



Controller-Integrated Type



Controller-Integrated 1	ype

	Slider type	Motor straight type		Width 58mm	ERC2-SA6C	3
				Width 68mm	ERC2-SA7C	5
	Rod type	Standard type		Width 58mm	ERC2-RA6C	7
ERC2				Width 68mm	ERC2-RA7C	9
		Guide type	Single-guide type	Width 58mm	ERC2-RGS6C	11
series				Width 68mm	ERC2-RGS7C	13
			Double-guide type	Width 58mm	ERC2-RGD6C	15
				Width 68mm	ERC2-RGD7C	17







* Refer to p. 31 of the front matter for details on the model specification items

C2-SA6C

Controller-Integrated Type, Slider Type, Actuator Width 58mm, Pulse Motor, Straight

■ Model Specification Items ERC2 — SA6C

- Encoder type - Motor type 1: hcremental PM: Pulse motor specification

12:12mm 6: 6mm 3: 3mm

Stroke 50:50mm

600:600mm

(Set in 50-mm steps)

I/O type NP:PIO PN:PIO

(NPN) type (PNP) type SE:SIOtype

Cable length Options :No cable P : 1m B :Brake

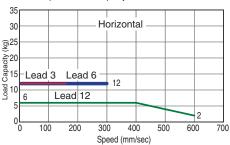
No Cable P: Im
S: 3m M:5m
X: Specified length
W: Cable with connectors
on both ends
R: Bobot cable NM:Reversed-home specification

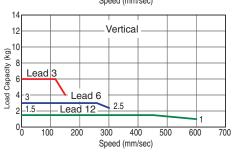
RW :: Robot cable with connectors on both ends



■ Correlation Diagram of Speed and Load Capacity

With the RCP2 series, the load capacity will decrease as the speed increases due to the characteristics of the pulse motor used in the actuator. Use the table below to check if the desired speed and load capacity are satisfied.





- (1) When the stroke increases, the maximum speed will drop to prevent the ball screw from reaching a critical speed. Use the actuator specification table below to check the maximum speed at the stroke you desire.
- (2) The ERC2 series uses a pulse motor, so the load capacity will decrease as the speed increases. Use the correlation diagram of speed and load capacity on the right to check the load capacity corresponding to
- (3) The load capacity is based on operation at an acceleration of 0.3 G (or 0.2 G if the lead is 3 or the actuator is operated vertically). This is the maximum acceleration.

Actuator Specifications

■ Lead and Load Capacity

(Note 1) Take note that the maximum load capacity will decrease as the speed increases

Model	Lead (mm)	Maximum load of Horizontal (kg)	apacity (Note 1) Vertical (kg)	Stroke (mm)		
ERC2-SA6C-I-PM-12-①-②-③-④	12	~6	~1.5			
ERC2-SA6C-I-PM-6-①-②-③-④	6	12	~3	50 ~ 600 (Set in 50-mm steps)		
ERC2-SA6C-I-PM-3-①-②-③-④	3	12	~6			
Explanation of numbers ① Stroke ② I/O type ③Cable length ④Options						

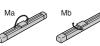
		Maximum	Speed
_	_ a:		

Stroke	50 ~ 600 (Set in 50-mm steps)	600 (mm)
12	600	515
6	300	255
3	150	125
		(Unit: mm/s)

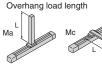
60w

Options		
Name	Model	Page
Brake	В	P381
Reversed-home specification	NM	P385

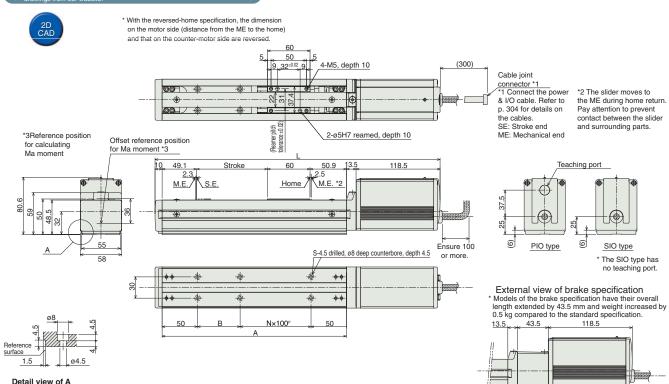
Actuator Specifications	
Item	Description
Drive method	Ball screw ø10mm, rolled C10
Positioning repeatability	±0.05mm
Backlash	0.1mm or less
Allowable load moment	Ma: 8.9N • m Mb: 12.7N • m Mc: 18.6N • m
Overhang load length	Ma direction: 150mm or less, Mb/Mc directions: 150mm or less
Ambient operating temperature, humidity	0~40°C, 85% RH or below (non-condensing)







Dimensions



Dimensions and Weight by Stroke

Difference and weight by Stroke												
Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	352	402	452	502	552	602	652	702	752	802	852	902
Α	210	260	310	360	410	460	510	560	610	660	710	760
В	10	60	10	60	10	60	10	60	10	60	10	60
N	1	1	2	2	3	3	4	4	5	5	6	6
S	6	6	8	8	10	10	12	12	14	14	16	16
Weight (kg)	1.9	2.0	2.1	2.3	2.4	2.6	2.7	2.8	3.0	3.1	3.3	3.4

Brake unit

I/O Type (Actuator with Built-In Controller)

I/O Type

(mounting hole and reference surface)

You can select a desired built-in controller of the ERC2 series from among the following three types, each adopting different external input/output (I/O) specifications. Choose the type that best suits you specific purpose.

specific purpose. Name	External view	Model	Features	Maximum number of positioning points	Input power supply	Power-supply capacity	Reference page
PIO type (NPN specification)		ERC2-SA6C-I-PM-🗆-🗆-NP-🗆-	Simple control type capable of positioning to a maximum of 16 points	16			
PIO type (PNP specification)		ERC2-SA6C-I-PM-□-□-PN-□-□	PNP I/O type popular overseas	16	DC24V	2A max.	→ P295
SIO type		ERC2-SA6C-I-PM-□-□-SE-□-□	Dedicated field network connection type (using a gateway unit)	64			

* Refer to p. 31 of the front matter for details on the model specification items.

