	480 365 300 1.47 sec.	8	427	—	30	18
	240 180 150 2.742 sec.	4	855	—	30	24

Single-Axis Robot / Table

RCS3/RCS2 series

200V
AC servo motor

RCS2-TCA5N

RCS2-TWA5N

RCS2-TFA5N

RCS3-CTZ5C

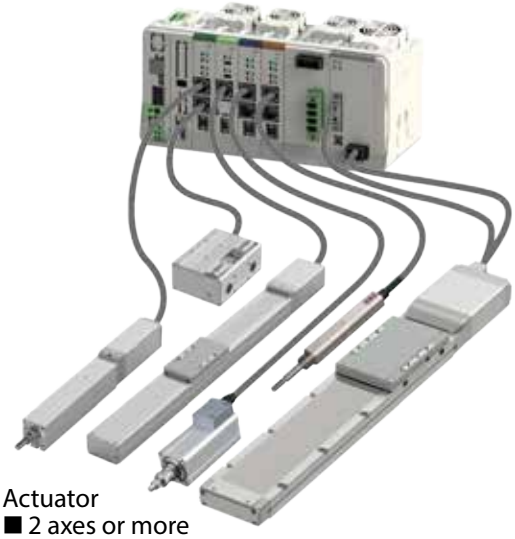
Applicable controller

1 axis	2 axes or more	Complicated movement (program type)

SCON controller

Actuator
■ 1 axis

RCON controller



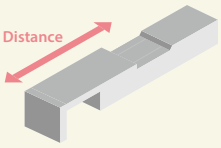
Actuator
■ 2 axes or more

RSEL controller

■Operations with a 2D/3D trajectory
■Palletizing operations
■Registration of multi-axis operations

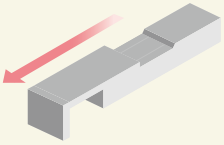
How to read the table and search the reference page

1 Stroke



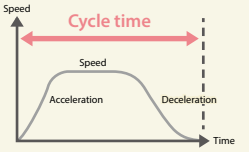
* The belt length shows selectable strokes.
Ex.) TCA5N can select 50 and 75mm.

2 Maximum speed (operation speed)



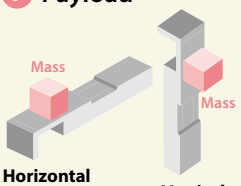
* Figures in < > represent operations in vertical use.

3 Cycle time



* One-way travel time of an operation with maximum stroke and horizontal mount, at maximum speed and maximum acceleration/deceleration.
Does not represent operations with the maximum payload.

5 Payload



* Payload changes depending on acceleration and mounting posture.

Series	Type	Stroke (mm) and maximum speed (mm/s) * Belt length = stroke * Figures in the belt are max. speed by stroke. Figures in < > represent operations in vertical use.							Lead (mm)	Rated thrust force (N)	Max. push force (N)	Payload (kg)	
		25	30	50	75	100	150	200				Horizontal	Vertical
RCS2	TCA5N			280 〈230〉	380 〈330〉	0.442 seconds			10	89	—	5	1.5
				250 〈230〉	250	0.498 seconds			5	178	—	10	3
				125		0.761 seconds			2.5	356	—	20	6
	TWA5N			280 〈230〉	380 〈330〉	0.442 seconds			10	89	—	5	1.5
				250 〈230〉	250	0.498 seconds			5	178	—	10	3
				125		0.761 seconds			2.5	356	—	20	6
	TFA5N			280 〈230〉	380 〈330〉	0.442 seconds			10	89	—	5	1.5
				250 〈230〉	250	0.498 seconds			5	178	—	10	3
				125		0.761 seconds			2.5	356	—	20	6
RCS3	CTZ5C					833		0.186 seconds	10	85	—	1.5	1

* Figures in <> represent operations in vertical use.