



# Rod Type



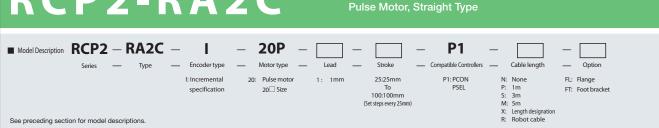
Pulse Motor **56** P

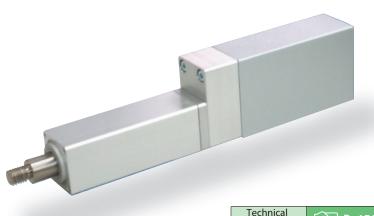
Servo Motor

Servo Motor
30 w
Servo Motor
60 w
Servo Motor
100 w

	Standard type	Coupling type	Width 25mm	RCP2-RA2C	121
			Width 35mm	RCP2-RA3C	123
DCDO			Width 45mm	RCP2-RA4C	125
RCP2			Width 64mm	RCP2-RA6C	127
cariac			Width 100mm	RCP2-RA10C	129
series	Single guide type	Coupling type	Width 45mm	RCP2-RGS4C	131
Pulse Motor			Width 64mm	RCP2-RGS6C	133
Туре	Double guide type	Coupling type	Width 35mm	RCP2-RGD3C	135
			Width 45mm	RCP2-RGD4C	137
			Width 64mm	RCP2-RGD6C	139
	-				
	Standard type	Coupling type	φ32mm	RCA-RA3C	141
			φ37mm	RCA-RA4C	143
		Built-in type	φ32mm	RCA-RA3D	145
			φ37mm	RCA-RA4D	147
		Motor reversing type	φ32mm	RCA-RA3R	149
RCA			φ37mm	RCA-RA4R	151
	Single guide type	Coupling type	φ32mm	RCA-RGS3C	153
series			φ37mm	RCA-RGS4C	155
24V		Built-in type	φ32mm	RCA-RGS3D	157
Servo Motor			φ37mm	RCA-RGS4D	159
Туре	Double guide type	Coupling type	φ32mm	RCA-RGD3C	161
			φ37mm	RCA-RGD4C	163
		Built-in type	φ32mm	RCA-RGD3D	165
			φ37mm	RCA-RGD4D	167
		Motor reversing type	φ32mm	RCA-RGD3R	169
			φ37mm	RCA-RGD4R	171
	Standard type	Coupling type	φ37mm	RCS2-RA4C	173
	Ctaridaid typo	Coupling type	Width 55mm	RCS2-RA5C	175
		Built-in type	φ37mm	RCS2-RA4D	177
			Width 75mm	RCS2-RA7AD	179
			Width 75mm	RCS2-RA7BD	181
		Motor reversing type	φ37mm	RCS2-RA4R	183
		3 71	Width 55mm	RCS2-RA5R	185
RCS2			Width 130mm	RCS2-RA13R	187
	Single guide type	Coupling type	φ37mm	RCS2-RGS4C	189
series			Width 55mm	RCS2-RGS5C	191
200V		Built-in type	φ37mm	RCS2-RGS4D	193
Servo Motor		- •	Width 75mm	RCS2-RGS7AD	195
Туре			Width 75mm	RCS2-RGS7BD	197
	Double type	Coupling type	φ37mm	RCS2-RGD4C	199
		<del></del>	Width 55mm	RCS2-RGD5C	201
		Built-in type	φ37mm	RCS2-RGD4D	203
		- •	Width 75mm	RCS2-RGD7AD	205
			Width 75mm	RCS2-RGD7BD	207
		Motor reversing type	φ37mm	RCS2-RGD4R	209

# RCP2 ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru ROBO Cylinder, Rod Type, Actuator Width 25mm,





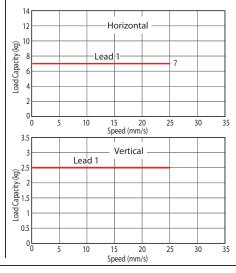
Technical Reference 译 P. 451



- (1) The RCP2 series uses a pulse motor, so the payload decreases at high speeds See the Diagram Showing Correlation Between Speed and Payload on the right.
- This value is when the unit is operated at an acceleration of 0.05G. 0.05G is the upper limit for acceleration. Also, the horizontal payload is when combined with an external guide. Please note that if external force is applied to the rod in a direction other than the proper direction the rod travels, the detent may get damaged.

#### ■Speed vs. Payload Graph

A characteristic of the RCP2 Series pulse motor is that the payload decreases as the speed increases. Use the table below to confirm that there is sufficient speed at the desired payload.



#### Actuator Specification Table

Legend: ① Stroke ② Cable length ③ Options

#### Leads and Payloads (Note 1) Please note that the maximum payload decreases when the speed increases.

Lead Max. payload Max. push force Stroke Model (mm) Horizontal (kg) Vertical (kg) (N) (Note 1) (mm) 25 to 100 RCP2-RA2C-I-20P-1-①-P1-②-③ 1 2.5 100

(Note 1) See P492 for the graph of push force.

	<u> </u>
Stroke	25 to 100
Lead	(every 25mm)

■Stroke and Maximum Speed

(Unit = mm/s)

25

#### Pricing List By Stroke

	Type code
① Stroke	RA2C
(mm)	Encoder type
	Incremental
25	_
50	_
75	_
100	_

#### ② Cable Length Price List

Type	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
	X06 (6m)	to X10 (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to <b>R03</b> (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

<sup>\*</sup>Please see P374 for information on the maintenance cable.

#### ③ Option Price List Option code Standard price See page Flange FL P438 Foot bracket P440

Actuator Specification				
Description				
Ball screw $\phi$ 6mm rolled C10				
±0.02mm				
0.1mm or less				
φ12mm				
±2.1 degrees				
0 to 40°C, 85% RH or less (non-condensing)				







Dimensional Drawings

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

Caution

\*In this case, the dimensions on the motor side (distance to home) and the dimensions on the reverse motor side are reversed.

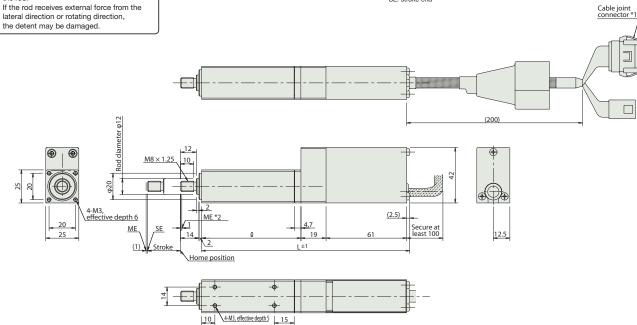
\*1. Connect the motor cable and encoder cable. For details on cables, see P374.

Information on

special orders

\*2. Please note that during home return, the rod moves to the ME, so watch out for interference with surrounding objects. ME: mechanical end

SE: stroke end



#### ■Dimensions and Weight by Stroke

Billionologic and Wolght by Guotte					
Stroke	25	50	75	100	
Q	75	100	125	150	
١	157.5	182.5	207.5	232.5	
Weight (kg)	0.4	0.5	0.6	0.7	

				Maximum number of				
Title	External View	Model	Features	positioning points	Input power	Power-supply capacity	Standard price	See page
Positioner type	Ĥ	PCON-C-20PI-NP-2-0	Up to 512-point	512 points			_	I
Safety category compatible Positioner type		PCON-CG-20PI-NP-2-0	positioning	512 points			-	1
Solenoid valve type		PCON-CY-20PI-NP-2-0	Same as solenoid valve Controlled operation enabled	3 points			_	P365
Solenoid valve type		PCON-PL-20PI-NP-2-0	Compatible with differential line driver Pulse train input type		500 11/		-	P305
Pulse series input type (Open collector specification)		PCON-PO-20PI-NP-2-0	Open collector compatible Pulse series input type	(-)	DC24V	Maximum 2A	_	1
Serial communication type		PCON-SE-20PI-N-0-0	Serial communications Special type	64 points		_	l	
Field network type		RPCON-20P	Field network Dedicated type	768 points		-	P343	
Program control type		PSEL-C-1-20PI-NP-2-0	Programmable type capable of operating up to 2 axes	1500 points			_	P395

RCP2-RA2C 122

Servo Motor

20 w Servo Motor

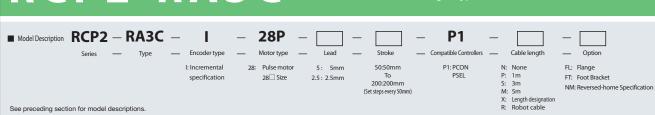
Servo Motor

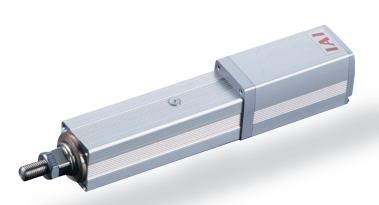
100w

150w Servo Motor RCP2 ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

# RCP2-RA3C

ROBO Cylinder, Rod Type, Actuator Width 35mm, Pulse Motor, Straight Type





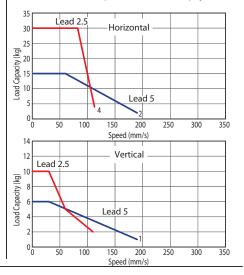
Technical Reference **全 P. 451** 

Notes on selection

- (1) If the stroke is long, the maximum speed will decrease because of the relationship with the critical rotations of the ball screw. See the actuator specification table below for the desired maximum stroke speed.
- (2) The RCP2 series uses a pulse motor, so the payload decreases at high speeds. See the Diagram Showing Correlation Between Speed and Payload on the right.
- (3) This is the value when operating at an acceleration of 0.2G. 0.2G is the upper limit for acceleration. Also, the horizontal payload is when combined with an external guide. Please note that if external force is applied to the rod in a direction other than the proper direction the rod travels, the detent may get damaged.

#### ■Speed vs. Payload Graph

A characteristic of the RCP2 Series pulse motor is that the payload decreases as the speed increases. Use the table below to confirm that there is sufficient speed at the desired payload.



#### Actuator Specification Table

#### ■Leads and Payloads

(Note 1) Please note that the maximum payload decreases when the speed increases.

Model	Lead	Max. paylo	ad (Note 1)	Max. push force	Stroke
INIOGEI	(mm)	Horizontal (kg)	Vertical (kg)	(N) (Note 1)	(mm)
RCP2-RA3C-I-28P-5-①-P1-②-③	5	To 15	To 6	73.5	50 to 200
RCP2-RA3C-I-28P-2.5-①-P1-②-③	2.5	To 30	To 10	156.8	(every 50mm)

## Stroke and Maximum Speed

Stroke	50 to 200	
Lead	(every 50mm)	
5	187	
2.5	114	

Legend: ① Stroke ② Cable length ③ Options (Note 2) See P492 for the graph of push force.

(Unit = mm/s)

### ① Pricing List By Stroke

	Type code
① Stroke	RA3C
(mm)	Encoder type
	Incremental
50	_
100	_
150	_
200	_

#### ② Cable Length Price List

Туре	Cable symbol		Standard price
	P (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
	X06 (6m)	to X10 (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to R03 (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

<sup>\*</sup>Please see P374 for information on the maintenance cable.

#### 

P442

NM

Actuator Specification				
Item	Description			
Drive method	Ball screw $\phi$ 8mm rolled C10			
Positioning Repeatability	±0.02mm			
Backlash	0.1mm or less			
Rod diameter	φ22mm			
Non-rotation accuracy of the rod	±1.5 degrees			
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)			

Reversed-home

Dimensional Drawings

CAD drawings can be downloaded from the website. www.intelligentactuator.com

Information on special orders



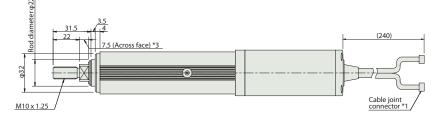


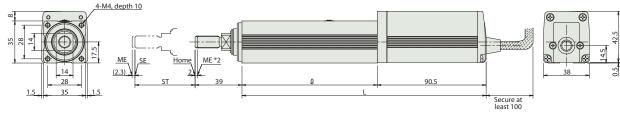
Caution

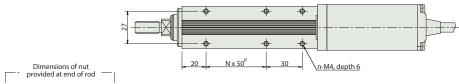
Do not apply external force on the rod in any direction other than the moving direction of

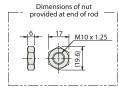
If the rod receives external force from the lateral direction or rotating direction, the detent may be damaged.

- \*1. Connect the motor cable and encoder cable. For details on cables, see P374.
- \*2. Please note that during home return, the rod moves to the ME, so watch out for interference with surrounding objects. ME: mechanical end SE: stroke end
- \*3. The direction that the bolt width surface moves differs by product.









#### ■Dimensions and Weight by Stroke

Stroke	50	100	150	200				
Q	112.5	162.5	212.5	262.5				
L	203	253	303	353				
N	1	2	3	4				
n	6	8	10	12				
Weight (kg)	0.8	0.95	1.1	1.25				

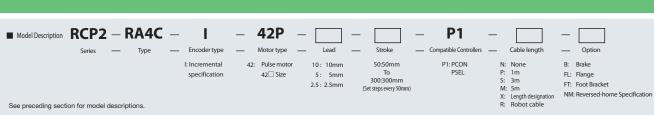
O-100	 Control	

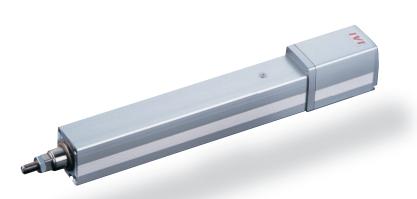
The HCP2 Series actuators can be operated with the following controllers. Select the type that is compatible with your application.																
Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page								
Positioner type		PCON-C-28SPI-NP-2-0	Up to 512-point	512 points					_							
Safety category compatible Positioner type		PCON-CG-28SPI-NP-2-0 positioning possible 512 points			-											
Solenoid valve type		PCON-CY-28SPI-NP-2-0	Same as solenoid valve Controlled operation enabled	3 points		Maximum 2A									_	P365
Solenoid valve type	á	PCON-PL-28SPI-NP-2-0	Compatible with differential line driver Pulse train input type	( )	DC24V		_	F303								
Pulse series input type (Open collector specification)		PCON-PO-28SPI-NP-2-0	Open collector compatible Pulse series input type	(-)	DG24V		-									
Serial communication type		PCON-SE-28SPI-N-0-0	Serial communications Special type	64 points			_									
Field network type		RPCON-28SP	Field network Dedicated type	768 points			-	P343								
Program control type		PSEL-C-1-28SPI-NP-2-0	Programmable type capable of operating up to 2 axes	1500 points			_	P395								

RCP2-RA3C 124

RCP2 ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

ROBO Cylinder, Rod Type, Actuator Width 45mm, Pulse Motor, Straight Type



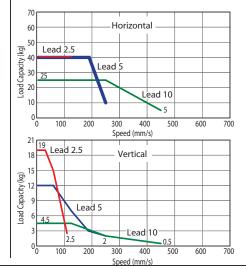


Technical Reference 译 P. 451

- (1) If the stroke is long, the maximum speed will decrease because of the relationship with the critical rotations of the ball screw. See the actuator specification table below for the desired maximum stroke speed.
- The RCP2 series uses a pulse motor, so the payload decreases at high speeds. See the Diagram Showing Correlation Between Speed and Payload on the right.
- This is the value when operating at an acceleration of 0.2G. 0.2G is the upper limit for acceleration. Also, the horizontal payload is when combined with an external guide. Please note that if external force is applied to the rod in a direction other than the proper direction the rod travels, the detent may get damaged.

#### ■Speed vs. Payload Graph

A characteristic of the RCP2 Series pulse motor is that the payload decreases as the speed increases. Use the table below to confirm that there is sufficient speed at the desired payload.



#### Actuator Specification Table

#### ■Leads and Payloads

(Note 1) Please note that the maximum payload decreases when the speed increases.

Model	Lead (mm)	Max. paylo Horizontal (kg)		Max. push force (N) (Note 1)	Stroke (mm)	
RCP2-RA4C-I-42P-10-①-P1-②-③	10	To 25	To 4.5	150		
RCP2-RA4C-I-42P-5-①-P1-②-③	5	To 40	To 12	284	50 to 300 (every 50mm)	
RCP2-RA4C-I-42P-2.5-①-P1-②-③	2.5	40	To 19	358		
Legend: ① Stroke ② Cable length ③ Options (Note 2) See P492 for the graph of push force.						

■St	roke a	nd M	axim	um Speed	d
	01.1	- o .		0.50	$\overline{}$

SHOKE	50 10 200	250	300			
Lead	(every 50mm)	(mm)	(mm)			
10	458	458	350			
5	250	237	175			
2.5	125	118	87			
2.5	<114>	<114>	0/			
*Information inside <> is for vertical use. (Unit = mm/s						

#### Pricing List By Stroke

	Type code
① Stroke	RA4C
(mm)	Encoder type
	Incremental
50	_
100	_
150	_
200	_
250	_
300	_

#### 2 Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
	X06 (6m)	to X10 (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to R03 (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

<sup>\*</sup>Please see P374 for information on the maintenance cable.

#### ③ Option Price List Option code Standard price See page Brake В P437 Flange FL P438 FT Foot bracket P440

P442

NM

Actuator Specification					
Item	Description				
Drive method	Ball screw $\phi$ 8mm rolled C10				
Positioning Repeatability	±0.02mm				
Backlash	0.1mm or less				
Rod diameter	φ22mm				
Non-rotation accuracy of the rod	±1.5 degrees				
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)				

Reversed-home specification

RCP2-RA4C 126



2D CAD

Dimensional Drawings

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

If the rod receives external force from the lateral direction or rotating direction, the detent may be damaged.

\*1. Connect the motor cable and encoder cable. For details on cables, see P374.
\*2. During home return, the rod moves to the ME, so

Information on

special orders

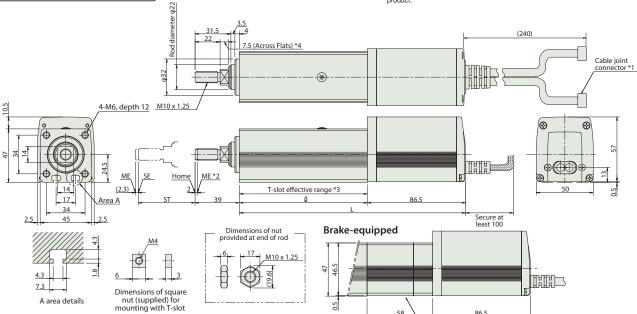
P. 454

watch out for interference with items near the unit. ME: mechanical end SE: stroke end

Dimensions inside ( ) are reference dimensions.

\*3. Please note that there is no T-groove on the bottom of the brake unit.

\*4. The direction of the bolt width surface differs by



\*\*The brake specification has an overall length that The overall length is 72.5mm longer, and the mass

### ■Dimensions and Weight by Stroke

Stroke	50	100	150	200	250	300		
Q	112.5	162.5	212.5	262.5	312.5	362.5		
L	199	249	299	349	399	449		
Weight (kg)	1.35	1.6	1.85	2.1	2.35	2.6		

Compatible Controllers  The RCP2 Series actuators can be operated with the following controllers. Select the type that is compatible with your application.										
Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page		
Positioner type	Ĩ	PCON-C-42PI-NP-2-0	Up to 512-point			_				
Safety category compatible Positioner type		PCON-CG-42PI-NP-2-0	positioning possible							
Solenoid valve type		PCON-CY-42PI-NP-2-0	Same as solenoid valve Controlled operation enabled	3 points			_			
Solenoid valve type	Ó	PCON-PL-42PI-NP-2-0	Compatible with differential line driver Pulse train input type				_	P365		
Pulse series input type (Open collector specification)		PCON-PO-42PI-NP-2-0	Open collector compatible Pulse series input type	(-)	DC24V	Maximum 2A	_			
Serial communication type		PCON-SE-42PI-N-0-0	Serial communications Special type	64 points			_			
Field network type		RPCON-42P	Field network Dedicated type	768 points			_	P343		
Program control type		PSEL-C-1-42PI-NP-2-0	Programmable type capable of operating up to 2 axes	1500 points			_	P395		

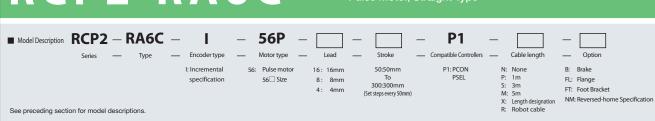
Servo Motor
150w

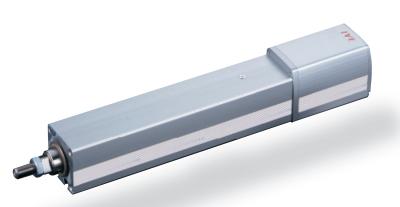
Servo Motor

RCP2 ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

# RCP2-RA6C

ROBO Cylinder, Rod Type, Actuator Width 64mm, Pulse Motor, Straight Type





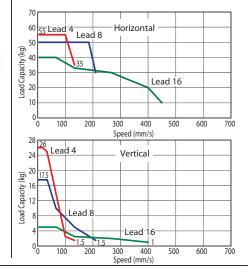
Technical Reference ( P. 451

Notes on selection

- (1) If the stroke is long, the maximum speed will decrease because of the relationship with the critical rotations of the ball screw. See the actuator specification table below for the desired maximum stroke speed.
- 2) The RCP2 series uses a pulse motor, so the payload decreases at high speeds. See the Diagram Showing Correlation Between Speed and Payload on the right.
- (3) This is the value when operating at an acceleration of 0.2G. 0.2G is the upper limit for acceleration. Also, the horizontal payload is when combined with an external guide. Please note that if external force is applied to the rod in a direction other than the proper direction the rod travels, the detent may get damaged.

#### ■Speed vs. Payload Graph

A characteristic of the RCP2 Series pulse motor is that the payload decreases as the speed increases. Use the table below to confirm that there is sufficient speed at the desired payload.