RC2-SA7C

Controller-Integrated Type, Slider Type, Actuator Width 68mm, Pulse Motor, Straight

■ Model Specification Items ERC2 — SA7C П **PM**

- Encoder type - Motor type I: Incremental PM:Pulse motor specification

16: 16mm 8: 8mm 4: 4mm

Stroke 50:50mm

600:600mm

NP:PIO (NPN) type PN:PIO (PNP) type (Set in 50-mm steps) SE:SIOtype

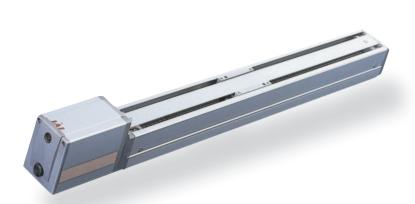
I/O type

Cable length :No cable P : 1m M:5m 3m

B :Brake X □ : Specified length
W □ : Cable with connectors
on both ends
R □ : Robot cable NM: Reversed-home specification

Options

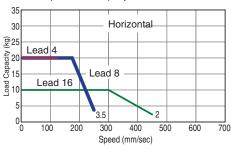
RW□□: Robot cable with connectors on both ends

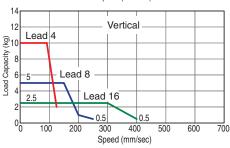


- (1) When the stroke increases, the maximum speed will drop to prevent the ball screw from reaching a critical speed. Use the actuator specification table below to check the maximum speed at the stroke you desire.
- (2) The ERC2 series uses a pulse motor, so the load capacity will decrease as the speed increases. Use the correlation diagram of speed and load capacity on the right to check the load capacity corresponding to
- (3) The load capacity is based on operation at an acceleration of 0.3 G (or 0.2 G if the lead is 4 or the actuator is operated vertically). This is the maximum acceleration.

■ Correlation Diagram of Speed and Load Capacity

With the RCP2 series, the load capacity will decrease as the speed increases due to the characteristics of the pulse motor used in the actuator. Use the table below to check if the desired speed and load capacity are satisfied.





Actuator Specifications

■ Lead and Load Capacity

(Note 1) Take note that the maximum load capacity will decrease as the speed increases.

Model	Lead	Maximum load o	Stroke	
Model	(mm)	Horizontal (kg)	Vertical (kg)	(mm)
ERC2-SA7C-I-PM-16-①-②-③-④	16	~10	~2.5	
ERC2-SA7C-I-PM-8-①-②-③-④	8	~20	~5	50 ~ 600 (Set in 50-mm steps)
ERC2-SA7C-I-PM-4-1-2-3-4	4	20	~10	
Explanation of numbers Stroke I/O type Cable length Options				

■ Stroke and Maximum Speed

Stroke Lead	50 ~ 600 (Set in 50-mm steps)
16	450 <400>
8	250
4	125

* The figure in < > applies when the actuator is used vertically. (Unit: mm/s)

Options		
Name	Model	Page
Brake	В	P381
Reversed-home specification	NM	P385

Actuator Specifications	
Item	Description
Drive method	Ball screw ø10mm, rolled C10
Positioning repeatability	±0.05mm
Backlash	0.1mm or less
Allowable load moment	Ma: 13.8N • m Mb: 19.7N • m Mc: 29.0N • m
Overhang load length	Ma direction: 150mm or less, Mb/Mc directions: 150mm or less
Ambient operating temperature, humidity	0~40°C, 85% RH or below (non-condensing)











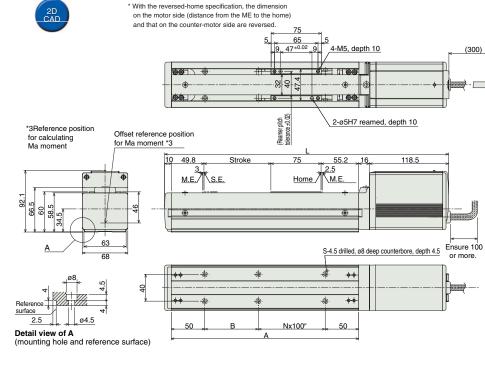
*2 The slider moves to the ME during home return.

Pay attention to prevent contact between the slider and surrounding parts.

no teaching port.

Dimensions





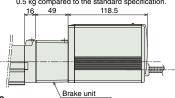
ME: Mechanical end Te aching port (3.5) (3.5)PIO type SIO type The SIO type has

Cable joint connector *1
*1 Connect the power & I/O cable. Refer to

p. 304 for details on the cables. SE: Stroke end

External view of brake specification

Models of the brake specification have their overall length extended by 43.5 mm and weight increased 0.5 kg compared to the standard specification.



Dimensions and Weight by Stroke

Stroke	50	100	150	200	250	300	350	400	450	500	550	600
L	374.5	424.5	474.5	524.5	574.5	624.5	674.5	724.5	774.5	824.5	874.5	924.5
Α	230	280	330	380	430	480	530	580	630	680	730	780
В	30	80	30	80	30	80	30	80	30	80	30	80
N	1	1	2	2	3	3	4	4	5	5	6	6
S	6	6	8	8	10	10	12	12	14	14	16	16
Weight (kg)	3.1	3.2	3.4	3.6	3.7	3.9	4.0	4.2	4.3	4.5	4.6	4.8

I/O Type (Actuator with Built-In Controller)

I/O Type

You can select a desired built-in controller of the ERC2 series from among the following three types, each adopting different external input/output (I/O) specifications. Choose the type that best suits your

specific purpose.								
	Name	External view	Model	Features	Maximum number of positioning points	Input power supply	Power-supply capacity	Reference page
	PIO type (NPN ecification)		ERC2-SA7C-I-PM-囗-囗-NP-囗-囗	Simple control type capable of positioning to a maximum of 16 points	16			
	PIO type (PNP ecification)		ERC2-SA7C-I-PM-囗-囗-PN-囗-□	PNP I/O type popular overseas	16	DC24V	2A max.	→ P295
	SIO type		ERC2-SA7C-I-PM-囗-囗-SE-囗-囗	Dedicated field network connection type (using a gateway unit)	64			

■ Model Specification Items ERC2 — RA6C

* Refer to p. 31 of the front matter for details on the model specification items.

RC2-RA6C



I: Incremental PM:Pulse motor

specification

12: 12mm

6: 6mm

3: 3mm

Stroke 50:50mm ι

300:300mm

(Set in 50-mm steps)

I/O type NP:PIO

(NPN) type PN:PIO (PNP) type SE:SIOtype

Controller-Integrated Type, Rod Type, Actuator Width 58mm, Pulse Motor, Straight

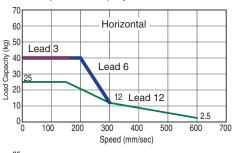
Cable length Options : No cable P : 1m B :Brake M:5m :3m

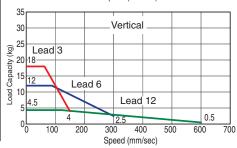
S : 3m M : 5m
X□ : Specified length
W□ : Cable with connectors
on both ends
R□ : Robot cable
RW□ : Robot cable with connectors on both ends



Correlation Diagram of Speed and Load Capacity

With the RCP2 series, the load capacity will decrease as the speed increases due to the characteristics of the pulse motor used in the actuator. Use the table below to check if the desired speed and load capacity are satisfied.





- (1) When the stroke increases, the maximum speed will drop to prevent the ball screw from reaching a critical speed. Use the actuator specification table below to check the maximum speed at the stroke you desire.
- (2) The ERC2 series uses a pulse motor, so the load capacity will decrease as the speed increases. Use the correlation diagram of speed and load capacity on the right to check the load capacity corresponding to the speed you desire.
- (3) The load capacity is based on operation at an acceleration of 0.3 G (or 0.2 G if the lead is 3 or the actuator is operated vertically). This is the maximum acceleration.
- (4) The horizontal load capacity assumes use of an external guide.

Actuator Specifications

■ Lead and Load Capacity

Model	Lead (mm)	Maximum load co Horizontal (kg)		Maximum push force (N) (Note 2)	Stroke (mm)
ERC2-RA6C-I-PM-12-1-2-3-4	12	~25	~4.5	78	
ERC2-RA6C-I-PM-6-1-2-3-4	6	~40	~12	157	50 ~ 300 (Set in 50-mm steps)
ERC2-RA6C-I-PM-3-1-2-3-4	3	40	~18	304	

(Note 1) Take note that the maximum load capacity will decrease as the speed increases.

Explanation of numbers Stroke I/O type Cable length Options

■ Stroke and Maximum Speed

Stroke	50 ~ 600 (Set in 50-mm steps)	600 (mm)
12	600	500
6	300	255
3	150	125
		(Unit: mm/s)

60w

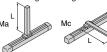
Options		
Name	Model	Page
Brake	В	P381
Foot bracket	FT	P383
Reversed-home specification	NM	P385

Actuator Specifications	
Item	Description
Drive method	Ball screw ø10mm, rolled C10
Positioning repeatability	±0.05mm
Backlash	0.1mm or less
Rod diameter	ø22mm, dedicated SUS pipe
Rod non-rotation accuracy	±1.5°
Ambient operating temperature, humidity	0~40°C, 85% RH or below (non-condensing)

Direction of allowable load moment

(Note 2) Refer to p. 406 for the graph of push force.





Cable joint

home return.

Dimensions

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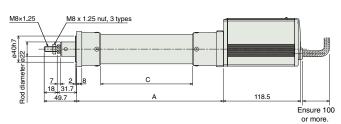
Do not apply an external force on the rod in any direction other than the moving direction of the rod.

If the rod receives an external force from the right-angle direction or

rotating direction, the detent may be damaged Home M.E. *2 Stroke

4-ø5.5

(Note) The actual angle of the across flats surface is slightly different.

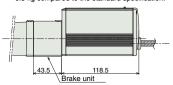


Te aching port ⇑ PIO type SIO type The SIO type has no teaching port.

connector *1_
*1 Connect the power & I/O cable.
Refer to p. 304 for details on the cables.
*2 The slider moves to the ME during

Pay attention to prevent contact between the slider and surrounding parts. ME: Mechanical end

External view of brake specification
* Models of the brake specification have their overall length extended by 43.5 mm and weight increased by 0.5 kg compared to the standard specification.