#### Actuator Specification Table

#### ■Leads and Payloads

(Note 1) Please note that the maximum payload decreases when the speed increases.

Model	Lead (mm)	Max. paylo Horizontal (kg)		Max. push force (N) (Note 1)	Stroke (mm)		
RCP2-RA6C-I-56P-16-①-P1-②-③	16	To 40	To 5	240			
RCP2-RA6C-I-56P-8-①-P1-②-③	8	To 50	To 17.5	470	50 to 300 (every 50mm)		
RCP2-RA6C-I-56P-4-①-P1-②-③	4	To 55	To 26	800			
Legend: ① Stroke ② Cable length ③ Options (Note 2) See P492 for the graph of push force.							

(Note 2) See P492 for the graph of push force. \*Information inside <> is for vertical use. (Unit = mm/s)

#### ■Stroke and Maximum Speed

Stroke	50 to 300 (every 50mm)
16	450<400>
8	210
4	130

① Pricing List By Stroke

	Type code
① Stroke	RA6C
(mm)	Encoder type
	Incremental
50	-
100	-
150	-
200	_
250	ı
300	_

#### ② Cable Length Price List

Type	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
	X06 (6m)	to X10 (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
Special length	X16 (16m)	to X20 (20m)	_
	<b>R01</b> (1m)	to R03 (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to R15 (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

\*Please see P374 for information on the maintenance cable.

#### ③ Option Price List Title Option code Standard price See page Brake В P437 Flange FL P438 FT Foot bracket P440 NM Reversed-home specification P442

Actuator Specification				
Item	Description			
Drive method	Ball screw $\phi$ 12mm rolled C10			
Positioning Repeatability	±0.02mm			
Backlash	0.1mm or less			
Rod diameter	φ30mm			
Non-rotation accuracy of the rod	±1.0 degrees			
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)			

50 100

300

3.6

350 400

4.1 4.6

138 188 238 288

250

3.1

Weight (kg)

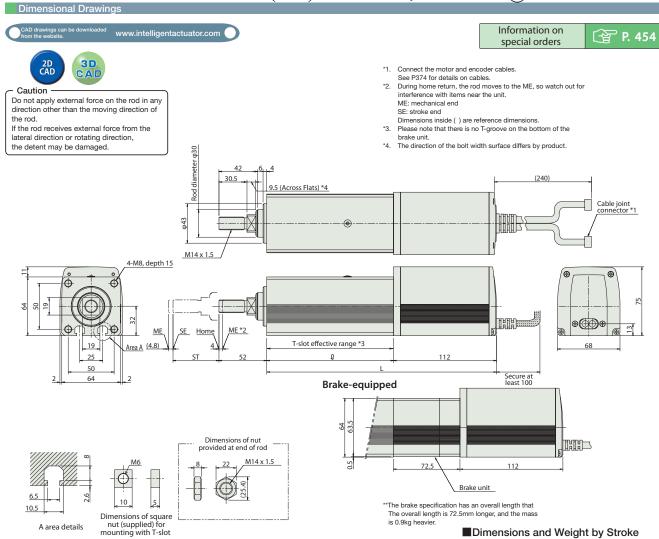
150 200 250

300 388

338

450

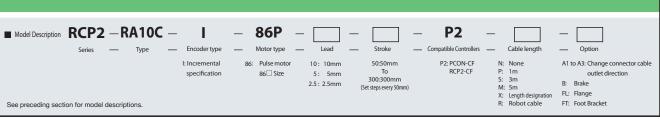
5.1 5.6

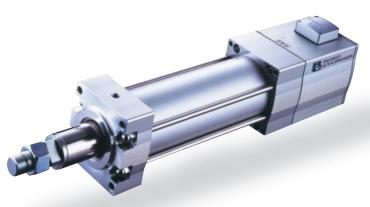


Title	External View	Model	Fastimas	Maximum number of	In the second		Ctorrel and maiore	0		
Positioner type	External view	PCON-C-56PI-NP-2-0	Features Up to 512-point	positioning points	Input power	Power-supply capacity	Standard price _	See page		
Safety category compatible Positioner type		PCON-CG-56PI-NP-2-0	positioning possible	512 points			_			
Solenoid valve type		PCON-CY-56PI-NP-2-0	Same as solenoid valve Controlled operation enabled	3 points		3 points			_	P365
Solenoid valve type	ő	PCON-PL-56PI-NP-2-0	Compatible with differential line driver Pulse train input type		DC24V	Maximum 2A	-	F303		
Pulse series input type (Open collector specification)		PCON-PO-56PI-NP-2-0	Open collector compatible Pulse series input type	(-)	DG24V	Maximum 2A	_			
Serial communication type		PCON-SE-56PI-N-0-0	Serial communications Special type	64 points			_			
Field network type		RPCON-56P	Field network Dedicated type	768 points			_	P343		
Program control type		PSEL-C-1-56PI-NP-2-0	Programmable type capable of operating up to	1500 points			_	P395		

# RCP2 ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

ROBO Cylinder, High-Thrust Rod Type, Actuator Width 100mm, Pulse Motor, Straight Type



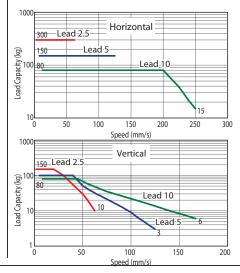


Technical Reference 译 P. 451

- The minimum speed is set for each lead. (Lead 10: 10mm/s, Lead 5: 5mm/s, Lead 2.5: 1mm/s) Please note that vibration may occur if the unit is operated at a speed under the minimum speed.
- The RCP2 series uses a pulse motor, so the payload decreases at high speeds. See the Diagram Showing Correlation Between Speed and Payload on the right.
- The payloads for each lead are as follows: Lead 10: 0.04G, Lead 5: 0.02G, Lead 2.5: 0.01G. The above values are the upper limits for acceleration. Also, the horizontal payload is when combined with an external guide. Please note that if external force is applied to the rod in a direction other than the proper direction the rod travels, the detent may get damaged.

#### ■Speed vs. Payload Graph

A characteristic of the RCP2 Series pulse motor is that the payload decreases as the speed increases. Use the table below to confirm that there is sufficient speed at the desired payload.



#### Actuator Specification Table

#### Leads and Payloads

(Note 1) Please note that the maximum payload decreases when the speed increases.

Model	Lead (mm)	Max. paylo Horizontal (kg)		Max. push force (N) (Note 1)	Stroke (mm)
	()	i iorizoritai (kg)	vertical (kg)	(1) (1010 1)	()
RCP2-RA10C-I-86P-10-①-P2-②-③	10	To 80	To 80	1500	
RCP2-RA10C-I-86P-5-①-P2-②-③	5	150	To 100	3000	50 to 300 (every 50mm)
RCP2-RA10C-I-86P-2.5-①-P2-②-③	2.5	300	To 150	6000	
Legend: ① Stroke ② Cable length ③ Options		(Note 2)	See P493 fo	or the graph o	f push force.

#### ■Stroke and Maximum Speed

Stroke	50 to 300 (every 50mm)
10	250<167>
5	125
2.5	63

\*Information inside <> is for vertical use. (Unit = mm/s)

#### ① Pricing List By Stroke

	Type code
① Stroke	RA10C
(mm)	Encoder type
	Incremental
50	_
100	_
150	_
200	_
250	_
300	_

#### ② Cable Length Price List

Туре	Cab	Cable symbol		
	<b>P</b> (1m)		_	
Standard type	<b>S</b> (3m)		_	
	<b>M</b> (5m)		_	
	X06 (6m)	to X10 (10m)	_	
Special length	X11 (11m)	to X15 (15m)	_	
	X16 (16m)	to X20 (20m)	_	
	<b>R01</b> (1m)	to R03 (3m)	_	
	R04 (4m)	to <b>R05</b> (5m)	_	
Robot cable	R06 (6m)	to R10 (10m)	_	
	R11 (11m)	to <b>R15</b> (15m)	_	
	R16 (16m)	to <b>R20</b> (20m)	_	

\*Please see P374 for information on the maintenance cable.

#### ③ Option Price List Title Option code See page Standard price Change the cable connector outlet direction A1 to A3 P437 В P437 Brake Flange FL P438

P440

FT

Actuator Specification	on .
Item	Description
Drive method	Ball screw rolled C10
Positioning Repeatability	±0.02mm
Backlash	0.1mm or less
Rod diameter	φ40mm
Non-rotation accuracy of the rod	±1.0 degrees
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)

Foot bracket

20 w

Servo Moto

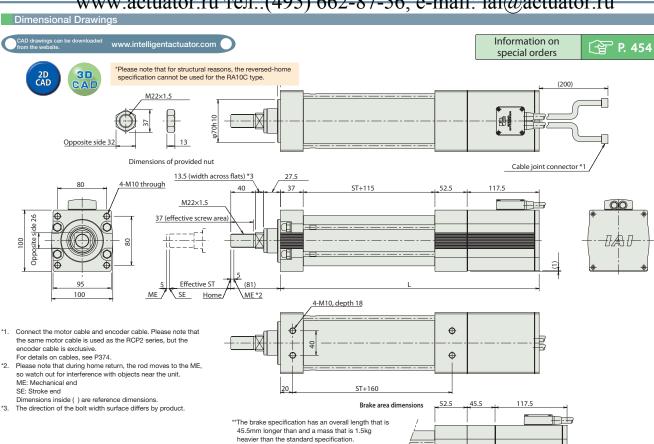
30 w Servo Motor

60 w Servo Motor

100w

150w

750w



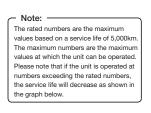
Do not apply external force on the rod in any direction other than the moving direction of the rod.

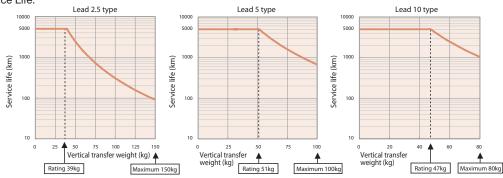
Caution

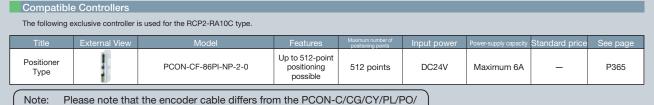
If the rod receives external force from the lateral direction or rotating direction, the detent may be damaged.

#### Diagram Showing Correlation Between Vertical Transport Mass and Service Life

■The service life of the ROBO Cylinder rod type is 5,000km, but the maximum thrust of the RCP2-RA10C is larger than the other types, so the service life varies widely based on the payload and push force used. When selecting a type based on the Diagram Showing Correlation Between Speed and Payload or the Diagram Showing Correlation Between Push Force and Electric Current Limitations, check the service life in the Diagram Showing Correlation Between Payload and Service Life and the Diagram Showing Correlation Between Push Force and Service Life.







e: Please note that the encoder cable differs from the PCON-C/CG/CY/PL/PO/ SE controller in that it is a CF type only. ■Dimensions and Weight by Stroke

9.5

372 422 472 522

9

Weight (kg)

50 100 150 200 250 300

10 10.5

11 11.5

Servo Motor

20 w

60 w Servo Motor

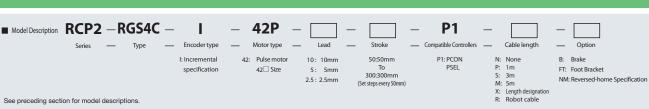
Servo Motor

Servo Motor 750w

RCP2 ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

# RCP2-RGS4C

ROBO Cylinder, Single-guide Rod Type, Actuator Width 45mm, Pulse Motor, Straight Type





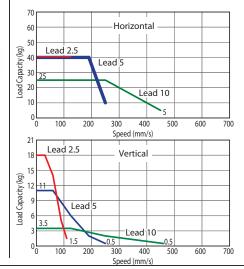
Technical Reference **全 P. 451** 



- If the stroke is long, the maximum speed will decrease because of the relationship with the critical rotations of the ball screw. See the actuator specification table below for the desired maximum stroke speed.
- (2) The RCP2 series uses a pulse motor, so the payload decreases at high speeds. See the Diagram Showing Correlation Between Speed and Payload on the right.
- (3) This is the value when operating at an acceleration of 0.2G. 0.2G is the upper limit for acceleration. Also, the horizontal payload is when combined with an external guide. Please note that if external force is applied to the rod in a direction other than the proper direction the rod travels, the detent may get damaged.

#### ■Speed vs. Payload Graph

A characteristic of the RCP2 Series pulse motor is that the payload decreases as the speed increases. Use the table below to confirm that there is sufficient speed at the desired payload.



#### Actuator Specification Table

#### ■Leads and Payloads

(Note 1) Please note that the maximum payload decreases when the speed increases.

Model	Lead (mm)	Max. paylo Horizontal (kg)		Max. push force (N) (Note 1)	Stroke (mm)
RCP2-RGS4C-I-42P-10-①-P1-②-③	10	To 25	To 3.5	150	
RCP2-RGS4C-I-42P-5-①-P1-②-③	5	To 40	To 11	284	50 to 300 (every 50mm)
RCP2-RGS4C-I-42P-2.5-①-P1-②-③	2.5	40	To 18	358	
Legend: ① Stroke ② Cable length ③ Options		(Note 2)	See P492 fo	or the graph o	f push force.

(Note 2) See P492 for the graph of push force. \*Information inside <> is for vertical use. (Unit = mm/s)

#### ■Stroke and Maximum Speed

Stroke	50 to 200 (every 50mm)	250 (mm)	300 (mm)
10	458	458	350
5	250	237	175
2.5	125 <114>	118 <114>	87

① Pricing List By Stroke

① Stroke (mm)	Type code RGS4C Encoder type Incremental
50	<del>-</del>
100	_
150	-
200	_
250	_
300	_

#### ② Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
	X06 (6m)	to <b>X10</b> (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to <b>R03</b> (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

<sup>\*</sup>Please see P374 for information on the maintenance cable.

# 3 Option Price List Title Option code See page Standard price Brake B P437 — Foot bracket FT P440 — Reversed-home specification NM P442 —

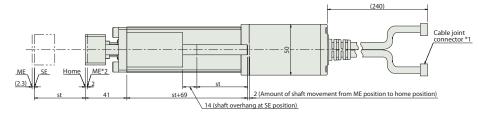
Actuator Specification	on
Item	Description
Drive method	Ball screw $\phi$ 8mm rolled C10
Positioning Repeatability	±0.02mm
Backlash	0.1mm or less
Guide	Single guide Guide rod diameter $\phi$ 10mm Ball bush type
Rod diameter	φ22mm
Non-rotation accuracy of the rod	±0.05 degrees
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)

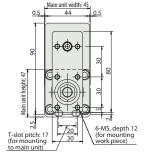


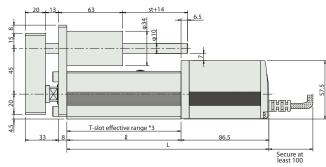


- Connect the motor and encoder cables. For details on cables, see P374.

  During home return, the rod moves to the ME, so watch out for interference with items near the unit. ME: mechanical end
  - Dimensions inside ( ) are reference dimensions.
- Please note that there is no T-groove on the bottom of the brake unit.



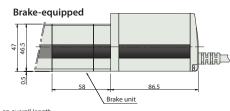






control type





\*The brake specification has an overall length that is 58mm longer than and a mass that is 0.4kg heavier than the standard specification.

#### ■Dimensions and Weight by Stroke

Stroke	50	100	150	200	250	300
Q	112.5	162.5	212.5	262.5	312.5	362.5
L	199	249	299	349	399	449
Weight (kg)	1.8	2.1	2.4	2.7	2.9	3.2

#### Compatible Controllers The RCP2 Series actuators can be operated with the following controllers. Select the type that is compatible with your application. Positioner PCON-C-42PI-NP-2-0 type Up to 512-point positioning 512 points Safety category possible PCON-CG-42PI-NP-2-0 compatible Positioner type Same as solenoid Solenoid valve PCON-CY-42PI-NP-2-0 3 points Controlled type operation enabled P365 Compatible with Solenoid valve PCON-PL-42PI-NP-2-0 differential line drive type Pulse train input type (-)DC24V Maximum 2A Pulse series Open collector input type (Open collector compatible Pulse series PCON-PO-42PI-NP-2-0 specification) input type Serial Serial communications Special type 64 points communication PCON-SE-42PI-N-0-0 Field network RPCON-42P P343 768 points type Dedicated type Programmable type Program

1500 points

capable of

operating up to 2 axes

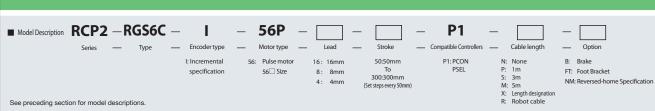
PSEL-C-1-42PI-NP-2-0

RCP2-RGS4C 132

P395

# RCP2 ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

ROBO Cylinder, Rod Type, Actuator Width 25mm, Pulse Motor, Straight Type





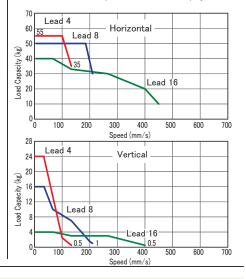
Technical Reference 译 P. 451



- (1) If the stroke is long, the maximum speed will decrease because of the relationship with the critical rotations of the ball screw. See the actuator specification table below for the desired maximum stroke speed.
- The RCP2 series uses a pulse motor, so the payload decreases at high speeds. See the Diagram Showing Correlation Between Speed and Payload on the right.
- This is the value when operating at an acceleration of 0.2G. 0.2G is the upper limit for acceleration. Also, the horizontal payload is when combined with an external guide. Please note that if external force is applied to the rod in a direction other than the proper direction the rod travels, the detent may get damaged.

#### ■Speed vs. Payload Graph

A characteristic of the RCP2 Series pulse motor is that the payload decreases as the speed increases. Use the table below to confirm that there is sufficient speed at the desired payload.



#### Actuator Specification Table

#### ■Leads and Payloads

(Note 1) Please note that the maximum payload decreases when the speed increases.

	Model		Max. payload (Note 1)		Max. push force	Stroke
		(mm)	Horizontal (kg)	Vertical (kg)	(N) (Note 1)	(mm)
	RCP2-RGS6C-I-56P-16-①-P1-②-③	16	To 40	To 4	240	
	RCP2-RGS6C-I-56P-8-①-P1-②-③	8	To 50	To 16	470	50 to 300 (every 50mm)
	RCP2-RGS6C-I-56P-4-①-P1-②-③	4	To 55	To 24	800	
ľ	Legend: ① Stroke ② Cable length ③ Options		(Note 2)	See P492 fo	or the graph o	f push force.

#### ■Stroke and Maximum Speed

Stroke	50 to 300 (every 50mm)			
16	450<400>			
8	210			
4	130			
*Information inside	e <> is for vertical use. (Unit = mm/s)			

#### ① Pricing List By Stroke

	Type code
① Stroke	RGS6C
(mm)	Encoder type
	Incremental
50	_
100	_
150	_
200	_
250	_
300	_

#### ② Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
	X06 (6m)	to <b>X10</b> (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to <b>R03</b> (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

<sup>\*</sup>Please see P374 for information on the maintenance cable.

#### ③ Option Price List Title Option code Standard price See page Brake В P437 Foot bracket FT P440 Reversed-home specification NMP442

Actuator Specification	n
Item	Description
Drive method	Ball screw $\phi$ 12mm rolled C10
Positioning Repeatability	±0.02mm
Backlash	0.1mm or less
Guide	Single guide Guide rod diameter $\phi$ 12mm Ball bush type
Rod diameter	φ30mm
Non-rotation accuracy of the rod	±0.05 degrees
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)

Information on special orders

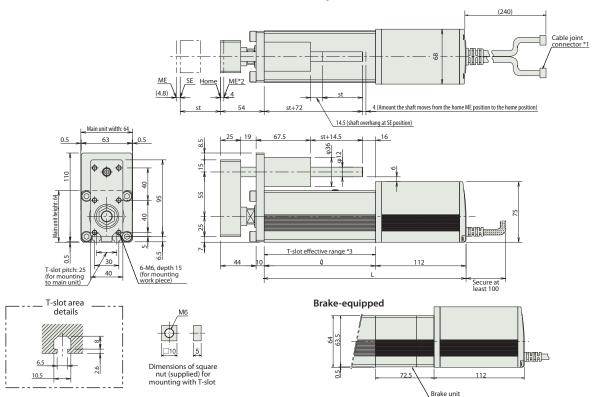
😭 P. 454





- Connect the motor and encoder cables. For details on cables, see P374.

  During home return, the rod moves to the ME, so watch out for interference with items near the unit. ME: mechanical end
- Dimensions inside ( ) are reference dimensions.
- \*3. Please note that there is no T-groove on the bottom of the brake unit.



\*The brake specification has an overall length that is 58mm longer than and a mass that is 0.4kg heavier than the standard specification.