■ Dimensions and Weight by Stroke

Stroke	50	100	150	200	250	300
L	293.5	343.5	393.5	443.5	493.5	543.5
Α	175	225	275	325	375	425
В	393.2	493.2	593.2	693.2	793.2	893.2
С	91	141	191	241	291	341
Weight (kg)	1.6	1.7	1.8	2.0	2.1	2.2

I/O Type (Actuator with Built-In Controller)

I/O Type

You can select a desired built-in controller of the ERC2 series from among the following three types, each adopting different external input/output (I/O) specifications. Choose the type that best suits your

specific purpose.							
Name	External view	Model	Features	Maximum number of positioning points	Input power supply	Power-supply capacity	Reference page
PIO type (NPN specification)		ERC2-RA6C-I-PM-🗆-🗆-NP-🗆-	Simple control type capable of positioning to a maximum of 16 points	16			
PIO type (PNP specification)		ERC2-RA6C-I-PM-□-□-PN-□-□	PNP I/O type popular overseas	16	DC24V	2A max.	→P295
SIO type		ERC2-RA6C-I-PM-□-□-SE-□-□	Dedicated field network connection type (using a gateway unit)	64			

60w

C2-RA7C

Controller-Integrated Type, Rod Type, Actuator Width 68mm, Pulse Motor, Straight

■Model Specification Items ERC2 — RA7C **PM**

* Refer to p. 31 of the front matter for details on the model specification items.

- Encoder type - Motor type I: Incremental PM:Pulse motor specification

16: 16mm 8: 8mm 4: 4mm

Stroke 50:50mm

600:600mm

(Set in 50-mm steps)

NP:PIO (NPN) type PN:PIO (PNP) type SE:SIOtype

I/O type

Cable length :No cable P : 1m :3m M :5m

B :Brake : 3m M:5m : Specified length : Cable with connectors on both ends : Robot cable FT : Foot bracket NM:Reversed-home specification

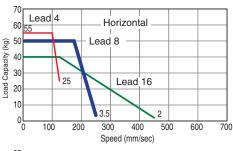
Options

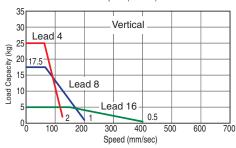
 $R \sqcap \sqcap$ RW□□: Robot cable with connectors on both ends



Correlation Diagram of Speed and Load Capacity

With the RCP2 series, the load capacity will decrease as the speed increases due to the characteristics of the pulse motor used in the actuator. Use the table below to check if the desired speed and load capacity are satisfied.





- (1) When the stroke increases, the maximum speed will drop to prevent the ball screw from reaching a critical speed. Use the actuator specification table below to check the maximum speed at the stroke you desire.
- (2) The ERC2 series uses a pulse motor, so the load capacity will decrease as the speed increases. Use the correlation diagram of speed and load capacity on the right to check the load capacity corresponding to the speed you desire.
- (3) The load capacity is based on operation at an acceleration of 0.3 G (or 0.2 G if the lead is 4 or the
- actuator is operated vertically). This is the maximum acceleration.
 (4) The horizontal load capacity assumes use of an external guide.

Actuator Specifications

■ Lead and Load Capacity (Note 1) Take note that the maximum load capacity will decrease as the speed increases.

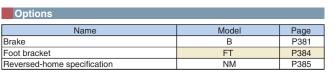
Model	Lead (mm)	Maximum load co Horizontal (kg)		Maximum push force (N) (Note 2)	Stroke (mm)
ERC2-RA7C-I-PM-16-①-②-③-④	16	~40	~5	220	
ERC2-RA7C-I-PM-8-1-2-3-4	8	~50	~17.5	441	50 ~ 300 (Set in 50-mm steps)
ERC2-RA7C-I-PM-4-1-2-3-4	4	~55	~25	873	

Explanation of numbers (1) Stroke (2) I/O type (3) Cable length (4) Options

(Note 2) Refer to p. 406 for the graph of push force.

Stroke Lead	50 ~ 600 (Set in 50-mm steps)
12	450 <400>
6	250 <200>
3	125

* The figure in < > applies when the actuator is used vertically. (Unit: mm/s)



Actuator Specifications	
Item	Description
Drive method	Ball screw ø12mm, rolled C10
Positioning repeatability	±0.05mm
Backlash	0.1mm or less
Rod diameter	ø30mm, dedicated SUS pipe
Rod non-rotation accuracy	±1.5°
Ambient operating temperature, humidity	0~40°C, 85% RH or below (non-condensing)

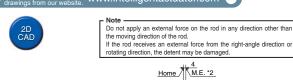


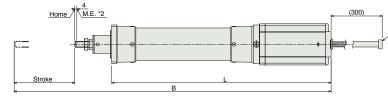


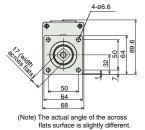




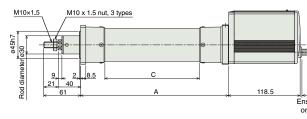
You can download CAD drawings from our washelie www.intelligentactuator.com

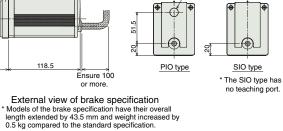






Dimensions





Cable joint connector *1

and surrounding parts. ME: Mechanical end

*1 Connect the power & I/O cable. Refer to p. 304 for details on the cables. *2 The slider moves to the ME during home return. Pay attention to prevent contact between the slider

Te aching port

49 118.5 Brake unit

Dimensions and Weight by Stroke

Difficiliations and Weight by Otroke								
Stroke	50	100	150	200	250	300		
L	312.5	362.5	412.5	462.5	512.5	562.5		
Α	194	244	294	344	394	444		
В	423.5	523.5	623.5	723.5	823.5	923.5		
С	106	156	206	256	306	356		
Weight (kg)	2.7	2.9	3.0	3.2	3.3	3.5		

I/O Type (Actuator with Built-In Controller)

I/O Type

You can select a desired built-in controller of the ERC2 series from among the following three types, each adopting different external input/output (I/O) specifications. Choose the type that best suits your specific purpose.

Name	External view	Model	Features	Maximum number of positioning points	Input power supply	Power-supply capacity	Reference page
PIO type (NPN specification)		ERC2-RA6C-I-PM-囗-囗-NP-囗-□	Simple control type capable of positioning to a maximum of 16 points	16			
PIO type (PNP specification)		ERC2-RA6C-I-PM-□-□-PN-□-□	PNP I/O type popular overseas	16	DC24V	2A max.	→P295
SIO type		ERC2-RA6C-I-PM-囗-囗-SE-囗-囗	Dedicated field network connection type (using a gateway unit)	64			

60w

C2-RGS6C

Controller-Integrated Type, Rod Type with Single Guide, Actuator Width 58mm Pulse Motor, Straight

■ Model Specification Items ERC2 — RGS6C

- Encoder type -I: Incremental PM:Pulse motor specification

12: 12mm 6: 6mm 3: 3mm

Stroke 50:50mm

PN:PIO 600:600mm (Set in 50-mm steps) SE:SIOtype

I/O type NP:PIO (NPN) type

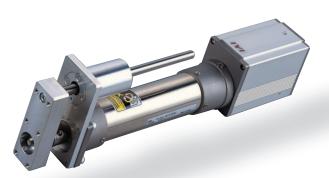
(PNP) type $R \sqcap \sqcap$

Cable length :No cable P : 1m B :Brake M:5m 3m

:Specified length
:Cable with connectors
on both ends
:Robot cable
:Cable with connectors
on both ends
:Robot cable
:Robot cable FT : Foot bracket RW□□: Robot cable with connectors on both ends

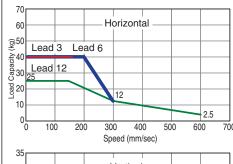
Options

* Refer to p. 31 of the front matter for details on the model specification items.



■ Correlation Diagram of Speed and Load Capacity

With the RCP2 series, the load capacity will decrease as the speed increases due to the characteristics of the pulse motor used in the actuator. Use the table below to check if the desired speed and load capacity are satisfied.





- (1) When the stroke increases, the maximum speed will drop to prevent the ball screw from reaching a critical
- speed. Use the actuator specification table below to check the maximum speed at the stroke you desire. (2) The ERC2 series uses a pulse motor, so the load capacity will decrease as the speed increases. Use the correlation diagram of speed and load capacity on the right to check the load capacity corresponding to
- the speed you desire. Subtract the guide weight (refer to the facing page) from the load capacity.

 (3) The load capacity is based on operation at an acceleration of 0.3 G (or 0.2 G if the lead is 3 or the actuator is operated vertically). This is the maximum acceleration.
- (4) The horizontal load capacity assumes use of an external guide.

Vertical 30 d Capacity (kg) 5 51 02 52 Lead 3 Lead 6 Load C Lead 12 0.5 4 100 200 400 600 700 Speed (mm/sec)

Actuator Specifications

■ Lead and Load Capacity (Note 1) Take note that the maximum load capacity will decrease as the speed increases.

·					
Model	Lead (mm)	Maximum load c Horizontal (kg)		Maximum push force (N) (Note 2)	Stroke (mm)
ERC2-RGS6C-I-PM-12-①-②-③-④	12	~25	~4.5	78	
ERC2-RGS6C-I-PM-6-1-2-3-4	6	~40	~12	157	50 ~ 300 (Set in 50-mm steps)
ERC2-RGS6C-I-PM-3-1-2-3-4	3	40	~18	304	
Explanation of numbers Stroke 1/0 type Cable length Options (Note 2) Refer to p. 406 for the graph of push force.					

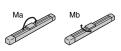
Stroke	and	Maximum	Speed
Sticke	anu	Maxilliulli	Speeu

Stroke	50 ~ 250 (Set in 50-mm steps)	300 (mm)
12	600	500
6	300	250
3	150	125
		(Unit: mm/s)

Options		
Name	Model	Page
Brake	В	P381
Foot bracket	FT	P383
Reversed-home specification	NM	P385

Actuator Specifications	
Item	Description
Drive method	Ball screw ø10mm, rolled C10
Positioning repeatability	±0.05mm
Backlash	0.1mm or less
Rod diameter	ø22mm, dedicated SUS pipe
Rod non-rotation accuracy	±1.5°
Ambient operating temperature, humidity	0~40°C, 85% RH or below (non-condensing)







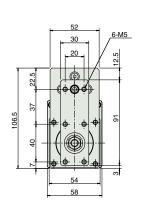


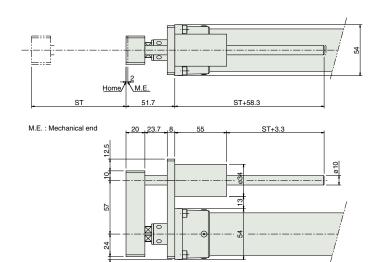




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Refer to p. 8 for the actuator dimentions.