#### ■Dimensions and Weight by Stroke

Stroke	50	100	150	200	250	300			
Q	138	188	238	288	338	388			
L	250	300	350	400	450	500			
Weight (kg)	3.6	4.4	5.0	5.5	6.1	6.6			

Compatible Controllers  The RCP2 Series actuators can be operated with the following controllers. Select the type that is compatible with your application.										
Title External View Model Features Maximum number of positioning points Input power Power-supply capacity Standard price See page										
Positioner type	Ī	PCON-C-56PI-NP-2-0	Up to 512-point	Up to 512-point positioning 512 points possible				_		
Safety category compatible Positioner type		PCON-CG-56PI-NP-2-0						_		
Solenoid valve type		PCON-CY-56PI-NP-2-0	Same as solenoid valve Controlled operation enabled	3 points		Maximum 2A	_	D005		
Solenoid valve type	ő	PCON-PL-56PI-NP-2-0	Compatible with differential line driver Pulse train input type					2004/	_	P365
Pulse series input type (Open collector specification)		PCON-PO-56PI-NP-2-0	Open collector compatible Pulse series input type	(-)	DC24V		_			
Serial communication type		PCON-SE-56PI-N-0-0	Serial communications Special type	64 points			_			
Field network type		RPCON-56P	Field network Dedicated type	768 points			_	P343		
Program control type		PSEL-C-1-56PI-NP-2-0	Programmable type capable of operating up to 2 axes	1500 points			_	P395		

RCP2-RGS6C 134

Servo Motor

Servo Motor

60 W Servo Motor

Servo Motor

Servo Motor 750w

RCP2 ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

# RCP2-RGD3C

ROBO Cylinder, Double-guide Rod Type, Actuator Width 35mm, Pulse Motor, Straight Type





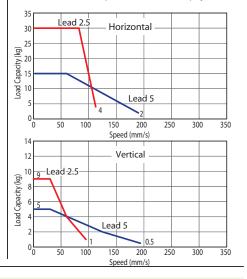
Technical Reference **译 P. 451** 

Notes on selection

- (1) If the stroke is long, the maximum speed will decrease because of the relationship with the critical rotations of the ball screw. See the actuator specification table below for the desired maximum stroke speed.
- 2) The RCP2 series uses a pulse motor, so the payload decreases at high speeds. See the Diagram Showing Correlation Between Speed and Payload on the right.
- (3) This is the value when operating at an acceleration of 0.2G. 0.2G is the upper limit for acceleration. Also, the horizontal payload is when combined with an external guide. Please note that if external force is applied to the rod in a direction other than the proper direction the rod travels, the detent may get damaged.

#### ■Speed vs. Payload Graph

A characteristic of the RCP2 Series pulse motor is that the payload decreases as the speed increases. Use the table below to confirm that there is sufficient speed at the desired payload.



#### Actuator Specification Table

#### ■Leads and Payloads

(Note 1) Please note that the maximum payload decreases when the speed increases.

Model	Lead (mm)	Max. paylo Horizontal (kg)		Max. push force (N) (Note 1)	Stroke (mm)	
RCP2-RGD3C-I-28P-5-①-P1-②-③	5	To 15	To 5	73.5	50 to 200	
RCP2-RGD3C-I-28P-2.5-①-P1-②-③	2.5	To 30	To 9	(every		

#### ■Stroke and Maximum Speed

Stroke Lead	50 to 200 (every 50mm)
5	187
2.5	114<93>

Legend: Stroke Cable length Options (Note 2) See P492 for the graph of push force.

(Unit = mm/s)

### ① Pricing List By Stroke

	Type code
① Stroke	RGD3C
(mm)	Encoder type
	Incremental
50	_
100	_
150	_
200	_

#### 2 Cable Length Price List

Type	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)	_	
	X06 (6m)	to X10 (10m)	_
Special length	<b>X11</b> (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	<b>R01</b> (1m)	to R03 (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

<sup>\*</sup>Please see P374 for information on the maintenance cable.

#### 

Actuator Specification					
Item Description					
Drive method	Ball screw $\phi$ 8mm rolled C10				
Positioning Repeatability	±0.02mm				
Backlash	0.1mm or less				
Guide	Single guide Guide rod diameter $\phi$ 10mm Ball bush type				
Rod diameter	φ22mm				
Non-rotation accuracy of the rod	±0.05 degrees				
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)				

CAD drawings can be downloaded from the website. www.intelligentactuator.com





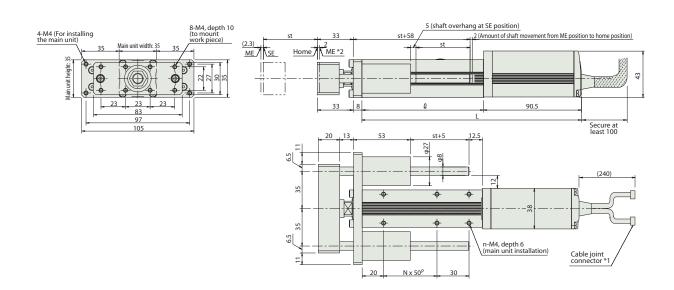




- \*1. Connect the motor and encoder cables. See P374 for details on cables.
- \*2. During home return, the rod moves to the ME, so watch out for interference with items near the unit.

ME: mechanical end SE: stroke end

Dimensions inside ( ) are reference dimensions.



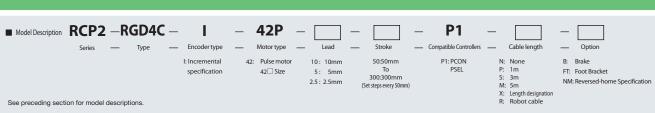
Dimensions and weight by Stroke						
Stroke	50	100	150	200		
I	112.5	162.5	212.5	262.5		
L	203	253	303	353		
N	1	2	3	4		
n	6	8	10	12		
Weight (kg)	1.1	1.3	1.4	1.6		

Title	External View	Model	Features	Maximum number of	Input power	Power-supply capacity	Standard price	See page
Positioner type	External view	PCON-C-28SPI-NP-2-0	Up to 512-point	positioning points	mpat power	Tomos cappi, capacity	—	Coo page
Safety category compatible Positioner type		PCON-CG-28SPI-NP-2-0	positioning possible				_	
Solenoid valve type		PCON-CY-28SPI-NP-2-0	Same as solenoid valve Controlled operation enabled	3 points			_	P365
Solenoid valve type	Ó	PCON-PL-28SPI-NP-2-0	Compatible with differential line driver Pulse train input type	()	DC24V		-	P303
Pulse series input type (Open collector specification)		PCON-PO-28SPI-NP-2-0	Open collector compatible Pulse series input type	(-)	DG24V	Maximum 2A	-	
Serial communication type		PCON-SE-28SPI-N-0-0	Serial communications Special type	64 points			_	
Field network type		RPCON-28SP	Field network Dedicated type	768 points			_	P343
Program control type		PSEL-C-1-28SPI-NP-2-0	Programmable type capable of operating up to 2 axes	1500 points			_	P395

RCP2-RGD3C 136

RCP2 ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

ROBO Cylinder, Double-guide Rod Type, Actuator Width 45mm, Pulse Motor, Straight Type





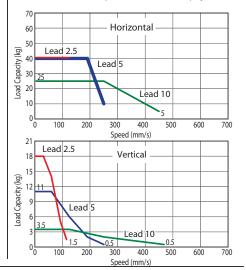
Technical Reference 译 P. 451



- (1) If the stroke is long, the maximum speed will decrease because of the relationship with the critical rotations of the ball screw. See the actuator specification table below for the desired maximum stroke speed.
- The RCP2 series uses a pulse motor, so the payload decreases at high speeds. See the Diagram Showing Correlation Between Speed and Payload on the right.
- This is the value when operating at an acceleration of 0.2G. 0.2G is the upper limit for acceleration. Also, the horizontal payload is when combined with an external guide. Please note that if external force is applied to the rod in a direction other than the proper direction the rod travels, the detent may get damaged.

#### ■Speed vs. Payload Graph

A characteristic of the RCP2 Series pulse motor is that the payload decreases as the speed increases. Use the table below to confirm that there is sufficient speed at the desired payload.



#### Actuator Specification Table

#### Leads and Payloads

(Note 1) Please note that the maximum payload decreases when the speed increases.

Model	Lead (mm)	Max. paylo Horizontal (kg)		Max. push force (N) (Note 1)	Stroke (mm)
RCP2-RGD4C-I-42P-10-①-P1-②-③	10	To 25	To 3.5	150	
RCP2-RGD4C-I-42P-5-①-P1-②-③	5	To 40	To 11	284	50 to 300 (every 50mm)
RCP2-RGD4C-I-42P-2.5-①-P1-②-③	2.5	To 40	To 18	258	
Legend: ① Stroke ② Cable length ③ Options		(Note 2)	See P492 fo	or the graph o	f push force.

#### ■Stroke and Maximum Speed

Stroke	50 to 200 (every 50mm)	250 (mm)	300 (mm)		
10	458	458	350		
5	250	237	175		
2.5	125 <114>	118 <114>	87		
*Information inside <> is for vertical use. (Unit = mm/s)					

#### ① Pricing List By Stroke

	Type code
① Stroke	RGD4C
(mm)	Encoder type
	Incremental
50	_
100	_
150	_
200	_
250	_
300	_

#### ② Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
	X06 (6m)	to <b>X10</b> (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to <b>R03</b> (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to R20 (20m)	_

<sup>\*</sup>Please see P374 for information on the maintenance cable.

#### ③ Option Price List Title Standard price Option code See page Brake В P437 Foot bracket FT P440

P442

NM

Actuator Specification				
Item	Description			
Drive method	Ball screw $\phi$ 8mm rolled C10			
Positioning Repeatability	±0.02mm			
Backlash	0.1mm or less			
Guide	Single guide Guide rod diameter $\phi$ 10mm Ball bush type			
Rod diameter	φ22mm			
Non-rotation accuracy of the rod	±0.05 degrees			
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)			

Reversed-home specification

Dimensional Drawings

www.intelligentactuator.com

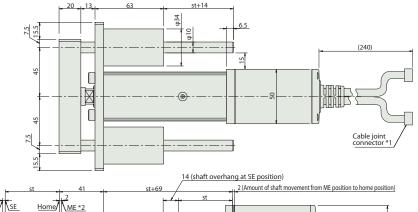
Information on special orders

P. 454

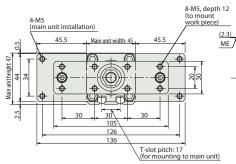


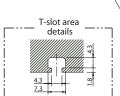
- Connect the motor and encoder cables. See P374 for details on cables.
- \*2. During home return, the rod moves to the ME, so watch out for interference with items near the unit.
  - ME: mechanical end SE: stroke end
- Dimensions inside ( ) are reference dimensions.
  \*3. Please note that there is no T-groove on the

bottom of the brake unit.

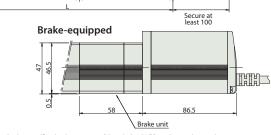


T-slot effective range \*3









\*The brake specification has an overall length that is 58mm longer than and a mass that is 0.4kg heavier than the standard specification.

#### ■Dimensions and Weight by Stroke

Stroke	50	100	150	200	250	300
Q	112.5	162.5	212.5	262.5	312.5	362.5
L	199	249	299	349	399	449
Weight (kg)	2.2	2.5	2.8	3.1	3.4	3.7

C	omna	tible	Control	lare
U,	סקוווט	LLIDIG	COLLIG	ICIO

The RCP2 Series actuators can be operated with the following controllers. Select the type that is compatible with your application.																
Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page								
Positioner type		PCON-C-42PI-NP-2-0	Up to 512-point	512 points				_								
Safety category compatible Positioner type		PCON-CG-42PI-NP-2-0		-												
Solenoid valve type		PCON-CY-42PI-NP-2-0	Same as solenoid valve Controlled operation enabled	3 points											_	P365
Solenoid valve type		PCON-PL-42PI-NP-2-0	Compatible with differential line driver Pulse train input type	()	DC24V		-	F303								
Pulse series input type (Open collector specification)		B	PCON-PO-42PI-NP-2-0	Open collector compatible Pulse series input type	(-)	DG24V	Maximum 2A	-								
Serial communication type		PCON-SE-42PI-N-0-0	Serial communications Special type	64 points			_									
Field network type		RPCON-42P	Field network Dedicated type	768 points			_	P343								
Program control type		PSEL-C-1-42PI-NP-2-0	Programmable type capable of operating up to 2 axes	1500 points			_	P395								

RCP2-RGD4C 138

Servo Motor

20 w

30 w

Servo Motor

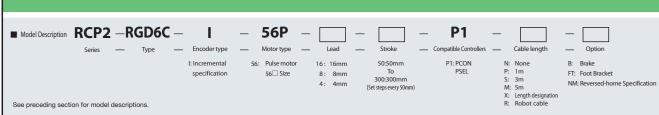
Servo Motor

Servo Motor 750w

# RCP2 ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

# RCP2-RGD6C

ROBO Cylinder, Double-guide Rod Type, Actuator Width 64mm, Pulse Motor, Straight Type





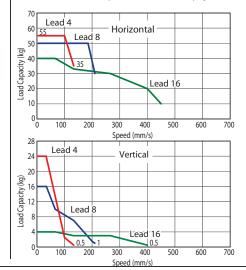
Technical Reference **译 P. 451** 



- (1) If the stroke is long, the maximum speed will decrease because of the relationship with the critical rotations of the ball screw. See the actuator specification table below for the desired maximum stroke speed.
- (2) The RCP2 series uses a pulse motor, so the payload decreases at high speeds. See the Diagram Showing Correlation Between Speed and Payload on the right.
- (3) This is the value when operating at an acceleration of 0.2G. 0.2G is the upper limit for acceleration. Also, the horizontal payload is when combined with an external guide. Please note that if external force is applied to the rod in a direction other than the proper direction the rod travels, the detent may get damaged.

#### ■Speed vs. Payload Graph

A characteristic of the RCP2 Series pulse motor is that the payload decreases as the speed increases. Use the table below to confirm that there is sufficient speed at the desired payload.



#### Actuator Specification Table

#### Leads and Payloads (Note 1) Please note that the maximum payload decreases when the speed increases.

Model	Lead (mm)	Max. paylo Horizontal (kg)		Max. push force (N) (Note 1)	Stroke (mm)
RCP2-RGD6C-I-56P-16-①-P1-②-③	16	To 40	To 4	240	
RCP2-RGD6C-I-56P-8-①-P1-②-③	8	To 50	To 16	470	50 to 300 (every 50mm)
RCP2-RGD6C-I-56P-4-①-P1-②-③	4	To 55	To 24	800	
Legend: ① Stroke ② Cable length ③ Options (Note 2) See P492 for the graph of push force					

(Note 2) See P492 for the graph of push force. \*Information inside <> is for vertical use. (Unit = mm/s)

#### ■Stroke and Maximum Speed

Stroke Lead	50 to 300 (every 50mm)
16	450<400>
8	210
4	130

#### ① Pricing List By Stroke

	Type code
① Stroke	RGD6C
(mm)	Encoder type
	Incremental
50	1
100	-
150	_
200	1
250	ı
300	_

#### ② Cable Length Price List

Туре	Cab	Standard price		
	<b>P</b> (1m)		_	
Standard type	<b>S</b> (3m)	<b>S</b> (3m)		
	<b>M</b> (5m)		_	
	X06 (6m)	to X10 (10m)	_	
Special length	X11 (11m)	to X15 (15m)	_	
	X16 (16m)	to X20 (20m)	_	
	R01 (1m)	to R03 (3m)	_	
	R04 (4m)	to <b>R05</b> (5m)	_	
Robot cable	R06 (6m)	to R10 (10m)	_	
	R11 (11m)	to <b>R15</b> (15m)	_	
	R16 (16m)	to <b>R20</b> (20m)	_	

<sup>\*</sup>Please see P374 for information on the maintenance cable.

# 3 Option Price List Title Option code See page Standard price Brake B P437 — Foot bracket FT P440 — Reversed-home specification NM P442 —

Actuator Specification				
Item	Description			
Drive method	Ball screw $\phi$ 12mm rolled C10			
Positioning Repeatability	±0.02mm			
Backlash	0.1mm or less			
Guide	Single guide Guide rod diameter $\phi$ 12mm Ball bush type			
Rod diameter	φ22mm			
Non-rotation accuracy of the rod	±0.05 degrees			
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)			

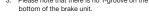
www.intelligentactuator.com

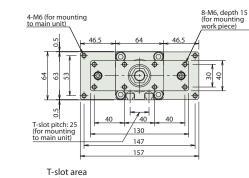
Information on special orders

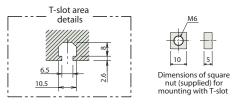


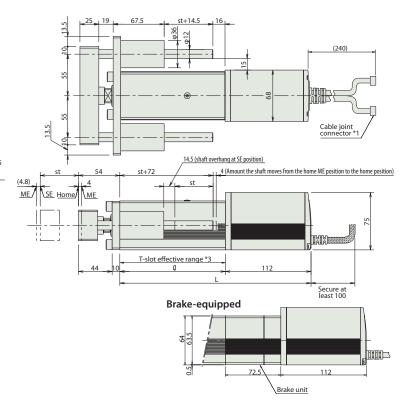


- Connect the motor and encoder cables. See P374 for details on cables.
- During home return, the rod moves to the ME, so watch out for interference with items near the unit.
  - ME: mechanical end SE: stroke end
- Dimensions inside ( ) are reference dimensions. Please note that there is no T-groove on the









\*The specification with brakes has an overall length that is 72.5mm longer and a mass that is 0.9kg heavier than the than the standard specification.

#### ■Dimensions and Weight by Stroke

				. ,	-	
Stroke	50	100	150	200	250	300
Q	138	188	238	288	338	388
L	250	300	350	400	450	500
Weight (kg)	4.4	5.0	5.5	6.1	6.7	7.3

Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page	
Positioner type	Í	PCON-C-56PI-NP-2-0	Up to 512-point				_		
Safety category compatible Positioner type		positioning possible 512 points possible			_				
Solenoid valve type		PCON-CY-56PI-NP-2-0	Same as solenoid valve Controlled operation enabled	3 points			_	_	P365
Solenoid valve type	á	PCON-PL-56PI-NP-2-0	Compatible with differential line driver Pulse train input type		20011		_	P365	
Pulse series input type (Open collector specification)	R	PCON-PO-56PI-NP-2-0	Open collector compatible Pulse series input type	(-)	DC24V	Maximum 2A	-		
Serial communication type		PCON-SE-56PI-N-0-0	Serial communications Special type	64 points			_		
Field network type		RPCON-56P	Field network Dedicated type	768 points			_	P343	
Program control type		PSEL-C-1-56PI-NP-2-0	Programmable type capable of operating up to 2 axes	1500 points			_	P395	

RCP2-RGD6C 140

Servo Motor

150w

Servo Motor

RCA ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

# RCA-RA3C

ROBO Cylinder, Rod Type, Actuator Dimensions 32mm, 24V Servo Motor, Coupling Specification

■ Model Description RCA — RA3C — **A1** 20 Cable length A1: ACON N: None I:Incremental 20: Servo motor 10: 10mm 50:50mm Options below 20W 5: 5mm ASEL See Pricing Table 200:200mm (Set steps every 50mm) X: Length designation R: Robot cable See preceding section for model descriptions.

> High-acceleration/ deceleration

Power saving

(Excluding lead 2.5)



- 2) The payload is the value when operated at 0.3G acceleration (0.2G at lead 2.5) at normal specifications/power saving or at 1G in high-acceleration/ deceleration applications (except at lead 2.5). (The values in the table below are the maximum payload, even if acceleration/deceleration drops)
- (3) The horizontal payload is the value when external guides are used and no external force is exerted from outside the direction of travel of the rod.

### Actuator Specifications Table

#### ■Leads and Payloads

Model	Motor output	Lead (mm)	Max. p Horizontal (kg)		Thrust (N)	Stroke (mm)
RCA-RA3C-I-20-10-①-A1-②-③		10	4.0	1.5	36.2	
RCA-RA3C-I-20-5-①-A1-②-③	20	5	9.0	3.0	72.4	50 to 200 (Every 50mm)
RCA-RA3C-I-20-2.5-①-A1-②-③		2.5	18.0	6.5	144.8	3011111)
Legend: ① Stroke ② Cable length ③ Option						

#### ■Stroke and Maximum Speed

	•
Stroke Lead	50 to 200 (Every 50mm)
10	500
5	250
2.5	125

(Unit = mm/s)

#### ① Pricing List By Stroke

	Type code
(1) Ohnelin	RA3C
① Stroke (mm)	Encoder type
(mm)	Incremental
	I
50	_
100	_
150	_
200	_

#### 4 Option Price List

Title	Option code	See page	Standard price
Brake	В	P437	_
Foot bracket	FT	P440	_
Flange bracket (Front)	FL	P438	_
Flange bracket (Rear)	FLR	P439	_
High-acceleration/deceleration (*1)	HA	P442	_
Home check sensor (*2)	HS	P442	_
Power saving (*3)	LA	P442	_
Kunckle joint	NJ	P443	_
Reversed-home specification	NM	P442	_
Trunion bracket (Front)	TRF	P446	_
Trunion bracket (Rear)	TRR	P446	_

(\*1) Lead 2.5 cannot be used in high-acceleration/deceleration applications.
(\*2) Home check sensors (HS) cannot be used in reversed-home specifications.

(2) High-acceleration/deceleration applications and power saving applications cannot be used together.

### 2 Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)	_	
	X06 (6m)	to X10 (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	<b>R01</b> (1m)	to R03 (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to R15 (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

\*See P384 for maintenance cables.

#### Actuator Specification

Item	Description
Drive method	Ball screw φ8mm, rolled C10
Positioning Repeatability	±0.02mm
Backlash	0.1mm or less
Base	Material Aluminum White alumite treated
Rod diameter	φ16mm
Non-rotation accuracy of the rod	±1.0 degrees
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)

4 | <sub>RCA-RA3C</sub>

Dimensional Drawings

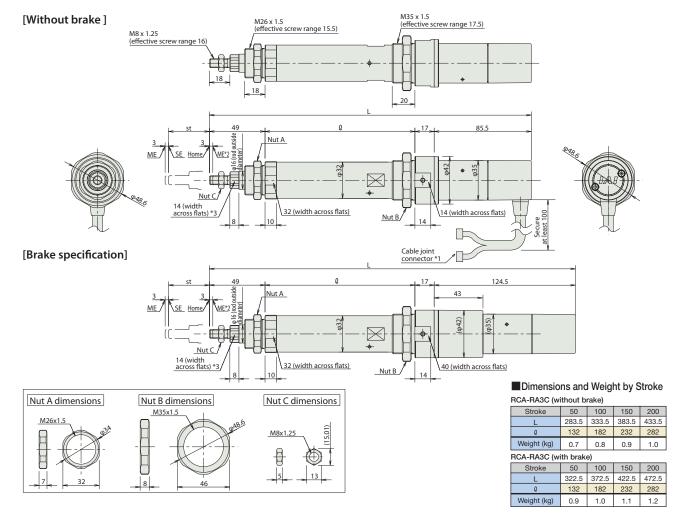
www.intelligentactuator.com

Information on special orders

P. 454

\*1. Connect the motor-encoder cable. See P384 for cable details.
\*2. Watch out for interference with peripheral objects since the slider moves as far as the ME when returning home.
ME: mechanical end SE: stroke end

\*3. The orientation of the width across flats differs with the product.



Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page
Positioner type		ACON-C-20SI①-NP-2-0	Up to 512-point	540		Rating 1.7A Peak 5.1A	_	
Safety category compatible Positioner type		ACON-C-20SI①-NP-2-0	positioning possible	512 points			_	
Solenoid valve type		ACON-CY-20SI①-NP-2-0	Same as solenoid valve Controlled operation enabled	3 points			_	P375
Pulse series input type (Differential line river specification)	à	ACON-PL-20SI①-NP-2-0	Compatible with differential line driver Pulse train input type	()	DC24V		_	F375
Pulse series input type (Open collector specification)		ACON-PO-20SI①-NP-2-0	Open collector compatible Pulse series input type				_	
Serial communication type		ACON-SE-20SI①-N-0-0	Serial communications Special Type	64 points			_	
Field network type		RACON-20S①	Field network Dedicated type	768 points			_	P343
Program control type		ASEL-C-1-20SI①-NP-2-0	Programmable type capable of operating up to 2 axes	1500 points			_	P405

\*ASEL is for 1-axis specifications.

\*① For entering the code when designating high-acceleration/deceleration applications or power saving applications (HA/LA).

RCA-RA3C



**20** w

# www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

ROBO Cylinder, Rod Type, Actuator Dimensions 37mm, 24V Servo Motor, Coupling Specification

■ Model Description RCA — RA4C — **A**1 Cable length N: None I:Incremental 20: Servo motor 12: 12mm 50:50mm A1: ACON Options below specification 20W ASEL See Pricing Table 6: 6mm 300:300mm A: Absolute 30: Servo motor (Set steps every 50mm) specification 30W Length designation See preceding section for model descriptions. R: Robot cable

Power saving

(\*1) Excluding all 20W models and and 30W lead3 Technical 😭 P. 451 Reference



- As the stroke length increases, the maximum speed decreases due to hazardous ball screw RPMs. Confirm the maximum desired stroke speed in the Actuator Spec Table below.
- The payload is the value when operated at 0.3G acceleration (0.2G at lead 3) at normal specifications/power saving or at 1G in high-acceleration/ deceleration applications (except at lead 3). (The values in the table below are the maximum payload, even if acceleration/deceleration drops)
- (3) The horizontal payload is the value when external guides are used and no external force is exerted from outside the direction of travel of the rod.

#### Actuator Specifications Table

#### Leads and Payloads

RCA ROBO Cylinder

Model	Motor output	Lead (mm)		ayload Vertical (kg)	Thrust (N)	Stroke (mm)
RCA-RA4C-①-20-12-②-A1-③-④		12	3.0	1.0	18.9	
RCA-RA4C-①-20-6-②-A1-③-④	20	6	6.0	2.0	37.7	
RCA-RA4C-①-20-3-②-A1-③-④		3	12.0	4.0	75.4	50 to 300
RCA-RA4C-①-20-12-②-A1-③-④		12	4.0	1.5	28.3	(Every 50mm)
RCA-RA4C-①-20-6-②-A1-③-④	30	6	9.0	3.0	56.6	
RCA-RA4C-① -20-3-② -A1-③ -④		3	18.0	6.5	113.1	

#### ■Stroke and Maximum Speed

Stroke	50 to 300 (Every 50mm)
Load	(Every Somm)
12	600
6	300
3	150

(Unit = mm/s)

Legend: 1 Encoder type 2 Stroke 3 Cable length 4 Option

U Pricing List By Encoder type and ② Stroke					
	Type code				
		RA	4C		
<li>2 Stroke</li>		① Enco	der type		
(mm)	Increr	Incremental Absolute			
	Motor wa	attage (W) Motor wattage (W)			
	20W	30W	20W	30W	
50	_	_	_	_	
100	_	_	_	_	
150	_	_	_	_	
200	_	_	_	_	
250	_	_	_	_	
300	_	_	_	_	

0	§) ∪	ntior	Drie	o L	ict

Title	Option code	See page	Standard price
Brake	В	P437	_
Foot bracket	FT	P440	_
Flange bracket (Front)	FL	P438	_
Flange bracket (Rear)	FLR	P439	_
High-acceleration/deceleration (*1)	HA	P442	_
Home check sensor (*2)	HS	P442	_
Power saving (*3)	LA	P442	_
Kunckle joint	NJ	P443	_
Reversed-home specification	NM	P442	_
Trunion bracket (Front)	TRF	P446	_
Trunion bracket (Rear)	TRR	P446	_

### ③ Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)	_	
	X06 (6m)	to <b>X10</b> (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to <b>R03</b> (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to R15 (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

\*See P384 for maintenance cables

Actuator Specification	on
Item	Description
Drive method	Ball screw φ10mm, rolled C10
Positioning Repeatability	±0.02mm
Backlash	0.1mm or less
Base	Material Aluminum White alumite treated
Rod diameter	φ20mm
Non-rotation accuracy of the rod	±1.0 degrees
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)

(\*1) None of the 20W or 30W-lead 3 models can be used in high-acceleration/deceleration applications.
 (\*2) Home check sensors (HS) cannot be used in reversed-home specifications.
 (\*3) High-acceleration/deceleration applications and power saving applications cannot be used together.

P. 454

Information on

special orders

\*3. The orientation of the width across flats differs with the product.

30 w

Dimensional Drawings

www.intelligentactuator.com

\*1. Connect the motor-encoder cable. See P384 for cable details.
\*2. Watch out for interference with peripheral objects since the slider moves as far as the ME when returning home.
ME: mechanical end SE: stroke end

M40 x 1.5 (effective screw range 19.5) [Without brake] M30 x 1.5 (effective screw range 17.5) M10 x 1.25 (effective screw range 20) \_ 20 \_ 22 Nut A 36 (width across flats) \*3 Nut C 19 (width across flats) \*3/ Nut B Cable joint connector \* [Brake specification] Nut A Home, 36 (width across flats) (050) Nut A Nut B M30 x 1.5 M40 x 1.5 Nut B 47 (width across flats) ■Dimensions and Weight by Stroke Nut C

nur	nca-na4c (without brake)								
	Stro	ke	50	100	150	200	250	300	
	20W	Incremental	279.5	329.5	379.5	429.5	479.5	529.5	
	2000	Absolute	292.5	342.5	392.5	442.5	492.5	542.5	
L	30W	Incremental	294.5	344.5	394.5	444.5	494.5	544.5	
	Absolute		307.5	357.5	407.5	457.5	507.5	557.5	
	Q 137			187	237	287	337	387	
	20W	Incremental	ental 67.5						
m	2000	Absolute			80	).5			
1111	30W	Incremental			82	2.5			
Absolute				95.5					
	Weigh	t (kg)	1.1	1.2	1.4	1.5	1.7	1.8	

(19.6)

M10 x 1.25

RCA-RA4C (with brake)											
00		Stroke		50	100	150	200	250	300		
9.5			2014/	Incremental	322.5	372.5	422.5	472.5	522.5	572.5	
2.5		20W	Absolute	335.5	385.5	435.5	485.5	535.5	585.5		
4.5		-	30W	Incremental	337.5	387.5	437.5	487.5	537.5	587.5	
7.5			3000	Absolute	350.5	400.5	450.5	500.5	550.5	600.5	
87			Q		137	187	237	287	337	387	
			2014/	Incremental			110	0.5			
		_ m	20W	Absolute			12	3.5			
		m	111	30W	Incremental			12	5.5		
			3000	Absolute			13	3.5			
8		Weight (kg)			1.3	14	16	17	1.9	2.0	

Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page	
Positioner type		ACON-C-20I2-NP-2-0 ACON-C-30I2-NP-2-0	Up to 512-point	510 i-t-			_		
compatible Positioner type		ACON-CG-2012-NP-2-0 ACON-CG-3012-NP-2-0	positioning possible	512 points			-		
Solenoid valve type		ACON-CY-201②-NP-2-0 ACON-CY-301②-NP-2-0	Same as solenoid valve Controlled operation enabled	3 points		20W Rated 1.3A Peak 5.1A	20/W	_	P375
Pulse series input type (Differential line river specification)		ACON-PL-201②-NP-2-0 ACON-PL-301②-NP-2-0	Compatible with differential line driver Pulse train input type	()	DODAV		-	P3/5	
Pulse series input type (Open collector specification)		ACON-PO-2012-NP-2-0 ACON-PO-3012-NP-2-0	Open collector compatible Pulse series input type	(-)	DC24V	30W Rated 1.3A	_		
Serial communication type		ACON-SE-201②-N-0-0 ACON-SE-301②-N-0-0	Serial communications Special Type	64 points		Peak 5.1A	_		
Field network type		RACON-20② RACON-30②	Field network Dedicated type	768 points			-	P343	
Program control type		ASEL-C-1-20①②-NP-2-0 ASEL-C-1-30①②-NP-2-0	Programmable type capable of operating up to 2 axes	1500 points			_	P405	

\*ASEL is for 1-axis specifications.

\*① For entering the encoder type (I: incremental/A: absolute).

\*② For entering the code when designating high-acceleration/deceleration applications or power saving applications (HA/LA).

Servo Motor

Servo Motor 20 w

30 w

Servo Motor

Servo Motor 150 w

Servo Motor 750 w

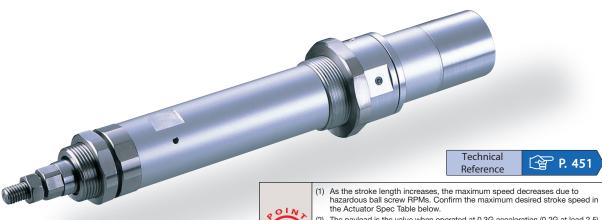
RCA ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

# RCA-RA3D

ROBO Cylinder, Rod Type, Actuator Dimensions 32mm, 24V Servo Motor, Bulit-in (Direct) Motor Specification

■ Model Description RCA — RA3D — **A1** 20 Cable length A1:ACON N: None I:Incremental 20: Servo motor 10: 10mm 50:50mm Options below 20W 5: 5mm ASEL See Pricing Table 200:200mm (Set steps every 50mm) X: Length designation R: Robot cable See preceding section for model descriptions.

Power saving



- 2) The payload is the value when operated at 0.3G acceleration (0.2G at lead 2.5) at normal specifications/power saving or at 1G in high-acceleration/ deceleration applications (except at lead 2.5). (The values in the table below are the maximum payload, even if acceleration/deceleration drops)
- (3) The horizontal payload is the value when external guides are used and no external force is exerted from outside the direction of travel of the rod.

## Actuator Specifications Table

#### ■Leads and Payloads

Model	Motor output	Lead (mm)	Max. p Horizontal (kg)		Thrust (N)	Stroke (mm)
RCA-RA3D-I-20-10-①-A1-②-③		10	4.0	1.5	36.2	
RCA-RA3D-I-20-5-①-A1-②-③	20	5	9.0	3.0	72.4	50 to 200 (Every 50mm)
RCA-RA3D-I-20-2.5-①-A1-②-③		2.5	18.0	6.5	144.8	3011111)
Legend: ① Stroke ② Cable length ③ Option						

#### ■Stroke and Maximum Speed

Stroke	50 to 200
Lead	(Every 50mm)
10	500
5	250
2.5	125

(Unit = mm/s)

#### 1 Pricing List By Stroke

	Type code
① Stroke	RA3D
(mm)	Encoder type
(111111)	Incremental
	I
50	_
100	_
150	_
200	_

#### Option Price List

© 5 p 11 5 11 11 10 5 E 15 1			
Title	Option code	See page	Standard price
Foot bracket	FT	P440	_
Flange bracket (Front)	FL	P438	_
Flange bracket (Rear)	FLR	P439	_
Home check sensor	HS	P442	_
Power saving	LA	P442	_
Kunckle joint	NJ	P443	_
Reversed-home specification	NM	P442	_
Trunion bracket (Front)	TRF	P446	_
Trunion bracket (Rear)	TRR	P446	_

 $<sup>{}^{\</sup>star}\mathsf{The}$  home check sensor cannot be used with the reversed-home specification

### ② Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
	X06 (6m)	to <b>X10</b> (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to <b>R03</b> (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to <b>R10</b> (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

<sup>\*</sup>See P384 for maintenance cables.

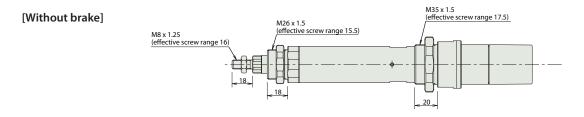
#### Actuator Specification

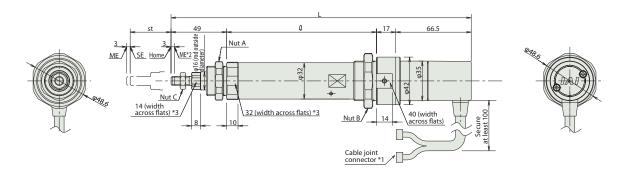
Item	Description			
Drive method	Ball screw φ8mm, rolled C10			
Positioning Repeatability	±0.02mm			
Backlash	0.1mm or less			
Base	Material Aluminum White alumite treated			
Rod diameter	φ16mm			
Non-rotation accuracy of the rod	±1.0 degrees			
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)			

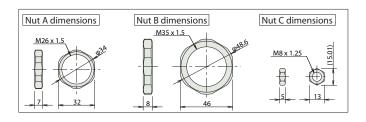


\*1. Connect the motor-encoder cable. See P384 for cable details.
\*2. Watch out for interference with peripheral objects since the slider moves as far as the ME when returning home.
ME: mechanical end SE: stroke end

\*3. The orientation of the width across flats differs with the product.







#### ■Dimensions and Weight by Stroke RCA-RA3D (without brake)

50 100 150 200 264.5 314.5 364.5 414.5 Stroke 182 232

Weight (kg)	0.7	0.8	0.9	1.0

The RCA-RA3D type is not available with a brake.

Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page	
Positioner type		ACON-C-20SI①-NP-2-0	Up to 512-point	F10 points			_		
afety category compatible Positioner type		ACON-CG-20SI①-NP-2-0	positioning possible	512 points			_		
Solenoid valve type		ACON-CY-20SI①-NP-2-0	Same as solenoid valve Controlled operation enabled	3 points			_	P375	
Pulse series input type (Differential line river specification)	á		ACON-PL-20SI①-NP-2-0	Compatible with differential line driver Pulse train input type	()	500.07	Rating 1.7A	-	P3/5
Pulse series input type (Open collector specification)	a l	ACON-PO-20SI①-NP-2-0	Open collector compatible Pulse series input type	(-)	DC24V	Peak 5.1A	_		
Serial communication type	T and	ACON-SE-20SI①-N-0-0	Serial communications Special Type	64 points			_		
Field network type		RACON-20S①	Field network Dedicated type	768 points			-	P343	
Program control type		ASEL-C-1-20SI①-NP-2-0	Programmable type capable of operating up to 2 axes	1500 points			_	P405	

\*ASEL is for 1-axis specifications.

\*1) For entering the code when designating power saving applications (LA).

RCA-RA3D

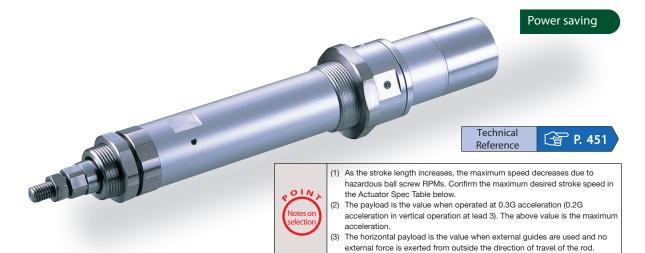
**20**w

**20** w

RCA ROBO Cylinder ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

ROBO Cylinder, Rod Type, Actuator Dimensions 37mm, 24V Servo Motor, Bulit-in (Direct) Motor Specification

■ Model Description RCA — RA4D — **A1** Cable length A1: ACON N: None I:Incremental 20: Servo motor 12: 12mm 50:50mm Options below specification 20W ASEL See Pricing Table 6: 6mm 300:300mm A: Absolute 30: Servo motor (Set steps every 50mm) specification 30W X: Length designat R: Robot cable Length designation See preceding section for model descriptions.



### Actuator Specifications Table

### ■Leads and Payloads

Model	output	(mm)		Vertical (kg)	(N)	(mm)
RCA-RA4D-①-20-12-②-A1-③-④		12	3.0	1.0	18.9	
RCA-RA4D-①-20-6-②-A1-③-④	20	6	6.0	2.0	37.7	
RCA-RA4D-①-20-3-②-A1-③-④		3	12.0	4.0	75.4	50 to 300
RCA-RA4D-①-20-12-②-A1-③-④		12	4.0	1.5	28.3	(Every 50mm)
RCA-RA4D-①-20-6-②-A1-③-④	30	6	9.0	3.0	56.6	
RCA-RA4D-①-20-3-②-A1-③-④		3	18.0	6.5	113.1	
Legend: ① Encoder type ② Stroke ③ Cable length ④ Option						

#### ■Stroke and Maximum Speed

Stroke Lead	50 to 300 (Every 50mm)					
12	600					
6	300					
3	150					

(Unit = mm/s)

#### ① Pricing List By Encoder type and ② Stroke

Thomas List by Enocaci type and & Stroke						
	Type code					
		RA	4D			
② Stroke		① Enco	der type			
(mm)	Increr	nental	Abso	olute		
	Motor wa	Motor wattage (W)		ttage (W)		
	20W 30W		20W	30W		
50	_	_	_	_		
100	_	_	_	_		
150	_	_	_	_		
200	_	_	_	_		
250	_	_	_	_		
300	_	_	_	_		

#### ③ Option Price List

Title	Option code	See page	Standard price
Foot bracket	FT	P440	_
Flange bracket (Front)	FL	P438	_
Flange bracket (Rear)	FLR	P439	_
Home check sensor	HS	P442	_
Power saving	LA	P442	_
Kunckle joint	NJ	P443	_
Reversed-home specification	NM	P442	_
Trunion bracket (Front)	TRF	P446	_
Trunion bracket (Rear)	TRR	P446	_

#### \*The home check sensor cannot be used with the reversed-home specification

# ③ Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
	X06 (6m)	to X10 (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to R03 (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

\*See P384 for maintenance cables

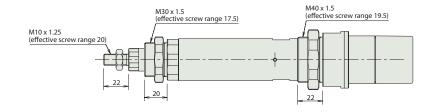
Actuator Specification				
Item	Description			
Drive method	Ball screw φ10mm, rolled C10			
Positioning Repeatability	±0.02mm			
Backlash	0.1mm or less			
Base	Material Aluminum White alumite treated			
Rod diameter	φ20mm			
Non-rotation accuracy of the rod	±1.0 degrees			
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)			

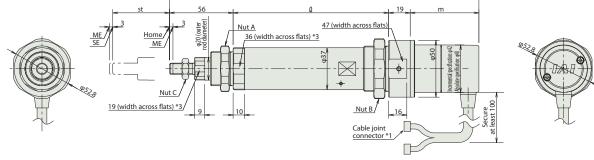


\*1. Connect the motor-encoder cable. See P384 for cable details.
\*2. Watch out for interference with peripheral objects since the slider moves as far as the ME when returning home.
ME: mechanical end SE: stroke end

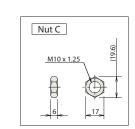
\*3. The orientation of the width across flats differs with the product.

#### [Without brake]





# Nut A Nut B M30 x 1.5 M40 x 1.5 10



#### ■Dimensions and Weight by Stroke

RCA-RA4D (Without brake)								
	Stro	ke	50	100	150	200	250	300
	20W	Incremental	257.5	307.5	357.5	407.5	457.5	507.5
	2000	Absolute	270.5	320.5	370.5	420.5	470.5	520.5
L	30W	Incremental	272.5	322.5	372.5	422.5	472.5	522.5
	3000	Absolute	285.5	335.5	385.5	435.5	485.5	535.5
Q			137	187	237	287	337	387
	20W	Incremental	45.5					
	2000	Absolute	58.5					
m	m 30W Incremental 60.5							
Absolute			73.5					
Weight (kg)			1.0	1.2	1.3	1.5	1.6	1.8

The RCA-RA4D type is not available with a brake.

Compatible	Controllare
Companion	COHLIGICIS

The RCA Series actuators can be operated with the following controllers. Select the type that is compatible with your application.													
Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page					
Positioner type		ACON-C-20I@-NP-2-0 ACON-C-30I@-NP-2-0	Up to 512-point	512 points			_						
Safety category compatible Positioner type		ACON-CG-201②-NP-2-0 ACON-CG-301②-NP-2-0	possible	512 points			-						
Solenoid valve type		ACON-CY-20I②-NP-2-0 ACON-CY-30I②-NP-2-0	Same as solenoid valve Controlled operation enabled	3 points		20W Rated 1.3A Peak 5.1A	OOM	2014	2014	20W	20W	_	P375
Pulse series input type (Differential line driver specification)	â	ACON-PL-2012-NP-2-0 ACON-PL-3012-NP-2-0	Compatible with differential line driver Pulse train input type	(-)	DC24V		-	P375					
Pulse series input type (Open collector specification)	å J	ACON-PO-20I②-NP-2-0 ACON-PO-30I②-NP-2-0	Open collector compatible Pulse series input type	()	DG24V	30W Rated 1.3A	_						
Serial communication type		ACON-SE-20I②-N-0-0 ACON-SE-30I②-N-0-0	Serial communications Special Type	64 points		Peak 5.1A	_						
Field network type		RACON-20② RACON-30②	Field network Dedicated type	768 points			_	P343					
Program control type		ASEL-C-1-20①②-NP-2-0 ASEL-C-1-30①②-NP-2-0	Programmable type capable of operating up to 2 axes	1500 points			_	P405					

'ASEL is for 1-axis specifications.
\*① For entering the encoder type (I: incremental/A: absolute).
\*② For entering the code when designating high-acceleration/deceleration applications or power saving applications (HA/LA).