Dimensions and Weight by Stroke

Stroke	50	100	150	200	250	300
Guide weight (kg)	0.2	0.2	0.3	0.3	0.3	0.4
Guide + actuator weight (kg)	1.8	1.9	2.1	2.3	2.4	2.6

I/O Type	(Actuator	with	Built-In	Controller)
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I/O Type

You can select a desired built-in controller of the ERC2 series from among the following three types, each adopting different external input/output (I/O) specifications. Choose the type that best suits your specific purpose.

	specific purpose.						
Name	External view	Model	Features	Maximum number of positioning points	Input power supply	Power-supply capacity	Reference page
PIO type (NPN specification)		ERC2-RGS6C-I-PMNP	Simple control type capable of positioning to a maximum of 16 points	16			
PIO type (PNP specification)		ERC2-RGS6C-I-PM-D-D-PN-D-D	PNP I/O type popular overseas	16	DC24V	2A max.	→ P295
SIO type		ERC2-RGS6C-I-PM-II-II-SE-II-II	Dedicated field network connection type (using a gateway unit)	64			

* Refer to p. 31 of the front matter for details on the model specification items.

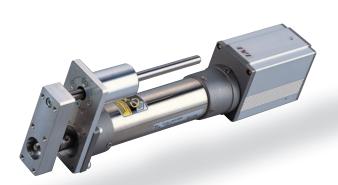
RC2-RGS7C Controller-Integrated Type, Rod Type with Single Guide, Actuator Width 68mm Pulse Motor, Straight ■Model Specification Items ERC2 —RGS7C I/O type - Encoder type -Cable length Options I: Incremental PM:Pulse motor 16: 16mm 50:50mm NP:PIO : No cable P : 1m B :Brake M:5m 8: 8mm (NPN) type 3m S : 3 m M : 5 m FT : Foot bracket W □□ : Cable with connectors on both ends R □□ : Robot cable specification 4: 4mm PN:PIO

600:600mm

(Set in 50-mm steps)

(PNP) type

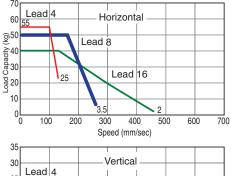
SE:SIOtype



■ Correlation Diagram of Speed and Load Capacity With the RCP2 series, the load capacity will decrease as the

speed increases due to the characteristics of the pulse motor used in the actuator. Use the table below to check if the desired speed and load capacity are satisfied.

RW□□: Robot cable with connectors on both ends



(B) 25 Lead 4 Capacity (kg 10 Pg 10 Lead 16 2 0.5 100 200 500 600 Speed (mm/sec)

- (1) When the stroke increases, the maximum speed will drop to prevent the ball screw from reaching a critical speed. Use the actuator specification table below to check the maximum speed at the stroke you desire.
- (2) The ERC2 series uses a pulse motor, so the load capacity will decrease as the speed increases. Use the correlation diagram of speed and load capacity on the right to check the load capacity corresponding to the speed you desire. Subtract the guide weight (refer to the facing page) from the load capacity.
- (3) The load capacity is based on operation at an acceleration of 0.3 G (or 0.2 G if the lead is 4 or the actuator is operated vertically). This is the maximum acceleration.
- (4) The horizontal load capacity assumes use of an external guide.

Actuator Specifications ■ Lead and Load Capacity (Note 1) Take note that the maximum load capacity will decrease as the speed increases. Maximum load capacity (Note 1) Horizontal (kg) Vertical (kg) Maximum push force (N) (Note 2) Stroke (mm) ERC2-RGS7C-I-PM-16-1-2-3-4 16 ~40 ~5 220 50 ~ 300 ERC2-RGS7C-I-PM-8-11-2-3-4 8 ~50 ~17.5 441 (Set in 50-mm steps ERC2-RGS7C-I-PM-4-1-2-3-4 ~55 ~25 873

Explanation of numbers Stroke I/O type Cable length	4)Options

■ Stroke and Maximum Speed						
Stroke Lead	50 ~ 300 (Set in 50-mm steps)					
16	450 <400>					
8	250 <200>					
4	125					
*The figure in <> applies when the actuator is used vertically. (Unit: mm/s)						

kplanation of numbers ① Stroke ② I/O type ③Cable length	4 Options	(Note 2) Ref	er to p. 406 for the	graph of push force.	* The figure in < > applies v	when the actuator is used vertically.	(Unit: m

Options Page Model Brake P381 Foot bracket FT P384 Reversed-home specification NM P385

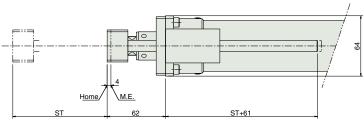
Actuator Specifications	
Item	Description
Drive method	Ball screw ø12mm, rolled C10
Positioning repeatability	±0.05mm
Backlash	0.1mm or less
Rod diameter	ø30mm, dedicated SUS pipe
Rod non-rotation accuracy	±1.5°
Ambient operating temperature, humidity	0~40°C, 85% RH or below (non-condensing)

Direction of allowable load moment

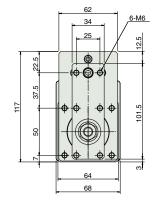


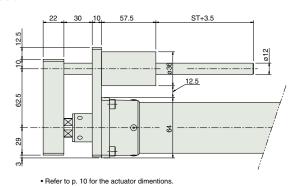






M.E.: Mechanical end





Dimensions and Weight by Stroke

Stroke	50	100	150	200	250	300
Guide weight (kg)	0.3	0.3	0.4	0.4	0.5	0.5
Guide + actuator weight (kg)	3.0	3.2	3.4	3.6	3.8	4.0

I/O Type (Actuator with Built-In Controller)