IAI

RCA-RA4D 148

30w

RCA ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

See preceding section for model descriptions.

ROBO Cylinder, Rod Type, Actuator Dimensions 32mm, 24V Servo Motor, Reverse-mounted Motor Specification

■ Model Description RCA — RA3R — **A1** 20 Cable length A1: ACON N: None I:Incremental 20: Servo motor 10: 10mm 50:50mm Options below 20W 5: 5mm ASEL See Pricing Table 200:200mm (Set steps every 50mm) X: Length designation R: Robot cable

Power saving

**Technical** Reference

译 P. 451



- As the stroke length increases, the maximum speed decreases due to hazardous ball screw RPMs. Confirm the maximum desired stroke speed in the Actuator Spec Table below.
- The payload is the value when operated at 0.3G acceleration (0.2G at lead 2.5) at normal specifications/power saving or at 1G in high-acceleration/ deceleration applications (except at lead 2.5). (The values in the table below are the maximum payload, even if acceleration/deceleration drops)
- (3) The horizontal payload is the value when external guides are used and no external force is exerted from outside the direction of travel of the rod.

### Actuator Specifications Table

#### Leads and Payloads

Model	Motor output	Lead (mm)	Max. p Horizontal (kg)		Thrust (N)	Stroke (mm)
RCA-RA3R-I-20-10-①-A1-②-③		10	4.0	1.5	36.2	
RCA-RA3R-I-20-5-①-A1-②-③	20	5	9.0	3.0	72.4	50 to 200 (Every 50mm)
RCA-RA3R-I-20-2.5-①-A1-②-③		2.5	18.0	6.5	144.8	3011111)
Legend: ① Stroke ② Cable length ③ Option						

#### ■Stroke and Maximum Speed

	·
Stroke Lead	50 to 200 (Every 50mm)
10	500
5	250
2.5	125

(Unit = mm/s)

#### ① Pricing List By Stroke

	Type code
1 Ctualca	RA3R
① Stroke (mm)	Encoder type
	Incremental
	I
50	_
100	_
150	_
200	_

#### 4 Option Price List

Till	0 11 1	0	01 1 1 1
Title	Option code	See page	Standard price
Brake	В	P437	_
Foot bracket	FT	P440	_
Flange bracket (Front)	FL	P438	_
Flange bracket (Rear)	FLR	P439	_
Home check sensor	HS	P442	_
Power saving	LA	P442	_
Kunckle joint	NJ	P443	_
Reversed-home specification	NM	P442	_
Clevis bracket	QR	P443	_
Rear mounting plate	RP	P444	_
Trunion bracket (Front)	TRF	P446	_

<sup>\*</sup>The home check sensor cannot be used with the reversed-home specification

#### ② Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
	X06 (6m)	to X10 (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to <b>R03</b> (3m)	_
Robot cable	R04 (4m)	to <b>R05</b> (5m)	_
	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

<sup>\*</sup>See P384 for maintenance cables.

#### Actuator Specification

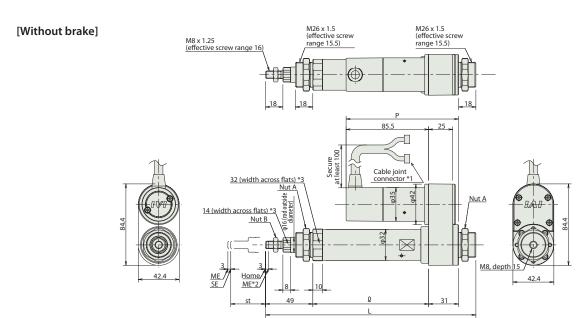
Item	Description
Drive method	Ball screw φ8mm, rolled C10
Positioning Repeatability	±0.02mm
Backlash	0.1mm or less
Base	Material Aluminum White alumite treated
Rod diameter	φ16mm
Non-rotation accuracy of the rod	±1.0 degrees
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)

Information on special orders

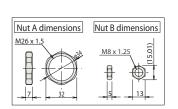
P. 454

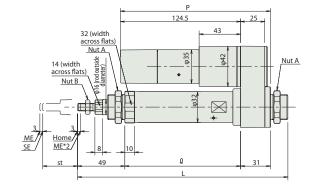
\*1. Connect the motor-encoder cable. See P384 for cable details.
\*2. Watch out for interference with peripheral objects since the slider moves as far as the ME when returning home.
ME: mechanical end SE: stroke end

\*3. The orientation of the width across flats differs with the product.



[Brake specification]





#### ■Dimensions and Weight by Stroke

RCA-RA3R (without brake)

	tirout braitoj				
Stroke	50	100	150	200	
L	218	268	318	368	
Q	120	170	220	270	
Р		11	6.5		
Weight (kg)	0.8	0.9	1.0	1.1	

RCA-RA3R (with brake)				
Stroke	50	100	150	200
L	218	268	318	368
Q	120	170	220	270
Р		15	5.5	
Weight (kg)	1.0	1.1	1.2	1.3

	e Controllers	operated with the following controllers.	Select the type that	is compatible with	your application.			
Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page
Positioner type		ACON-C-20SI①-NP-2-0	Up to 512-point	510 i-t-			_	
Safety category compatible Positioner type		ACON-CG-20SI①-NP-2-0	positioning possible	512 points			_	
Solenoid valve type		ACON-CY-20SI①-NP-2-0	Same as solenoid valve Controlled operation enabled	3 points			_	D075
Pulse series input type (Differential line driver specification)		ACON-PL-20SI①-NP-2-0	Compatible with differential line driver Pulse train input type	()	D0041/	Rating 1.7A	_	P375
Pulse series input type (Open collector specification)		ACON-PO-20SI①-NP-2-0	Open collector compatible Pulse series input type	(-)	DC24V	Peak 5.1A	_	
Serial communication type		ACON-SE-20SI①-N-0-0	Serial communications Special Type	64 points			_	
Field network type		RACON-20S①	Field network Dedicated type	768 points			_	P343
Program control type		ASEL-C-1-20SI①-NP-2-0	Programmable type capable of operating up to 2 axes	1500 points			_	P405

\*ASEL is for 1-axis specifications.

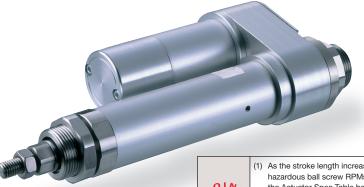
**20** w Servo Motor 30 w

RCA ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

ROBO Cylinder, Rod Type, Actuator Dimensions 37mm, 24V Servo Motor, Reverse-mounted Motor Specification

■ Model Description RCA — RA4R — **A1** Cable length A1: ACON N: None I:Incremental 20: Servo motor 12: 12mm 50:50mm Options below

specification 20W 6: 6mm ASEL See Pricing Table 300:300mm A: Absolute 30: Servo motor (Set steps every 50mm) specification 30W X: Length designation R: Robot cable See preceding section for model descriptions.



Power saving

Technical Reference 😭 P. 451

- (1) As the stroke length increases, the maximum speed decreases due to hazardous ball screw RPMs. Confirm the maximum desired stroke speed in the Actuator Spec Table below.
- (2) The payload is the value when operated at 0.3G acceleration (0.2G acceleration in vertical operation at lead 3). The above value is the maximum acceleration.
- (3) The horizontal payload is the value when external guides are used and no external force is exerted from outside the direction of travel of the rod.

#### Actuator Specifications Table

#### ■Leads and Payloads

Model	Motor output	Lead (mm)	Max. p Horizontal (kg)	ayload Vertical (kg)	Thrust (N)	Stroke (mm)
RCA-RA4R-①-20-12-②-A1-③-④		12	3.0	1.0	18.9	
RCA-RA4R-①-20-6-②-A1-③-④	20	6	6.0	2.0	37.7	
RCA-RA4R-①-20-3-②-A1-③-④		3	12.0	4.0	75.4	50 to 300
RCA-RA4R-①-30-12-②-A1-③-④		12	4.0	1.5	28.3	(Every 50mm)
RCA-RA4R-①-30-6-②-A1-③-④	30	6	9.0	3.0	56.6	
RCA-RA4R-①-30-3-②-A1-③-④		3	18.0	6.5	113.1	
Legend: 1 Encoder type 2 Stroke 3 Cable length 4 Option	n					

#### ■Stroke and Maximum Speed

Stroke 50 to 300 Lead (Every 50mm)		
	12	600
	6	300
	3	150

(Unit = mm/s)

#### 1 Pricing List By Encoder type and 2 Stroke

Thomas Elat by Endoder type drid & otroite						
	Type code					
		RA4R				
② Stroke	① Encoder type					
(mm)	Increr	nental	Abso	olute		
	Motor wattage (W)		Motor wa	ittage (W)		
	20W	30W	20W	30W		
50	_	_	_	_		
100	_	_	_	_		
150	_	_	_	_		
200	_	_	_	_		
250	_	_	_	_		
300	_	_	_	_		

### 3 Cable Length Price List

Туре	Cable symbol		Standard price
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
	X06 (6m)	to <b>X10</b> (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to <b>R03</b> (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to R15 (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

\*See P384 for maintenance cables

#### ③ Option Price List

Title	Option code	See page	Standard price
Brake	В	P437	_
Foot bracket	FT	P440	_
Flange bracket (Front)	FL	P438	_
Flange bracket (Rear)	FLR	P439	_
Home check sensor	HS	P442	_
Power saving	LA	P442	_
Kunckle joint	NJ	P443	_
Reversed-home specification	NM	P442	_
Clevis bracket	QR	P443	_
Rear mounting plate	RP	P444	_
Trunion bracket (Front)	TRF	P446	_

_

Trunion bracket (Front)	TRF	P446				
The home check sensor cannot be used with the reversed-home specification						
1 <i>[</i> 1						
151						
RCA-RA	4R					

Actuator Specification			
Description			
Ball screw φ10mm, rolled C10			
±0.02mm			
0.1mm or less			
Material Aluminum White alumite treated			
φ20mm			
±1.0 degrees			
0 to 40°C, 85% RH or less (non-condensing)			

20\_

26

 $\exists$ Cable joint

www.intelligentactuator.com

M10 x 1.25 (effective screw range 20)

Nut B

ME/



[Without brake]

Nut A M3.0 x 1.5

Connect the motor-encoder cable. See P384 for cable details. Watch out for interference with peripheral objects since the slider moves as far as the ME when returning home. ME: mechanical end SE: stroke end

M30 x 1.5

Nut A

The orientation of the width across flats differs with the product.

M30 x 1.5 (effective screw range 17.5) (effective screw range 17.5)

 $\bigoplus$ 

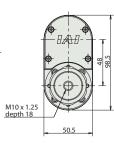
Information on special orders

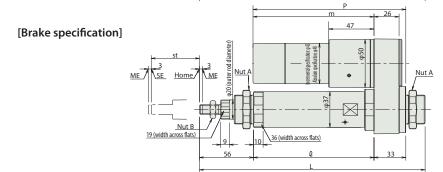


#### ■Dimensions and Weight by Stroke

RCA-RA4R (without brake)

	Stroke		50	100	150	200	250	300		
	20W	Incremental	234	284	334	384	434	484		
L	2000	Absolute	234	284	334	384	434	484		
L	30W	Incremental	234	284	334	384	434	484		
	3000	Absolute	234	284	334	384	434	484		
	Q		125	175	225	275	325	375		
	20W	Incremental		67.5						
	2000	Absolute	80.5							
m	30W	Incremental	82.5							
	3000	Absolute		95.5						
	20W	Incremental	100.5							
P	2000	Absolute		113.5						
	30W	Incremental			11	5.5				
	3000	Absolute			12	8.5				
	Weight (kg)		1.2	1.4	1.5	1.7	1.8	2.0		





ME\*2

Nut B

19 (width across flats) \*3

#### RCA-RA4R (with brake)

nca-naan (with brake)									
	Stro	ke	50	100	150	200	250	300	
	00147	Incremental	234	284	334	384	434	484	
L	20W	Absolute	234	284	334	384	434	484	
	30W	Incremental	234	284	334	384	434	484	
	3000	Absolute	234	284	334	384	434	484	
Q			125	175	225	275	325	375	
	20W	Incremental	110.5						
	2000	Absolute	123.5						
m	30W	Incremental	125.5						
	3000	Absolute		138.5					
	20W	Incremental	143.5						
Р	2000	Absolute			15	6.5			
Г	30W	Incremental			15	8.5			
	3000	Absolute			17	1.5			
	Weigh	t (kg)	1.4	1.6	1.7	1.9	2.0	2.2	

THE HOA Delies	s actuators can be	operated with the following controllers.	Select the type that	is compatible with	your application.			
Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page
Positioner type		ACON-C-201②-NP-2-0 ACON-C-301②-NP-2-0	Up to 512-point	510 :			_	
Safety category compatible Positioner type		ACON-CG-2012-NP-2-0 ACON-CG-3012-NP-2-0	positioning possible	512 points			_	
Solenoid valve type		ACON-CY-201@-NP-2-0 ACON-CY-301@-NP-2-0	Same as solenoid valve Controlled operation enabled	3 points		0004	_	D075
Pulse series input type (Differential line triver specification)		ACON-PL-20I②-NP-2-0 ACON-PL-30I②-NP-2-0	Compatible with differential line driver Pulse train input type	()	D00.41/	20W Rated 1.3A Peak 5.1A 30W Rated 1.3A Peak 5.1A	-	P375
Pulse series input type (Open collector specification)		ACON-PO-2012-NP-2-0 ACON-PO-3012-NP-2-0	Open collector compatible Pulse series input type	(-)	DC24V		_	
Serial communication type		ACON-SE-201②-N-0-0 ACON-SE-301②-N-0-0	Serial communications Special Type	64 points			_	
Field network type		RACON-20② RACON-30②	Field network Dedicated type	768 points			_	P343
Program control type		ASEL-C-1-20①②-NP-2-0 ASEL-C-1-30①②-NP-2-0	Programmable type capable of operating up to 2 axes	1500 points			_	P405

'ASEL is for 1-axis specifications.

\*① For entering the encoder type (I: incremental/A: absolute).

\*② For entering the code when designating high-acceleration/deceleration appl

RCA-RA4R

**30**w

Servo Motor

Servo Motor 20 w

30 w

Servo Motor

Servo Motor 150 w

Servo Motor 750 w

RCA ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

# RCA-RGS3C

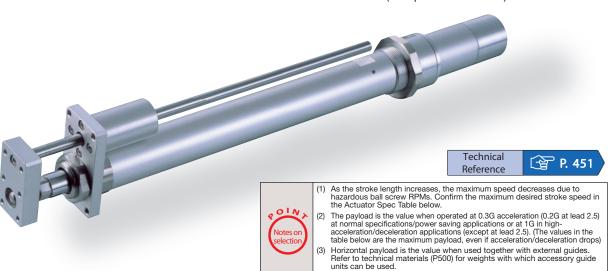
ROBO Cylinder, Single-guide Rod Type, Actuator Dimensions 32mm, 24V Servo Motor, Coupling Specification

■ Model Description RCA — RGS3C — **A1** 20 Encoder type Cable length N: None I:Incremental 20: Servo motor 10: 10mm 50:50mm A1: ACON Options below 20W 5: 5mm ASEL See Pricing Table 200:200mm (Set steps every 50mm) X: Length designation R: Robot cable See preceding section for model descriptions.

#### High-acceleration/ deceleration

Power saving

(Except for 2.5mm lead)



#### Actuator Specifications Table

#### ■Leads and Payloads

Model	Motor output	Lead (mm)		ayload Vertical (kg)	Thrust (N)	Stroke (mm)
RCA-RGS3C-I-20-10-①-A1-②-③		10	4.0	1.2	36.2	
RCA-RGS3C-I-20-5-①-A1-②-③	20	5	9.0	2.7	72.4	50 to 200 (Every 50mm)
RCA-RGS3C-I-20-2.5-①-A1-②-③		2.5	18.0	6.2	144.8	3011111)
Legend: ① Stroke ② Cable length ③ Option						

#### ■Stroke and Maximum Speed

	•
Stroke Lead	50 to 200 (Every 50mm)
10	500
5	250
2.5	125

(Unit = mm/s)

#### ① Pricing List By Stroke

① Stroke (mm)	Type code
	RGS3C
	Encoder type
	Incremental
50	-
100	_
150	-
200	_

#### ③ Option Price List

Title	Option code	See page	Standard price
Brake	В	P437	-
Foot bracket	FT	P440	-
High-acceleration/deceleration (*1)	HA	P442	_
Home check sensor (*2)	HS	P442	
Power saving (*3)	LA	P442	_
Reversed-home specification	NM	P442	_
Trunion (Rear)	TRR	P446	_

- (\*1) Lead 2.5 cannot be used in high-acceleration/deceleration applications.
- (\*2) Home check sensors (HS) cannot be used in reversed-home specifications.
- (\*3) High-acceleration/deceleration applications and power saving applications cannot be used together.

### 2 Cable Length Price List

Type	Cable symbol		Standard price
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
Special length	X06 (6m)	to X10 (10m)	_
	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	<b>R01</b> (1m)	to R03 (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

<sup>\*</sup>See P384 for maintenance cables.

#### Actuator Specification

Item	Description
Drive method	Ball screw φ8mm, rolled C10
Positioning Repeatability	±0.02mm
Backlash	0.1mm or less
Guide	Single-rod guide type, rod diameter φ8mm ball-bushing
Rod diameter	φ16mm
Non-rotation accuracy of the rod	±0.05 degrees
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)

Information on special orders

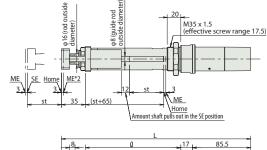


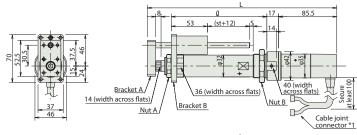


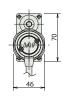


Connect the motor-encoder cable. See P384 for cable details.
 Watch out for interference with peripheral objects since the slider moves as far as the ME when returning home. ME: mechanical end SE: stroke end

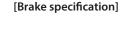
[Without brake]

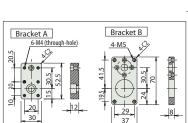


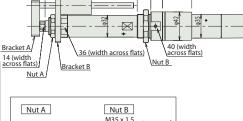




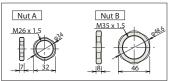
124.5







(st+12)



## ■Dimensions and Weight by Stroke

RCA-RGS3C (without brake)						
Stroke	50	100	150	200		
L	277.5	327.5	377.5	427.		
Q	140	190	240	290		
Weight (kg)	0.9	1.1	1.2	1.3		

RCA-RGS3C (with brake)						
Stroke	50	100	150	200		
L	316.5	366.5	416.5	466.5		
Q	140	190	240	290		
Weight (kg)	1.1	1.3	1.4	1.5		

Com	natihla	Controllers	

Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page
Positioner type	4	ACON-C-20SI①-NP-2-0	Up to 512-point positioning possible	512 points		Rating 1.7A Peak 5.1A	_	- P375
Safety category compatible Positioner type		ACON-CG-20SI①-NP-2-0					-	
Solenoid valve type		ACON-CY-20SI①-NP-2-0	Same as solenoid valve Controlled operation enabled	3 points			_	
Pulse series input type (Differential line triver specification)		ACON-PL-20SI①-NP-2-0	Compatible with differential line driver Pulse train input type	()	DC24V		_	
Pulse series input type (Open collector specification)		ACON-PO-20SI①-NP-2-0	Open collector compatible Pulse series input type	(-)			-	
Serial communication type		ACON-SE-20SI①-N-0-0	Serial communications Special type	64 points			_	
Field network type		RACON-20S①	Field network Dedicated type	768 points			_	P343
Program control type		ASEL-C-1-20SI①-NP-2-0	Programmable type capable of operating up to	1500 points			_	P405

\*ASEL is for 1-axis specifications

\*① For entering the code when designating high-acceleration/deceleration applications or power saving applications (HA/LA).

RCA-RGS3C

30 w

## RCA ROBO Cylinder ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

# A - R G S 4

ROBO Cylinder, Single-guide Rod Type, Actuator Dimensions 37mm, 24V Servo Motor, Coupling Specification

■ Model Description RCA — RGS4C — **A**1 Cable length N: None I:Incremental 20: Servo motor 12: 12mm 50:50mm A1: ACON Options below specification 20W ASEL See Pricing Table 6: 6mm 300:300mm A: Absolute 30: Servo motor (Set steps every 50mm) specification 30W Length designation See preceding section for model descriptions. R: Robot cable

High-acceleration/ Power saving (\*1)(\*1) Except for 3mm lead and 20W/30W models Technical 😭 P. 451 Reference As the stroke length increases, the maximum speed decreases due to hazardous ball screw RPMs. Confirm the maximum desired stroke speed in the Actuator Spec Table below.
The payload is the value when operated at 0.3G acceleration (0.2G at lead 3) at normal specifications/power saving applications or at 1G in high-acceleration/deceleration applications (except at lead 3). (The values in the table below are the maximum payload, even if acceleration/deceleration drops) Horizontal payload is the value when used together with external guides. Refer to technical materials (P500) for weights with which accessory guide units can be used.