I/O Type

You can select a desired built-in controller of the ERC2 series from among the following three types, each adopting different external input/output (I/O) specifications. Choose the type that best suits your specific purpose.

specific purpose.							
Name	External view	Model	Features	Maximum number of positioning points	Input power supply	Power-supply capacity	Reference page
PIO type (NPN specification)		ERC2-RGS7C-I-PM	Simple control type capable of positioning to a maximum of 16 points	16			→ P295
PIO type (PNP specification)		ERC2-RGS7C-I-PM	PNP I/O type popular overseas	16	DC24V	2A max.	
SIO type		ERC2-RGS7C-I-PM	Dedicated field network connection type (using a gateway unit)	64			

Controller -Integrated Type

> Slider Type

Rod Type

Arm / Flat Type

t Grippe Rotary 1

Cleanroom Type

Splash Proof Typ

sh Cont

58

68



30w

60w

RC2-RGD6C

Controller-Integrated Type, Rod Type with Double Guide, Actuator Width 58mm Pulse Motor, Straight

■ Model Specification Items ERC2 — RGD6C—

- Encoder type -I: Incremental PM:Pulse motor specification

12: 12mm 6: 6mm 3: 3mm

50:50mm

I/O type NP:PIO (NPN) type PN:PIO 600:600mm

(PNP) type SE:SIOtype

Cable length Options : No cable P : 1m B :Brake 3m M:5m

Specified length:
Cable with connectors on both ends

NM:Reversed-home specification FT : Foot bracket specification : Robot cable RW□□: Robot cable with connectors on both ends

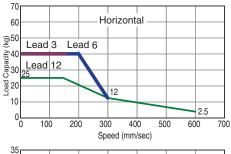
* Refer to p. 31 of the front matter for details on the model specification items



Correlation Diagram of Speed and Load Capacity

 $R \sqcap \sqcap$

With the RCP2 series, the load capacity will decrease as the speed increases due to the characteristics of the pulse motor used in the actuator. Use the table below to check if the desired speed and load capacity are satisfied.





- (1) When the stroke increases, the maximum speed will drop to prevent the ball screw from reaching a critical speed. Use the actuator specification table below to check the maximum speed at the stroke you desire.
- (2) The ERC2 series uses a pulse motor, so the load capacity will decrease as the speed increases. Use the correlation diagram of speed and load capacity on the right to check the load capacity corresponding to the speed you desire. Subtract the guide weight (refer to the facing page) from the load capacity.
- (3) The load capacity is based on operation at an acceleration of 0.3 G (or 0.2 G if the lead is 3 or the actuator is operated vertically). This is the maximum acceleration.
- (4) The horizontal load capacity assumes use of an external guide.

Actuator Specifications

■ Lead and Load Capacity

Maximum load capacity (Note 1)
Horizontal (kg) Vertical (kg) force (N) (Note 2) Stroke (mm) ERC2-RGD6C-I-PM-12-1-2-3-4 12 ~25 ~4.5 78 50 ~ 300 ERC2-RGD6C-I-PM-6-1-2-3-4 6 ~40 ~12 157 Set in 50-mm step ERC2-RGD6C-I-PM-3-1-2-3-4 40 ~18 304

Explanation of numbers Stroke I/O type Cable length Options

Stroke and Maximum Speed

Stroke	50 ~ 250 (Set in 50-mm steps)	300 (mm)
12	600	500
6	300	250
3	150	125
		(Unit: mm/s)

(Note 2) Refer to p. 406 for the graph of push force.

(Note 1) Take note that the maximum load capacity will decrease as the speed increases.

60w

Options		
Name	Model	Page
Brake	В	P381
Foot bracket	FT	P383
Reversed-home specification	NM	P385

Actuator Specifications				
Item	Description			
Drive method	Ball screw ø10mm, rolled C10			
Positioning repeatability	±0.05mm			
Backlash	0.1mm or less			
Rod diameter	ø22mm, dedicated SUS pipe			
Rod non-rotation accuracy	±1.5°			
Ambient operating temperature, humidity	0~40°C, 85% RH or below (non-condensing)			







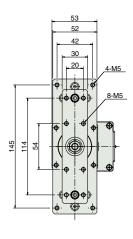


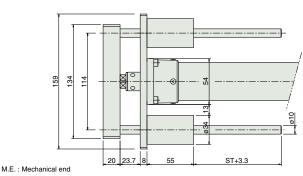
Dimensions

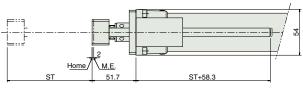


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• Refer to p. 8 for the actuator dimentions.

■ Dimensions and Weight by Stroke

Stroke	50	100	150	200	250	300
Guide weight (kg)	0.4	0.4	0.5	0.6	0.6	0.7
Guide + actuator weight (kg)	2.0	2.1	2.3	2.6	2.7	2.9

I/O Type (Actuator with Built-In Controller)

I/O Type

You can select a desired built-in controller of the ERC2 series from among the following three types, each adopting different external input/output (I/O) specifications. Choose the type that best suits your specific purpose.