#### Actuator Specifications Table

#### ■Leads and Payloads

Model	Motor output	Lead (mm)		ayload Vertical (kg)	Thrust (N)	Stroke (mm)
RCA-RGS4C-①-20-12-②-A1-③-④		12	3.0	0.5	18.9	
RCA-RGS4C-①-20-6-②-A1-③-④	20	6	6.0	1.5	37.7	
RCA-RGS4C-①-20-3-②-A1-③-④		3	12.0	3.5	75.4	50 to 300
RCA-RGS4C-①-30-12-②-A1-③-④		12	4.0	1.0	28.3	(Every 50mm)
RCA-RGS4C-①-30-6-②-A1-③-④	30	6	9.0	2.5	56.6	
RCA-RGS4C-①-30-3-②-A1-③-④		3	18.0	6.0	113.1	
Legend: ① Encoder type ② Stroke ③ Cable length ④ Option						

#### ■Stroke and Maximum Speed

Stroke	50 to 300 (Every 50mm)
12	600
6	300
3	150

(Unit = mm/s)

#### 1 Pricing List By Encoder Type and 2 Stroke

Tricing List by Encoder Type and & Stroke						
	Type code					
	RGS4C					
<li>2 Stroke</li>	① Encoder type					
(mm)	) Incremental Motor wattage (W)		Abso	olute		
			Motor wattage (W)			
	20W	30W	20W	30W		
50	_	_	_	_		
100	_	_	_	_		
150	_	_	_	_		
200	_	_	_	_		
250	_	_	_	_		
300	_	_	_	_		

Option	Price	Liet

Option code	See page	Standard price
В	P437	_
FT	P440	_
HA	P442	_
HS	P442	-
LA	P442	_
NM	P442	_
TRR	P446	_
	B FT HA HS LA	B P437 FT P440 HA P442 HS P442 LA P442 NM P442

(\*1) None of the 20W or 30W-lead 3 models can be used in high-acceleration/deceleration applications.

(\*2) Home check sensors (HS) cannot be used in reversed-home specifications.

(\*3) High-acceleration/deceleration applications and power saving applications cannot be used together.

#### 3 Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
	X06 (6m)	to <b>X10</b> (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to <b>R03</b> (3m)	_
Robot cable	R04 (4m)	to <b>R05</b> (5m)	_
	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

\*See P384 for maintenance cables

#### Actuator Specification Item Description Drive method Ball screw $\phi 10 mm$ , rolled C10 Positioning Repeatability ±0.02mm Backlash 0.1mm or less Single-rod guide type, rod diameter $\phi 10$ mm ball-bushing Guide

Rod diameter φ20mm Non-rotation accuracy of the rod ±0.05 degrees 0 to 40°C, 85% RH or less (non-condensing) Ambient operating temperature, humidity

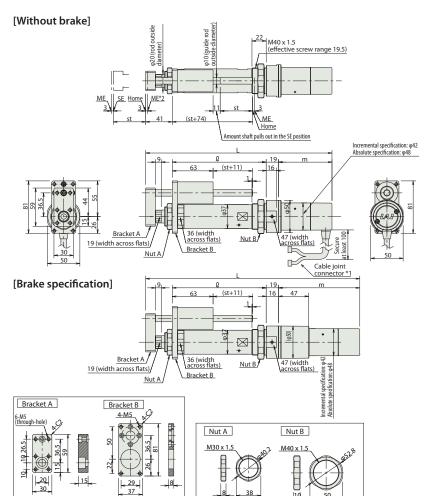
Information on special orders







11. Connect the motor-encoder cable. See P384 for cable details.
22. Watch out for interference with peripheral objects since the slider moves as far as the ME when returning home. ME: mechanical end SE: stroke end



#### ■Dimensions and Weight by Stroke

RCA-RGS4C (without brake)

Tier triae to (mareat brane)								
	Stro	ke	50	100	150	200	250	300
	20W	Incremental	272.5	322.5	372.5	422.5	472.5	522.5
L	2000	Absolute	285.5	335.5	385.5	435.5	485.5	535.5
_	30W	Incremental	287.5	337.5	387.5	437.5	487.5	537.5
	3000	Absolute	300.5	350.5	400.5	450.5	500.5	550.5
Q			145	195	245	295	345	395
	20W	Incremental	67.5					
	2000	Absolute	80.5					
m	30W	Incremental		82.5				
	3000	Absolute	95.5					
Weight (kg)			1.5	1.6	1.8	2.0	2.2	2.4

RCA-RGS3C(with brake)

,									
	Stro	ke	50	50 100 150			250	300	
	20W	Incremental	315.5	365.5	415.5	465.5	515.5	565.5	
	2000	Absolute	328.5	378.5	428.5	478.5	528.5	578.5	
L	30W	Incremental	330.5	380.5	430.5	480.5	530.5	580.5	
3000	3000	Absolute	343.5	393.5	443.5	493.5	543.5	593.5	
Q			145	195	245	295	345	395	
	20W	Incremental	110.5						
	2000	Absolute	123.5						
m Incremental		125.5							
	3000	Absolute	138.5						
	Weigh	t (kg)	1.7 1.8 2.0 2.2 2.4 2				2.6		
	vveign	t (kg)		1.0					

Compotible	Controllers

The RCA Series actuators can be operated with the following controllers. Select the type that is compatible with your application.																			
Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page											
Positioner type	i i	ACON-C-201②-NP-2-0 ACON-C-301②-NP-2-0	Up to 512-point	510 points			_												
Safety category compatible Positioner type	1	ACON-CG-201②-NP-2-0 ACON-CG-301②-NP-2-0	possible 512 points			512 points			-										
Solenoid valve type		ACON-CY-20I②-NP-2-0 ACON-CY-30I②-NP-2-0	Same as solenoid valve Controlled operation enabled	3 points	20//							2011	2014	2014	2014	20W	2014	_	P375
Pulse series input type (Differential line driver specification)	<u>oï</u>	ACON-PL-2012-NP-2-0 ACON-PL-3012-NP-2-0	Compatible with differential line driver Pulse train input type	( )	DO0.4V	20W Rated 1.3A Peak 5.1A 30W Rated 1.3A Peak 5.1A	-	P3/5											
Pulse series input type (Open collector specification)	8	ACON-PO-201@-NP-2-0 ACON-PO-301@-NP-2-0	Open collector compatible Pulse series input type	(-)	DC24V		_												
Serial communication type		ACON-SE-2012-N-0-0 ACON-SE-3012-N-0-0	Serial communications Special type	64 points			_												
Field network type		RACON-20② RACON-30②	Field network Dedicated type	768 points			_	P343											
Program control type		ASEL-C-1-20①②-NP-2-0 ASEL-C-1-30①②-NP-2-0	Programmable type capable of operating up to 2 axes	1500 points			_	P405											

\*ASEL is for 1-axis specifications.

\*① For entering the encoder type (I: incremental/A: absolute).

\*② For entering the code when designating high-acceleration applications or power saving applications (HA/LA).

IAI

RCA-RGS4C 156

## ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru ROBO Cylinder, Single-guide Rod Type, Actuator Dimensions 32mm,

-RGS3

24V Servo Motor, Built-in Specification

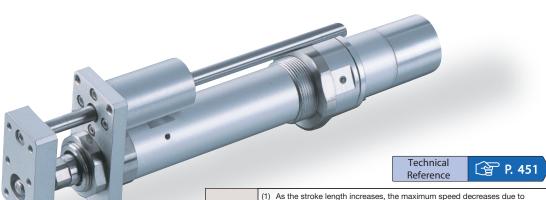
■ Model Description RCA — RGS3D — **A1** 20 Encoder type Cable length A1:ACON N: None I:Incremental 20: Servo motor 10: 10mm 50:50mm 20W 5: 5mm ASEL See Pricing Table 200:200mm (Set steps every 50mm)

See preceding section for model descriptions.

RCA ROBO Cylinder

Power saving

Options below



As the stroke length increases, the maximum speed decreases due to hazardous ball screw RPMs. Confirm the maximum desired stroke speed in the Actuator Spec Table below. The payload is the value when operated at 0.3G acceleration (0.2G

X: Length designation R: Robot cable

acceleration in vertical operation at lead 2.5). The above value is the maximum acceleration. Horizontal payload is the value when used together with external guides.

Refer to technical materials (P500) for weights with which accessory guide units can be used.

## Actuator Specifications Table

#### Leads and Payloads

Model		Lead (mm)	Max. p Horizontal (kg)	ayload Vertical (kg)	Thrust (N)	Stroke (mm)
RCA-RGS3D-I-20-10-①-A1-②-③		10	4.0	1.2	36.2	
RCA-RGS3D-I-20-5-①-A1-②-③	20	5	9.0	2.7	72.4	50 to 200 (Every 50mm)
RCA-RGS3D-I-20-2.5-①-A1-②-③		2.5	18.0	6.2	144.8	3011111)
Legend: ① Stroke ② Cable length ③ Option						

#### ■Stroke and Maximum Speed

	•
Stroke Lead	50 to 200 (Every 50mm)
10	500
5	250
2.5	125

(Unit = mm/s)

#### ① Pricing List By Stroke

	Type code
① Stroke (mm)	RGS3D
	Encoder type
	Incremental
	I
50	_
100	_
150	_
200	_

#### ③ Option Price List

Title	Option code	See page	Standard price
Foot bracket	FT	P440	_
Home check sensor	HS	P442	_
Power saving	LA	P442	_
Reversed-home specification	NM	P442	_
Trunion (Rear)	TRR	P446	ı

<sup>\*</sup>The home check sensor cannot be used with the reversed-home specification.

#### ② Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
Special length	X06 (6m)	to X10 (10m)	_
	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to <b>R03</b> (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

<sup>\*</sup>See P384 for maintenance cables.

#### Actuator Specification

Item	Description
Drive method	Ball screw φ8mm, rolled C10
Positioning Repeatability	±0.02mm
Backlash	0.1mm or less
Guide	Single-rod guide type, rod diameter φ8mm ball-bushing
Rod diameter	φ16mm
Non-rotation accuracy of the rod	±0.05 degrees
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)

www.intelligentactuator.com

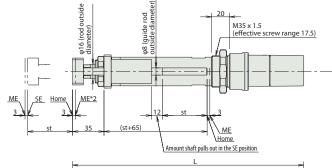
Information on special orders

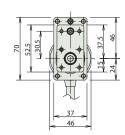
P. 454

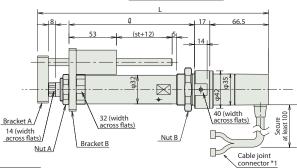


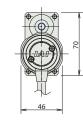
- \*1. Connect the motor-encoder cable. See P384 for cable details.
  \*2. Watch out for interference with peripheral objects since the slider moves as far as the ME when returning home. ME: mechanical end SE: stroke end

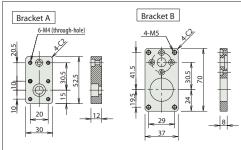
#### [Without brake]

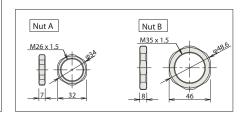












## ■Dimensions and Weight by Stroke

RCA-RGS3D (without brake)				
Stroke	50	100	150	200
L	258.5	308.5	358.5	408.5
Q	140	190	240	290
Weight (kg)	0.9	1.1	1.2	1.3

The RCA-RGS3D type is not available with a brake.

#### Compatible Controllers

The RCA Series actuators can be operated with the following controllers. Select the type that is compatible with your application

The NGA Series actuators can be operated with the following controllers. Select the type that is compatible with your application.											
Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page			
Positioner type	I	ACON-C-20SI①-NP-2-0	Up to 512-point	F10 points			_				
Safety category compatible Positioner type	9	ACON-CG-20SI①-NP-2-0 positioning possible 512 points				_					
Solenoid valve type		ACON-CY-20SI①-NP-2-0	Same as solenoid valve Controlled operation enabled	3 points		Rating 1.7A				_	P375
Pulse series input type (Differential line driver specification)	gi .	ACON-PL-20SI①-NP-2-0	Compatible with differential line driver Pulse train input type	( )	DC24V		_	F3/3			
Pulse series input type (Open collector specification)		<u>a</u> j.	ACON-PO-20SI①-NP-2-0	Open collector compatible Pulse series input type	(-)	50247	Peak 5.1A	_			
Serial communication type		ACON-SE-20SI①-N-0-0	Serial communications Special type	64 points			_				
Field network type		RACON-20S①	Field network Dedicated type	768 points			_	P343			
Program control type		ASEL-C-1-20SI①-NP-2-0	Programmable type capable of operating up to 2 axes	1500 points			_	P405			

\*ASEL is for 1-axis specifications

\*① For entering the code when designating power saving applications (LA).

IAI

RCA-RGS3D

Servo Motor

20 w

30 w

Servo Motor

Servo Motor 150 w

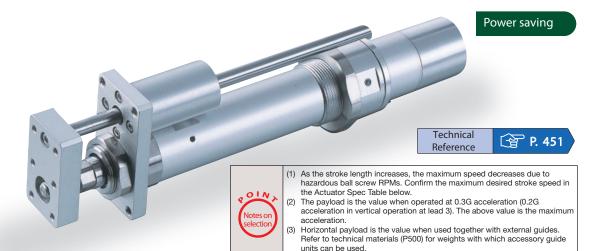
Servo Motor

RCA ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

# RCA-RGS4D

ROBO Cylinder, Single-guide Rod Type, Actuator Dimensions 37mm, 24V Servo Motor, Built-in Specification

■ Model Description RCA — RGS4D — **A1** Cable length A1: ACON N: None I:Incremental 20: Servo motor 12: 12mm 50:50mm Options below specification 20W ASEL See Pricing Table 6: 6mm 300:300mm A: Absolute 30: Servo motor (Set steps every 50mm) specification 30W X: Length designation R: Robot cable See preceding section for model descriptions.



#### Actuator Specifications Table

#### ■Leads and Payloads

Model	Motor output	Lead (mm)	Max. p Horizontal (kg)	-	Thrust (N)	Stroke (mm)
RCA-RGS4D-①-20-12-②-A1-③-④		12	3.0	0.5	18.9	
RCA-RGS4D-①-20-6-②-A1-③-④	20	6	6.0	1.5	37.7	
RCA-RGS4D-①-20-3-②-A1-③-④		3	12.0	3.5	75.4	50 to 300
RCA-RGS4D-①-30-12-②-A1-③-④		12	4.0	1.0	28.3	(Every 50mm)
RCA-RGS4D-①-30-6-②-A1-③-④	30	6	9.0	2.5	56.6	
RCA-RGS4D-①-30-3-②-A1-③-④		3	18.0	6.0	113.1	
Legend: ① Encoder type ② Stroke ③ Cable length ④ Option						

#### ■Stroke and Maximum Speed

Stroke	50 to 300 (Every 50mm)
12	600
6	300
3	150

(Unit = mm/s)

#### ① Pricing List By Encoder Type and ② Stroke

		Туре	code		
		RG	S4D		
② Stroke	① Encoder type				
(mm)	Increr	nental	Abso	olute	
	Motor wa	ttage (W)	Motor wattage (W)		
	20W	30W	20W	30W	
50	_	_	_	_	
100	_	_	_	_	
150	_	_	_	_	
200	_	_	_	-	
250	_	_	_	_	
300	_	_	_	_	

#### 4 Option Price List

Title	Option code	See page	Standard price
Foot bracket	FT	P440	_
Home check sensor	HS	P442	_
Power saving	LA	P442	_
Reversed-home specification	NM	P442	_
Trunion (Rear)	TRR	P446	_

<sup>\*</sup>The home check sensor cannot be used with the reversed-home specification.

#### 3 Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
Special length	X06 (6m)	to <b>X10</b> (10m)	_
	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
Robot cable	<b>R01</b> (1m)	to <b>R03</b> (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

\*See P384 for maintenance cables.

## Gee 1 GG4 161 Maintenance Gaste

Actuator Specification				
Item Description				
Drive method	Ball screw φ10mm, rolled C10			
Positioning Repeatability	±0.02mm			
Backlash	0.1mm or less			
Guide	Single-rod guide type, rod diameter φ10mm ball-bushing			
Rod diameter	φ20mm			
Non-rotation accuracy of the rod	±0.05 degrees			
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)			

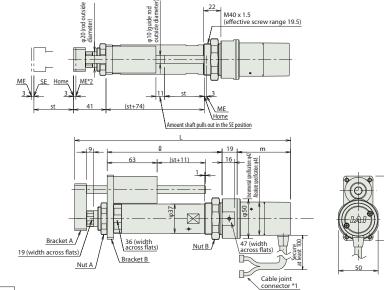
Information on special orders

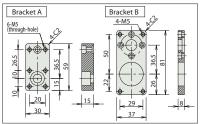


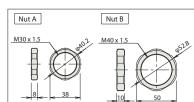


[Without brake]

11. Connect the motor-encoder cable. See P384 for cable details.
22. Watch out for interference with peripheral objects since the slider moves as far as the ME when returning home. ME: mechanical end SE: stroke end







■Dimensions and Weight by Stroke

RCA-RGS4D (Without brake)									
Stroke			50	100	150	200	250	300	
	20W	Incremental	250.5	300.5	350.5	400.5	450.5	500.5	
L	2000	Absolute	263.5	313.5	363.5	413.5	463.5	513.5	
_	30W	Incremental	265.5	315.5	365.5	415.5	465.5	515.5	
		Absolute	278.5	328.5	378.5	428.5	478.5	528.5	
Q			145	195	245	295	345	395	
	20W	Incremental	45.5						
	2000	Absolute			58	3.5			
m	30W	Incremental	60.5						
	3000	Absolute			73	3.5			
Weight (kg)			1.3	1.5	1.7	1.9	2.1	2.3	

The RCA-RGS4D type is not available with a brake.

Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page
Positioner type	El .	ACON-C-2012-NP-2-0 ACON-C-3012-NP-2-0	Up to 512-point	510 i-t-		20W Rated 1.3A Peak 5.1A 30W Rated 1.3A Peak 5.1A	_	
Safety category compatible Positioner type		ACON-CG-2012-NP-2-0 ACON-CG-3012-NP-2-0	positioning possible	512 points			_	
Solenoid valve type		ACON-CY-201②-NP-2-0 ACON-CY-301②-NP-2-0	Same as solenoid valve Controlled operation enabled	3 points			_	D075
Pulse series input type (Differential line river specification)	cii	ACON-PL-20I②-NP-2-0 ACON-PL-30I②-NP-2-0	Compatible with differential line driver Pulse train input type	()			_	P375
Pulse series input type (Open collector specification)		ACON-PO-20I2-NP-2-0 ACON-PO-30I2-NP-2-0	Open collector compatible Pulse series input type	(-)	DC24V		_	
Serial communication type		ACON-SE-201②-N-0-0 ACON-SE-301②-N-0-0	Serial communications Special type	64 points			_	
Field network type		RACON-20② RACON-30②	Field network Dedicated type	768 points			_	P343
Program control type		ASEL-C-1-20①②-NP-2-0 ASEL-C-1-30①②-NP-2-0	Programmable type capable of operating up to 2 axes	1500 points			_	P405

\*ASEL is for 1-axis specifications.
\*(1) For entering the encoder type (I: incremental/A: absolute).
\*(2) For entering the code when designating power saving applications (LA).

IAI

RCA-RGS4D

Pulse Moto

Pulse Motor

86 P

Servo Motor

Servo Motor

Servo Motor

100w

Servo Motor

Servo Motor 750 w

RCA ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

# RCA-RGD3C

ROBO Cylinder, Double-guide Rod Type, Actuator Dimensions 32mm, 24V Servo Motor, Coupling Specification



#### High-acceleration/ deceleration

Power saving

(Except for 2.5mm lead)



#### Actuator Specifications Table

#### ■Leads and Payloads

Model	Motor output	Lead (mm)	Max. p Horizontal (kg)	ayload Vertical (kg)	Thrust (N)	Stroke (mm)
RCA-RGD3C-I-20-10-①-A1-②-③		10	4.0	1.2	36.2	
RCA-RGD3C-I-20-5-①-A1-②-③	20	5	9.0	2.7	72.4	50 to 200 (Every 50mm)
RCA-RGD3C-I-20-2.5-①-A1-②-③		2.5	18.0	6.2	144.8	3011111)
Legend: ① Stroke ② Cable length ③ Option						

#### ■Stroke and Maximum Speed

Stroke Lead	50 to 200 (Every 50mm)
10	500
5	250
2.5	125

(Unit = mm/s)

#### ① Pricing List By Stroke

	Type code		
① Stroke	RGD3C		
(mm)	Encoder type		
(mm)	Incremental		
	I		
50	_		
100	_		
150	_		
200	_		

#### ③ Option Price List

Title	Option code	See page	Standard price
Brake	В	P437	_
Foot bracket	FT	P440	_
High-acceleration/deceleration (*1)	HA	P442	_
Home check sensor (*2)	HS	P442	_
Power saving (*3)	LA	P442	_
Reversed-home specification	NM	P442	_
Trunion (Rear)	TRR	P446	_

- (\*1) Lead 2.5 cannot be used in high-acceleration/deceleration applications.
- (\*2) Home check sensors (HS) cannot be used in reversed-home specifications.
- (\*3) High-acceleration/deceleration applications and power saving applications cannot be used together.

#### ② Cable Length Price List

Туре	Cable symbol Standard		Standard price
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
	X06 (6m)	to X10 (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to <b>R03</b> (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

\*See P384 for maintenance cables.

#### Actuator Specification

Item	Description		
Drive method	Ball screw φ8mm, rolled C10		
Positioning Repeatability	±0.02mm		
Backlash	0.1mm or less		
Guide	Single-rod guide type, rod diameter φ8mm ball-bushing		
Rod diameter	φ16mm		
Non-rotation accuracy of the rod	±0.05 degrees		
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)		

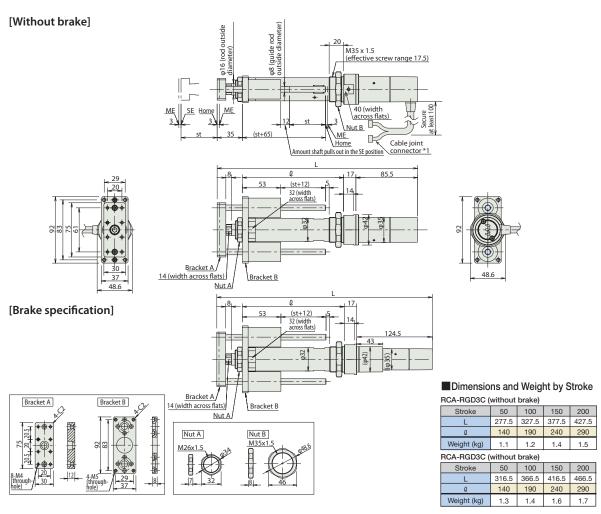
Information on special orders

P. 454





- 11. Connect the motor-encoder cable. See P384 for cable details.
  22. Watch out for interference with peripheral objects since the slider moves as far as the ME when returning home. ME: mechanical end SE: stroke end



The RCA Series actuators can be operated with the following controllers. Select the type that is compatible with your application.									
Title	External View	Model	Features	positioning points	Input power	Power-supply capacity	Standard price	See page	
Positioner type	Ť	ACON-C-20SI①-NP-2-0	Up to 512-point	512 points			_		
Safety category compatible Positioner type		ACON-CG-20SI①-NP-2-0	positioning possible	312 points			-	P375	
Solenoid valve type		ACON-CY-20SI①-NP-2-0	Same as solenoid valve Controlled operation enabled	3 points			_		
Pulse series input type (Differential line driver specification)		ő.	ACON-PL-20SI①-NP-2-0	Compatible with differential line driver Pulse train input type		500.07	Rating 1.7A	-	P3/3
Pulse series input type (Open collector specification)		ACON-PO-20SI①-NP-2-0	Open collector compatible Pulse series input type	(-)	DC24V	Peak 5.1A	-		
Serial communication type		ACON-SE-20SI①-N-0-0	Serial communications Special type	64 points			_		
Field network type		RACON-20S①	Field network Dedicated type	768 points			_	P343	
Program control type		ASEL-C-1-20SI①-NP-2-0	Programmable type capable of operating up to 2 axes	1500 points			_	P405	

\*ASEL is for 1-axis specifications.

\*① For entering the code when designating high-acceleration/deceleration applications or power saving applications (HA/LA).

RCA-RGD3C

30 w

RCA ROBO Cylinder ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

ROBO Cylinder, Double-guide Rod Type, Actuator Dimensions 37mm, 24V Servo Motor, Coupling Specification

■ Model Description RCA — RGD4C — **A**1 Encoder type Cable length N: None I:Incremental 20: Servo motor 12: 12mm 50:50mm A1: ACON Options below specification 20W 6: 6mm ASEL See Pricing Table 300:300mm A: Absolute 30: Servo motor (Set steps every 50mm) specification 30W Length designation R: Robot cable See preceding section for model descriptions.

> High-acceleration/ Power saving (\*1)(\*1) Excluding all 20W models and and 30W lead3 Technical 译 P. 451 Reference (1) As the stroke length increases, the maximum speed decreases due to hazardous ball screw RPMs. Confirm the maximum desired stroke speed in the Actuator Spec Table below.
> The payload is the value when operated at 0.3G acceleration (0.2G at lead 3) at normal specifications/power saving applications or at 1G in high-acceleration/deceleration applications (except at lead 3). (The values in the table below are the maximum payload, even if acceleration/deceleration drops)
> Horizontal payload is the value when used together with external guides.
> Refer to technical materials (P500) for weights with which accessory guide units can be used.

#### Actuator Specifications Table

#### ■Leads and Payloads

Model	Motor output	Lead (mm)		vertical (kg)	Thrust (N)	Stroke (mm)
RCA-RGD4C-①-20-12-②-A1-③-④		12	12 3.0 0.5	18.9		
RCA-RGD4C-①-20-6-②-A1-③-④	20	6	6.0	1.5	37.7	
RCA-RGD4C-①-20-3-②-A1-③-④		3	12.0	3.5	75.4	50 to 300
RCA-RGD4C-①-30-12-②-A1-③-④		12	4.0	1.0	28.3	(Every 50mm)
RCA-RGD4C-①-30-6-②-A1-③-④	30	6	9.0	2.5	56.6	
RCA-RGD4C-①-30-3-②-A1-③-④		3	18.0	6.0	113.1	
Legend: ① Encoder type ② Stroke ③ Cable length ④ Option						

#### ■Stroke and Maximum Speed

Stroke Lead	50 to 300 (Every 50mm)
12	600
6	300
3	150

(Unit = mm/s)

#### 1) Pricing List By Encoder Type and 2 Stroke

Thomg List by Enocaci Type and & Stroke								
	Type code							
	RGD4C							
② Stroke	① Encoder type							
(mm)	Incren	nental	Absolute					
	Motor wa	ttage (W)	Motor wattage (W)					
	20W	30W	20W	30W				
50	_	_	_	_				
100	_	_	_	_				
150	150 —		_	_				
200	_	_	_	_				
250	_	_	_	_				
300	_	_	_	_				

Option	Drico	Liet

Option code	See page	Standard price
В	P437	_
FT	P440	_
HA	P442	_
HS	P442	_
LA	P442	_
NM	P442	_
TRR	P446	_
	B FT HA HS LA NM	B P437 FT P440 HA P442 HS P442 LA P442 NM P442

# (\*1) None of the 20W or 30W-lead 3 models can be used in high-acceleration/deceleration applications. (\*2) Home check sensors (HS) cannot be used in reversed-home specifications. (\*3) High-acceleration/deceleration applications and power saving applications cannot be used together.

## 3 Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
Special length	X06 (6m)	to <b>X10</b> (10m)	_
	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to <b>R03</b> (3m)	_
Robot cable	R04 (4m)	to <b>R05</b> (5m)	_
	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to R15 (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

\*See P384 for maintenance cables

Actuator Specification			
Item	Description		
Drive method	Ball screw φ10mm, rolled C10		
Positioning Repeatability	±0.02mm		
Backlash	0.1mm or less		
Guide	Single-rod guide type, rod diameter φ10mm ball-bushing		
Rod diameter	φ20mm		
Non-rotation accuracy of the rod	±0.05 degrees		

Ambient operating temperature, humidity 0 to 40°C, 85% RH or less (non-condensing)

Information on special orders

P. 454





11. Connect the motor-encoder cable. See P384 for cable details.
22. Watch out for interference with peripheral objects since the slider moves as far as the ME when returning home. ME: mechanical end SE: stroke end

#### [Without brake] M40 x 1.5 (effective screw range 19.5) φ10 (guide r outside dian dia dia 47 (width across flats) ME\*2 ME Home Cable joint connector \*1 Amount shaft pulls out in the SE position Incremental specification: φ42 Absolute specification: φ48 37 16 (st+11) 52.8 Bracket A Nut B

36 (width across flats)

\36 (width across flats) Bracket B

Nut B

19 16

Nut B

Bracket B

■Dimensions and Weight by Stroke

RCF	RCA-RGD4C (without brake)								
	Stroke		50	100	150	200	250	300	
	20W	Incremental	272.5	322.5	372.5	422.5	472.5	522.5	
L	2000	Absolute	285.5	335.5	385.5	435.5	485.5	535.5	
L	30W	Incremental	287.5	337.5	387.5	437.5	487.5	537.5	
	3000	Absolute	300.5	350.5	400.5	450.5	500.5	550.5	
	Q		145	195	245	295	345	395	
	20W	Incremental	67.5						
m	2000	Absolute	80.5						
111	m 30W	Incremental	82.5						
	Absolute		95.5						
	Weight (kg)		1.8	2.0	2.2	2.4	2.6	2.8	

RCA-RGD4C	(with	brake

	TOA-HOD-O (WITH BLAKE)							
	Stroke		50	100	150	200	250	300
	20W	Incremental	315.5	365.5	415.5	465.5	515.5	565.5
١. ا	2000	Absolute	328.5	378.5	428.5	478.5	528.5	578.5
L	30W	Incremental	330.5	380.5	430.5	480.5	530.5	580.5
	3000	Absolute	343.5	393.5	443.5	493.5	543.5	593.5
Q		145	195	245	295	345	395	
	m 20W Incremental Absolute Incremental		al 110.5					
			123.5					
III			125.5					
Absolute				13	8.5			
	Weigh	t (kg)	2.0	2.2	2.4	2.6	2.8	3.0

#### Compatible Controllers

Bracket B 4-M5

[Brake specification]

Bracket A 8-M5 (through-hole)

Bracket A

Nut A

M30 x 1.5 8

The HCA Series actuators can be operated with the following controllers. Select the type that is compatible with your application.										
Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page		
Positioner type		ACON-C-201②-NP-2-0 ACON-C-301②-NP-2-0	Up to 512-point	510 :				_		
Safety category compatible Positioner type		ACON-CG-201@-NP-2-0 ACON-CG-301@-NP-2-0	positioning possible				-			
Solenoid valve type		ACON-CY-20I2-NP-2-0 ACON-CY-30I2-NP-2-0	Same as solenoid valve Controlled operation enabled	3 points					_	P375
Pulse series input type (Differential line driver specification)	<u> </u>	ACON-PL-2012-NP-2-0 ACON-PL-3012-NP-2-0	Compatible with differential line driver Pulse train input type	()	D0041/	20W Rated 1.3A Peak 5.1A	-	P3/5		
Pulse series input type (Open collector specification)	a l	ACON-PO-2012-NP-2-0 ACON-PO-3012-NP-2-0	Open collector (–) DC24V compatible Pulse series input type	DG24V	30W Rated 1.3A Peak 5.1A	_				
Serial communication type		ACON-SE-2012-N-0-0 ACON-SE-3012-N-0-0	Serial communications Special type	64 points		Peak 5. IA	_			
Field network type		RACON-20② RACON-30②	Field network Dedicated type	768 points			-	P343		
Program control type		ASEL-C-1-20①②-NP-2-0 ASEL-C-1-30①②-NP-2-0	Programmable type capable of operating up to 2 axes	1500 points			_	P405		

\*ASEL is for 1-axis specifications.
\*① For entering the encoder type (I: incremental/A: absolute).
\*② For entering the code when designating high-acceleration applications or power saving applications (HA/LA).



RCA-RGD4C

Servo Motor

Servo Motor

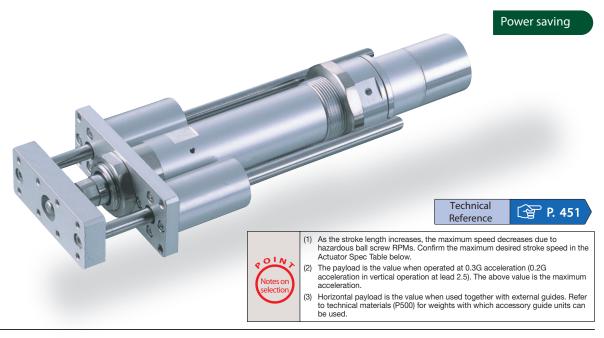
Servo Motor

Servo Motor 150 w

Servo Motor 750 w







#### Actuator Specifications Tab ■Leads and Payloads ■Stroke and Maximum Speed Motor Max. payload Stroke 50 to 200 Lead Thrust (N) Stroke Model output (mm) rizontal (kg) Vertical (kg) (mm) (Every 50mm) RCA-RGD3D-I-20-10-1 -A1-2 -3 10 4.0 1.2 36.2 10 500 50 to 200 RCA-RGD3D-I-20-5-1 -A1-2 -3 20 5 9.0 2.7 72.4 (Every 5 250 50mm) RCA-RGD3D-I-20-2.5-1 -A1-2 -3 2.5 18.0 6.2 144.8 2.5 125 Legend: 1 Stroke 2 Cable length 3 Option

① Pricing List By Stroke			
	Type code RGD3D		
① Stroke			
(mm)	Encoder type		
	Incremental		
	I		
50	_		
100	_		
150	_		
200	_		

③ Option Price List				
Title	Option code	See page	Standard price	
Foot bracket	FT	P440	_	
Home check sensor	HS	P442	_	
Power saving	LA	P442	_	
Reversed-home specification	NM	P442	_	
Trunion (Rear)	TRR	P446	_	

 $<sup>^{*}</sup>$ The home check sensor cannot be used with the reversed-home specification.

## ② Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
Special length	X06 (6m)	to X10 (10m)	_
	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	<b>R01</b> (1m)	to <b>R03</b> (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

(Unit = mm/s)

<sup>\*</sup>See P384 for maintenance cables.

Actuator Specification			
Item	Description		
Drive method	Ball screw φ8mm, rolled C10		
Positioning Repeatability	±0.02mm		
Backlash	0.1mm or less		
Guide	Single-rod guide type, rod diameter φ8mm ball-bushing		
Rod diameter	φ16mm		
Non-rotation accuracy of the rod	±0.05 degrees		
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)		

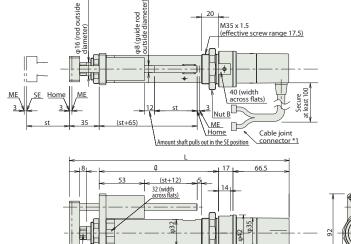
Information on special orders

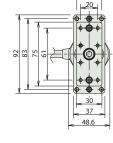


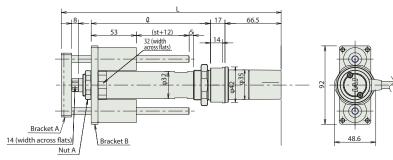


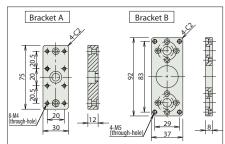
\*1. Connect the motor-encoder cable. See P384 for cable details.
\*2. Watch out for interference with peripheral objects since the slider moves as far as the ME when returning home. ME: mechanical end SE: stroke end

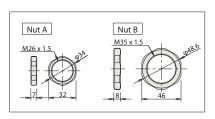
#### [Without brake]











## ■Dimensions and Weight by Stroke

RCA-RGD3D (without brake)

HON HODOD (	without	braite			
Stroke	50	100	150	200	
L	258.5	308.5	358.5	408.5	
Q	140	190	240	290	
Weight (kg)	1.1	1.2	1.4	1.5	

The RCA-RGD3D type is not available with a brake.

0	a a Aila I a	O a serior II	
Com	patible	Controll	ers

The RCA Series actuators can be operated with the following controllers. Select the type that is compatible with your application

The HCA Series actuators can be operated with the following controllers. Select the type that is compatible with your application.									
Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page	
Positioner type	H	ACON-C-20SI①-NP-2-0	Up to 512-point	F10 points			_		
Safety category compatible Positioner type		ACON-CG-20SI①-NP-2-0 positioning possible 512 points			_				
Solenoid valve type	- ·	ACON-CY-20SI①-NP-2-0	Same as solenoid valve Controlled operation enabled	3 points			_	P375	
Pulse series input type (Differential line driver specification)		ACON-PL-20SI①-NP-2-0  Compatible with differential line driver Pulse train input type	()	DC24V	Rating 1.7A	_	1373		
Pulse series input type (Open collector specification)			ACON-PO-20SI①-NP-2-0	Open collector compatible Pulse series input type	(–)	DO24V	Peak 5.1A	_	
Serial communication type		ACON-SE-20SI①-N-0-0	Serial communications Special type	64 points			_		
Field network type		RACON-20S①	Field network Dedicated type	768 points			_	P343	
Program control type		ASEL-C-1-20SI①-NP-2-0	Programmable type capable of operating up to 2 axes	1500 points			_	P405	

\*ASEL is for 1-axis specifications.

\*1) For entering the code when designating power saving applications (LA).



RCA-RGD3D

86 P Servo Motor

Servo Motor

Servo Motor 30 w

60 w Servo Motor

Servo Motor

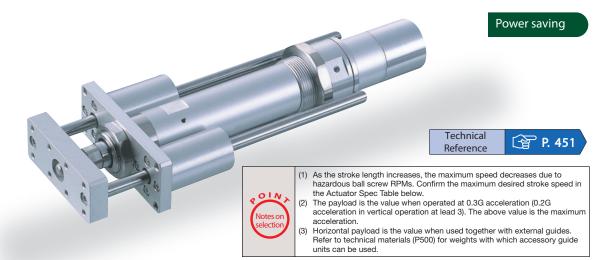
Servo Motor 750 w

RCA ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

# RCA-RGD4D

ROBO Cylinder, Double-guide Rod Type, Actuator Dimensions 37mm, 24V Servo Motor, Built-in Specification

■ Model Description RCA — RGD4D— **A1** Cable length A1: ACON N: None I:Incremental 20: Servo motor 12: 12mm 50:50mm Options below specification 20W 6: 6mm ASEL See Pricing Table 300:300mm A: Absolute 30: Servo motor (Set steps every 50mm) specification 30W X: Length designation R: Robot cable See preceding section for model descriptions.



#### Actuator Specifications Table

#### ■Leads and Payloads

Model	output	(mm)		Vertical (kg)	Thrust (N)	(mm)
RCA-RGD4D-①-20-12-②-A1-③-④		12	3.0	0.5	18.9	
RCA-RGD4D-①-20-6-②-A1-③-④	20	6	6.0	1.5	37.7	
RCA-RGD4D-① -20-3-② -A1-③ -④		3	12.0	3.5	75.4	50 to 300
RCA-RGD4D-①-30-12-②-A1-③-④		12	4.0	1.0	28.3	(Every 50mm)
RCA-RGD4D-①-30-6-②-A1-③-④	30	6	9.0	2.5	56.6	
RCA-RGD4D-①-30-3-②-A1-③-④		3	18.0	6.0	113.1	
Legend: 1 Encoder type 2 Stroke 3 Cable length 4 Option	n					

#### ■Stroke and Maximum Speed

Stroke	50 to 300 (Every 50mm)
12	600
6	300
3	150

(Unit = mm/s)

#### ① Pricing List By Encoder Type and ② Stroke

_ · <b>J</b>	-, -, -, -, -, -, -, -, -, -, -, -, -, -					
	Type code					
	RGD4D					
② Stroke	① Encoder type					
(mm)	Incren	nental	Absolute			
	Motor wa	ttage (W)	Motor wattage (W)			
	20W	30W	20W	30W		
50	_	_	_	_		
100	_	_	_	_		
150	-	_	_	_		
200	_	_	_	_		
250	_	_	_	_		
300	_	_	_	_		

#### 4 Option Price List

Option code	See page	Standard price
FT	P440	_
HS	P442	_
LA	P442	_
NM	P442	_
TRR	P446	_
	FT HS LA NM	FT P440 HS P442 LA P442 NM P442

<sup>\*</sup>The home check sensor cannot be used with the reversed-home specification.

#### ③ Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)	_	
	<b>M</b> (5m)		_
	X06 (6m)	to <b>X10</b> (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to R03 (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

\*See P384 for maintenance cables

Ambient operating temperature, humidity 0 to 40°C, 85% RH or less (non-condensing)

Actuator Specification					
Description					
Ball screw φ10mm, rolled C10					
±0.02mm					
0.1mm or less					
Single-rod guide type, rod diameter φ10mm ball-bushing					
φ20mm					
±0.05 degrees					

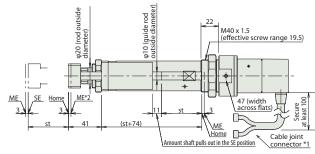
Information on special orders

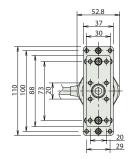


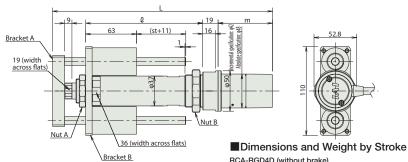


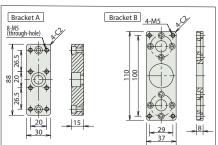
11. Connect the motor-encoder cable. See P384 for cable details.
22. Watch out for interference with peripheral objects since the slider moves as far as the ME when returning home. ME: mechanical end SE: stroke end

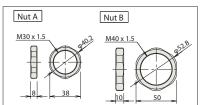
#### [Without brake]











RCA-RGD4D (without brake)									
	Stro	ke	50	100	150	200	250	300	
	20W	Incremental	250.5	300.5	350.5	400.5	450.5	500.5	
	2000	Absolute	263.5	313.5	363.5	413.5	463.5	513.5	
L	30W	Incremental	265.5	315.5	365.5	415.5	465.5	515.5	
	3000	Absolute	278.5	328.5	378.5	428.5	478.5	528.5	
Q			145	195	245	295	345	395	
	20W Incremen		ental 45.5						
	2000	Absolute	58.5						
m	30W	Incremental			60	).5			
Absolute Weight (kg)					73	3.5			
			1.6	1.8	2.1	2.3	2.5	2.7	
				•	•				

The RCA-RGD4D type is not available with a brake.

Compatible Controllers

The HOA Series actuators can be operated with the following controllers. Select the type that is compatible with your application.										
Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page		
Positioner type	i i	ACON-C-20I②-NP-2-0 ACON-C-30I②-NP-2-0	Up to 512-point	512 points		0014	_			
Safety category compatible Positioner type	1	ACON-CG-201@-NP-2-0 ACON-CG-301@-NP-2-0	possible				-			
Solenoid valve type		ACON-CY-2012-NP-2-0 ACON-CY-3012-NP-2-0	Same as solenoid valve Controlled operation enabled	3 points			00144	2011	20W	_
Pulse series input type (Differential line driver specification)	Ó	ACON-PL-20I②-NP-2-0 ACON-PL-30I②-NP-2-0	Compatible with differential line driver Pulse train input type	( )	DC24V	Rated 1.3A Peak 5.1A	-	P3/5		
Pulse series input type (Open collector specification)			ACON-PO-20I2-NP-2-0 ACON-PO-30I2-NP-2-0	Open collector compatible Pulse series input type	(-)	DG24V	30W Rated 1.3A Peak 5.1A	_		
Serial communication type		ACON-SE-2012-N-0-0 ACON-SE-3012-N-0-0	Serial communications Special type	64 points		Peak 5.1A	_			
Field network type		RACON-202 RACON-302	Field network Dedicated type	768 points			-	P343		
Program control type		ASEL-C-1-20①②-NP-2-0 ASEL-C-1-30①②-NP-2-0	Programmable type capable of operating up to 2 axes	1500 points			_	P405		

\*ASEL is for 1-axis specifications.
\*(1) For entering the encoder type (I: incremental/A: absolute).
\*(2) For entering the code when designating power saving applications (LA).