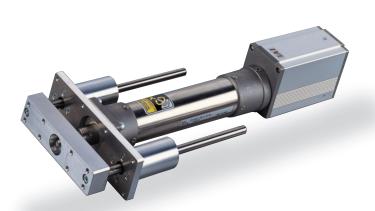
specific purpose.							
Name	External view	Model	Features	Maximum number of positioning points	Input power supply	Power-supply capacity	Reference page
PIO type (NPN specification)		ERC2-RGD6C-I-PM-[]-[]-NP-[]-[]	Simple control type capable of positioning to a maximum of 16 points	16			→ P295
PIO type (PNP specification)		ERC2-RGD6C-I-PMPN	PNP I/O type popular overseas	16	DC24V	2A max.	
SIO type		ERC2-RGD6C-I-PM-[]-[]-SE-[]-[]	Dedicated field network connection type (using a gateway unit)	64			

ZUW

60w

* Refer to p. 31 of the front matter for details on the model specification items.

RC2-RGD7C Controller-Integrated Type, Rod Type, Actuator Width 68mm, Pulse Motor, Straight ■ Model Specification Items **ERC2** — **RGD7C**— **PM** I/O type - Encoder type - Motor type Cable length Options NP:PIO I: Incremental PM:Pulse motor 16: 16mm 50:50mm :No cable P : 1m B :Brake 8: 8mm (NPN) type M:5m specification X : Specified length W : Cable with connectors on both ends FT : Foot bracket 4: 4mm PN:PIO NM:Reversed-home 600:600mm (PNP) type



- (1) When the stroke increases, the maximum speed will drop to prevent the ball screw from reaching a critical speed. Use the actuator specification table below to check the maximum speed at the stroke you desire.
- (2) The ERC2 series uses a pulse motor, so the load capacity will decrease as the speed increases. Use the correlation diagram of speed and load capacity on the right to check the load capacity corresponding to the speed you desire. Subtract the guide weight (refer to the facing page) from the load capacity.
- (3) The load capacity is based on operation at an acceleration of 0.3 G (or 0.2 G if the lead is 4 or the actuator is operated vertically). This is the maximum acceleration.
- (4) The horizontal load capacity assumes use of an external guide.

Correlation Diagram of Speed and Load Capacity

: Robot cable

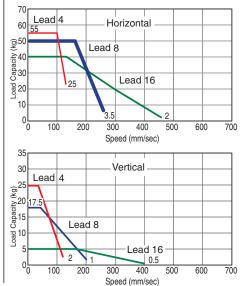
 $R \sqcap \sqcap$

SE:SIOtype

With the RCP2 series, the load capacity will decrease as the speed increases due to the characteristics of the pulse motor used in the actuator. Use the table below to check if the desired speed and load capacity are satisfied.

RW□□: Robot cable with connectors on both ends

specification



Actuator Specifications

■ Lead and Load Capacity

(Note 1) Take note that the maximum load capacity will decrease as the speed increases.

Model	Lead (mm)	Maximum load c Horizontal (kg)		Maximum push force (N) (Note 2)	Stroke (mm)
ERC2-RGD7C-I-PM-16-①-②-③-④	16	~40	~5	220	
ERC2-RGD7C-I-PM-8-1-2-3-4	8	~50	~17.5	441	50 ~ 300 (Set in 50-mm steps)
ERC2-RGD7C-I-PM-4-1-2-3-4	4	~55	~25	873	

Explanation of numbers 1 Stroke 2 I/O type 3 Cable length 4 Options

■ Stroke and Maximum Speed

ertical (kg)	Maximum push force (N) (Note 2)	Stroke (mm)		Stroke	50 ~ 300 (Set in 50-mm steps)
~5	220			16	450 <400>
~17.5	441	50 ~ 300 (Set in 50-mm steps)		8	250 <200>
~25	873			4	125
(Note 2) Refe	er to p. 406 for the	graph of push force.		* The figure in <> applies v	when the actuator is used vertically. (Unit: mm/s)

Options Page Model Name Brake R P381 Foot bracket FT P384 NM Reversed-home specification P385

Actuator Specifications				
Item	Description			
Drive method	Ball screw ø12mm, rolled C10			
Positioning repeatability	±0.05mm			
Backlash	0.1mm or less			
Rod diameter	ø30mm, dedicated SUS pipe			
Rod non-rotation accuracy	±1.5°			
Ambient operating temperature, humidity	0~40°C, 85% RH or below (non-condensing)			



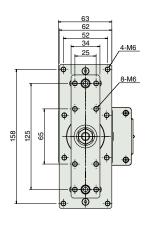


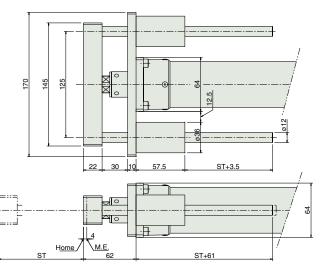












M.E.: Mechanical end

Refer to p. 10 for the actuator dimentions.

Dimensions and Weight by Stroke

Stroke	50	100	150	200	250	300
Guide weight (kg)	0.5	0.6	0.7	0.8	0.9	1.0
Guide + actuator weight (kg)	3.2	3.5	3.7	4.0	42	4.5

I/O Type (Actuator with Built-In Controller) You can select a desired built-in controller of the ERC2 series from among the following three types, each adopting different external input/output (I/O) specifications. Choose the type that best suits your specific purpose. Simple control PIO type type capable of ERC2-RGD7C-I-PM-□-□-NP-□-□ (NPN positioning to a 16 specification) maximum of 16 points PIO type PNP I/O type (PNP ERC2-RGD7C-I-PM-□-□-PN-□-□ 16 DC24V 2A max. →P295 popular overseas specification) Dedicated field SIO network connection

type (using a gateway unit)

64

ERC2-RGD7C-I-PM-□-□-SE-□-□

type

ERC2-RGD7C

Type

Type

Type

otary Type

pe Prod

roof Type C

introller

5 m

6 m

Pul

20

60

150v