IAI

RCA-RGD4D

Servo Motor 30 w

60 w Servo Motor

Servo Motor

Servo Motor 750 w RCA ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

# RCA-RGD3R

ROBO Cylinder, Double-guide Rod Type, Actuator Dimensions 32mm, 24V Servo Motor, Reverse-mounted Motor Specification

■ Model Description RCA — RGD3R — **A1** 20 Cable length A1: ACON N: None I:Incremental 20: Servo motor 10: 10mm 50:50mm Options below 20W 5: 5mm ASEL See Pricing Table 200:200mm (Set steps every 50mm)

Power saving

Technical Reference

X: Length designation R: Robot cable

P.451

 As the stroke length increases, the maximum speed decreases due to hazardous ball screw RPMs. Confirm the maximum desired stroke speed in the Actuator Spec Table below.
 The payload is the value when operated at 0.3G acceleration (0.2G

acceleration in vertical operation at lead 2.5). The above value is the maximum acceleration.

(3) The horizontal payload is the value when external guides are used and no external force is exerted from outside the direction of travel of the rod. Refer to technical materials (P500) for weights with which accessory guide units can be used.

#### Actuator Specifications Table

See preceding section for model descriptions.

#### ■Leads and Payloads

- · · · · · · · · · · · · · · · · · · ·						
Model	Motor output	Lead (mm)	Max. p Horizontal (kg)		Thrust (N)	Stroke (mm)
RCA-RGD3R-I-20-10-①-A1-②-③		10	4.0	1.2	36.2	
RCA-RGD3R-I-20-5-①-A1-②-③	20	5	9.0	2.7	72.4	50 to 200 (Every 50mm)
RCA-RGD3R-I-20-2.5-①-A1-②-③		2.5	18.0	6.2	144.8	3011111)

#### ■Stroke and Maximum Speed

Stroke Lead	50 to 200 (Every 50mm)
10	500
5	250
2.5	125

(Unit = mm/s)

#### ① Pricing List By Stroke

Legend: 1 Stroke 2 Cable length 3 Option

① Stroke (mm)	Type code
	RGD3R
	Encoder type
	Incremental
	I
50	_
100	_
150	-
200	_

#### 3 Option Price List

Title	Option code	See page	Standard price				
Brake	В	P437	-				
Foot bracket	FT	P440	_				
Flange bracket (Rear)	FLR	P439	_				
Home check sensor	HS	P442	-				
Power saving	LA	P442	_				
Reversed-home specification	NM	P442	_				
Clevis bracket	QR	P443	_				
Rear mounting plate	RP	P444	_				

<sup>\*</sup>The home check sensor cannot be used with the reversed-home specification.

#### 2 Cable Length Price List

Type	Cab	Standard price	
	<b>P</b> (1m)	_	
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)	_	
	X06 (6m)	to X10 (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to R03 (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

<sup>\*</sup>See P384 for maintenance cables.

#### Actuator Specification

Item	Description
Drive method	Ball screw φ8mm, rolled C10
Positioning Repeatability	±0.02mm
Backlash	0.1mm or less
Base	Material: Aluminum, white alumite treatment
Rod diameter	φ16mm
Non-rotation accuracy of the rod	±1.0 degrees
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)

www.intelligentactuator.com

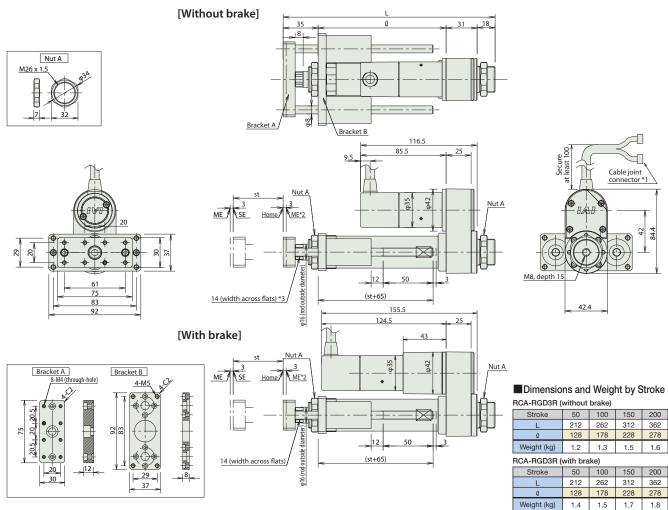
Information on special orders







- Connect the motor-encoder cable. See P384 for cable details.
   Watch out for interference with peripheral objects since the slider moves as far as the ME when returning home. ME: mechanical end SE: stroke end
   The orientation of the width across flats differs with the product.



Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page
Positioner type	H	ACON-C-20SI2-NP-2-0	Up to 512-point				-	
Safety category compatible Positioner type		ACON-CG-20SI2-NP-2-0	positioning possible	512 points			_	
Solenoid valve type		ACON-CY-20SI②-NP-2-0	Same as solenoid valve Controlled operation enabled	3 points		Rating 1.7A	_	P375
Pulse series input type (Differential line lriver specification)		ACON-PL-20SI②-NP-2-0	Compatible with differential line driver Pulse train input type	()	DC24V		_	P375
Pulse series input type (Open collector specification)	ă.	ACON-PO-20SI2-NP-2-0	Open collector compatible Pulse series input type	(-)	DG24V	Peak 5.1A	_	
Serial communication type		ACON-SE-20SI②-N-0-0	Serial communications Special type	64 points			_	
Field network type		RACON-20S②	Field network Dedicated type	768 points			_	P343
Program control type		ASEL-C-1-20SI②-NP-2-0	Programmable type capable of operating up to 2 axes	1500 points			_	P405

ASEL is for 1-axis specifications.

\*2) For entering the code when designating power saving applications (LA).

RCA-RGD3R

Servo Motor

Servo Motor 20 w

Servo Motor 30 w

60 w Servo Motor

100 w Servo Motor

Servo Motor 750 w RCA ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

# RCA-RGD4R

ROBO Cylinder, Double-guide Rod Type, Actuator Dimensions 37mm, 24V Servo Motor, Reverse-mounted Motor Specification

Cable length

(1) As the shazardo the Act. (2) The pay accelers

Power saving

Technical Reference **拿 P.451** 

 As the stroke length increases, the maximum speed decreases due to hazardous ball screw RPMs. Confirm the maximum desired stroke speed in the Actuator Spec Table below.
 The payload is the value when operated at 0.3G acceleration (0.2G

acceleration in vertical operation at lead 3). The above value is the maximum acceleration.

(3) The horizontal payload is the value when external guides are used and no external force is exerted from outside the direction of travel of the rod. Refer to technical materials (P500) for weights with which accessory guide units can be used.

#### Actuator Specifications Table

See preceding section for model descriptions.

#### ■Leads and Payloads

Model	Motor output	Lead (mm)		vertical (kg)	Thrust (N)	Stroke (mm)
RCA-RGD4R-①-20-12-②-A1-③-④		12	3.0	0.5	18.9	
RCA-RGD4R-①-20-6-②-A1-③-④	20	6	6.0	1.5	37.7	
RCA-RGD4R-①-20-3-②-A1-③-④		3	12.0	3.5	75.4	50 to 300
RCA-RGD4R-①-30-12-②-A1-③-④		12	4.0	1.0	28.3	(Every 50mm)
RCA-RGD4R-①-30-6-②-A1-③-④	30	6	9.0	2.5	56.6	
RCA-RGD4R-①-30-3-②-A1-③-④		3	18.0	6.0	113.1	
Legend: 1 Encoder type 2 Stroke 3 Cable length 4 Option						

#### ■Stroke and Maximum Speed

Stroke	50 to 300
Lead	(Every 50mm)
12	600
6	300
3	150

(Unit = mm/

#### 1 Pricing List By Encoder Type and 2 Stroke

The finding list by Encouer Type and 2 Stroke						
	Type code					
	RGD4R					
<li>② Stroke</li>	① Encoder type					
(mm)	Increr	nental	Absolute			
	Motor wa	ittage (W)	Motor wa	ittage (W)		
	20W	30W	20W	30W		
50	_	_	_	_		
100	_	_	_	_		
150	_	_	_	_		
200	_	_	_	_		
250	_	_	_	_		
300	_	_	_	_		

#### ③ Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)	_	
Standard type	<b>S</b> (3m)	_	
	<b>M</b> (5m)		_
	X06 (6m)	to <b>X10</b> (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to <b>R03</b> (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to R15 (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

\*See P384 for maintenance cables

#### 4 Option Price List

Title	Option code	See page	Standard price
Brake	В	P437	_
Foot bracket	FT	P440	_
Flange bracket (Rear)	FLR	P439	_
Home check sensor	HS	P442	_
Power saving	LA	P442	_
Reversed-home specification	NM	P442	_
Clevis bracket	QR	P443	_
Rear mounting plate	RP	P444	_

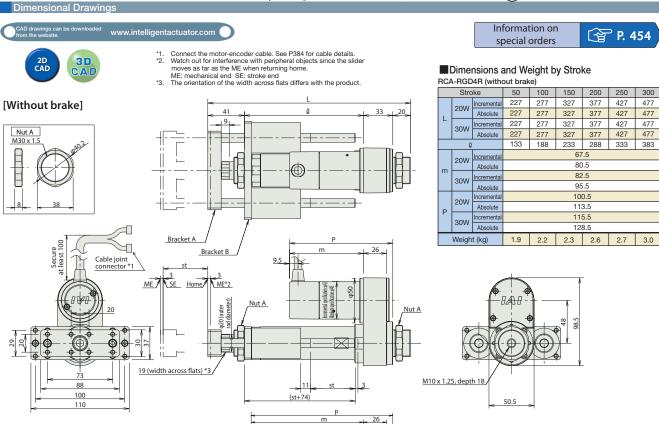
<sup>\*</sup>The home check sensor cannot be used with the reversed-home specification.

Actuator Specification	on				
Item	Description				
Drive method	Ball screw φ10mm, rolled C10				
Positioning Repeatability ±0.02mm					
Backlash	0.1mm or less				
Base	Material: Aluminum, white alumite treatment				
Rod diameter	φ20mm				
Non-rotation accuracy of the rod	±1.0 degrees				
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)				

30w

60 w





		-		m 26 -	]									
DACAL Localisa	9.5	17L		47		RC.	A-RGE	04R (with	brake)					
[With brake]	st >	1#					Stro	oke	50	100	150	200	250	300
N.	SE Home ME*2	Щ.	~ ·	1			00)4/	Incremental	227	277	327	377	427	477
<u>M</u>	-	i i	giore di mare	φ20		١.	20W	Absolute	227	277	327	377	427	477
	¬∥ ∥ ב∭iNut A		- Refregio	<del>├</del> ╶─ॉ╫─╌╫	+ -	-	30W	Incremental	227	277	327	377	427	477
Bracket A Bracket B	φ20 (outer rod diameter)		hoemental specification p48 Absolute specification p48	•	Nut A		3000	Absolute	227	277	327	377	427	477
8-M5 (through-hole) 4-M5			52	┖┸┸	i∡			!	133	188	233	288	333	383
					hi_h		20W	Incremental			11	0.5		
				<del></del>	# } +	m	2000	Absolute			12	3.5		
1997			1.1			'''	30W	Incremental			12	5.5		
	19 (width across flats) *3				ا ر		3000	Absolute			13	8.5		
	across flats) *3/						20W	Incremental			14	3.5		
			11	st <u>3</u>		P	2000	Absolute			15	6.5		
		_	(st+74)			Ι.	30W	Incremental			15	8.5		
20 29		-	•				3000	Absolute			17	1.5		
30 15 37 8	-						Weigh	it (kg)	2.1	2.4	2.5	2.8	2.9	3.2

Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page											
Positioner type	E)	ACON-C-20I②-NP-2-0 ACON-C-30I②-NP-2-0	Up to 512-point			_													
Safety category compatible Positioner type		ACON-CG-2012-NP-2-0 ACON-CG-3012-NP-2-0	positioning possible	512 points			-												
Solenoid valve type		ACON-CY-2012-NP-2-0 ACON-CY-3012-NP-2-0	Same as solenoid valve Controlled operation enabled	3 points		20W Rated 1.3A Peak 5.1A 30W Rated 1.3A Peak 5.1A	Rated 1.3A Peak 5.1A 30W Rated 1.3A	Rated 1.3A Peak 5.1A 30W Rated 1.3A		20W	20W	20W	20W	20W	20W	20W		_	P375
Pulse series input type (Differential line river specification)	cil.	ACON-PL-201②-NP-2-0 ACON-PL-301②-NP-2-0	Compatible with differential line driver Pulse train input type	()	500 11/				_	P3/5									
Pulse series input type (Open collector specification)		ACON-PO-2012-NP-2-0 ACON-PO-3012-NP-2-0	Open collector compatible Pulse series input type	(-)	DC24V				Rated 1.3A	Rated 1.3A	_								
Serial communication type		ACON-SE-201②-N-0-0 ACON-SE-301②-N-0-0	Serial communications Special type	64 points				_											
Field network type		RACON-20② RACON-30②	Field network Dedicated type	768 points			-	P343											
Program control type		ASEL-C-1-20①②-NP-2-0 ASEL-C-1-30①②-NP-2-0	Programmable type capable of operating up to 2 axes	1500 points			_	P405											

\*① For entering the encoder type (I: incremental/A: absolute).
\*② For entering the code when designating power saving applications (LA).

RCS2 ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

ROBO Cylinder, Rod Type, Actuator Width 37mm, 200-V Servo Motor, Coupling Specification

■ Model Description RCS2 — RA4C — Cable length Encoder type Motor type Lead Stroke Compatible Controllers Option N: None P: 1m S: 3m 20: Servo motor 12: 12mm 50:50mm T1: XSEL-J/K Options below specification 20W 6: 6mm T2: SCON See Pricing List 300:300mm A: Absolute 30: Servo motor 3: 3mm SSEL (Set steps every 50mm) M· 5m specification XSEL-P/O X: Length designation R: Robot cable 30W

High-acceleration/deceleration (\*1) (\*1) Excluding all 20W models and 30W-3mm lead Technical 译 P.451 Reference (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. The load capacity is the value when operated at 0.3G acceleration (0.2G with lead 3) under standard specifications, or at 1G acceleration (except lead 3) under high-acceleration/deceleration specifications. (The maximum capacity loads for accelerations are shown in the table below) The horizontal load capacity is the value when external guides are used and no external force is exerted from outside the direction the rod moves

#### Actuator Specifications Table

See preceding section for model descriptions.

#### ■Leads and Payloads

Model	Motor output	Lead (mm)	Max. p Horizontal (kg)	ayload Vertical (kg)	Thrust (N)	Stroke (mm)
RCS2-RA4C-①-20-12-②-③-④-⑤		12	3.0	1.0	18.9	
RCS2-RA4C-①-20-6-②-③-④-⑤	20	6	6.0	2.0	37.7	
RCS2-RA4C-①-20-3-②-③-④-⑤		3	12.0	4.0	75.4	50 to 300
RCS2-RA4C-①-30-12-②-③-④-⑤		12	4.0	1.5	28.3	(Every 50mm)
RCS2-RA4C-①-30-6-②-③-④-⑤	30	6	9.0	3.0	56.6	
RCS2-RA4C-①-30-3-②-③-④-⑤		3	18.0	6.5	113.1	
 Legend: 1 Encoder type 2 Stroke 3 Compatible Controller	4 Cable I	length 5	Option			

#### ■Stroke and Maximum Speed

Stroke Lead	50 to 300 (Every 50mm)
12	600
6	300
3	150

(Unit = mm/s)

#### ① Pricing List By Encoder Type and ② Stroke

1 Holling El	or by Encoder Typ	c and E onone					
		Туре	code				
		RA	4C				
<li>2 Stroke</li>		① Enco	der type				
(mm)	Increr	nental	Absolute				
	Motor wattage (W)		Motor wa	ittage (W)			
	20W	30W	20W	30W			
50	_	_	_	_			
100	_	_	_	_			
150	_	_	_	_			
200	_	_	_	_			
250	_						
300	_	_	_	_			

## 4 Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
Special length	X06 (6m)	to <b>X10</b> (10m)	_
	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to <b>X20</b> (20m)	_
	R01 (1m)	to <b>R03</b> (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to R15 (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

\*See P394 for maintenance cables

#### ⑤ Option Price List

Title	Option code	See page	Standard price
Brake	В	P437	_
Foot bracket	FT	P440	_
Flange bracket (front)	FL	P438	-
Flange bracket (rear)	FLR	P439	_
High-acceleration/deceleration (*1)	HA	P442	_
Home check sensor (*2)	HS	P442	-
Knuckle joint	NJ	P443	_
Reversed-home specification	NM	P442	_
Trunion bracket (front)	TRF	P446	_
Trunion bracket (rear)	TRR	P446	_

Actuator Specification	on
Item	Description
Drive method	Ball screw φ10mm, rolled C10
Positioning Repeatability	±0.02mm
Backlash	0.1mm or less
Base	Material: Aluminum, white alumite treatment
Rod diameter	φ20mm
Non-rotation accuracy of the rod	±1.0 degrees
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)

(\*1) High-acceleration/deceleration cannot be used with any 20W models or 30W-lead 3. (\*2) Home check sensor cannot be used with reversed-home specification.

P. 454

Information on

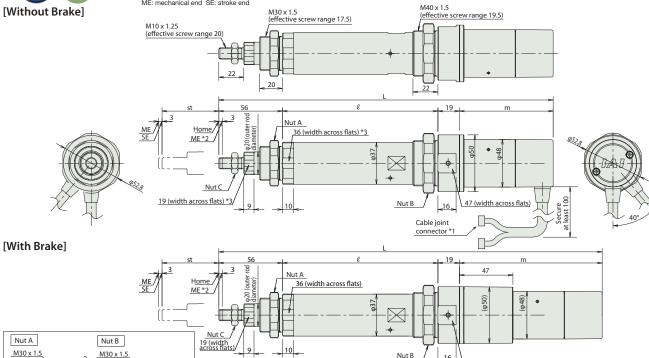
special orders

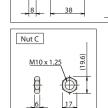
\*3 The width direction across flats orientation differs with the product.

30 w

Dimensional Drawings www.intelligentactuator.com

Connect the motor-encoder cable. See P394 for cable details. The slider moves to the ME during home return. Pay attention to prevent contact between the slider and surrounding parts during home return. ME: mechanical end SE: stroke end





Nut A

H

## ■Dimensions and Weight by Stroke

RCS2-RA4C (without brake)

S	troke	50	100	150	200	250	300	
	20W	292.5	342.5	392.5	442.5	492.5	542.5	
L	30W	307.5	357.5	407.5	457.5	507.5	557.5	
Q		137	187	237	287	337	487	
	20W		80.5					
m 30W				95	5.5			
Weight (kg)		1.1	1.2	1.4	1.5	1.7	1.8	

47 (width across flats)

\_16\_

HU52	RCS2-RA4C (With brake)								
S	troke	50	100	150	200	250	300		
	20W	335.5	385.5	435.5	485.5	535.5	585.5		
30W		350.5	400.5	450.5	500.5	550.5	600.5		
	Q	137	187	237	287	337	487		
	20W			12	3.5				
m	30W			13	8.5				
Wei	ght (kg)	1.3	1.5	1.6	1.7	1.9	2.0		

## Compatible Controllers

M30 x 1.5

The RCS2 Series actuators can be operated with the following controllers. Select the type that is compatible with your application

Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page
Positioner mode			Up to 512-point positioning possible	512 points				
Solenoid valve mode		SCON-C-20①-NP-2-③	Same as solenoid valve Controlled operation enabled	7 points	Single-phase AC 100V Single-phase AC	Maximum 360VA	-	P385
Serial communication type		SCON-C-30D①②-NP-2-③	Serial communications Special type	64 points				1 565
Pulse train input control type			Pulse train input type Special type	(-)	200V Three-phase	*1-axis specification for 150W operation		
Program control 1-2 axis type		SSEL-C-1-20①-NP-2-③ SSEL-C-1-30D①②-NP-2-③	Programmable type capable of operating up to 2 axes	20000 points	AC 200V (XSEL-P/Q only)		-	P415
Program control 1-6 axis type		XSEL-4-1-201-N1-EEE-2-3 XSEL-4-1-30D12-N1-EEE-2-3	Programmed operation enabled Can drive up to 6 axis	4000 points			-	P425

\*SSEL, XSEL are for 1-axis specification.

\*(1) Indicates the encoder type (I: Incremental/A: Absolute).

\*(2) HA indicates high-acceleration/deceleration.

\*(3) Indicates the power supply voltage type (1: 100V/2: single-phase 200V).

\*(4) Indicates XSEL type (J/K/P/Q).

\*(5) Indicates the power supply voltage type (1: 100V, 2: single-phase 200V, 3: three-phase 200V).

RCS2 ROBO Cylinder ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

ROBO Cylinder, Rod Type, Actuator Width 55mm, 200-V Servo Motor, Coupling Specification

■ Model Description RCS2 — RA5C — Cable length Encoder type Lead Stroke Compatible Controllers N: None P: 1m S: 3m 50:50mm T1: XSEL-J/K Options below specification 60W 8: 8mm T2: SCON See Pricing List 300:300mm A: Absolute 100: Servo motor 4: 4mm SSEL (Set steps every 50mm) specification XSEL-P/O X: Length designation R: Robot cable 100W

> High-acceleration/deceleration (\*1) (\*1) Exculdes all 60W models and 100W-4mm lead Technical 译 P.45<u>1</u> Reference (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 load capacity is based on operation at an acceleration of 0.3G (lead 4), with a high speed acceleration of 1G (0.2G for lead 4). (The maximum capacity loads for accelerations are shown in the table below) (3) The horizontal load capacity is the value when external guides are used and

#### Actuator Specifications Table

See preceding section for model descriptions.

#### ■Leads and Payloads

Model	Motor output	Lead (mm)		vertical (kg)	Thrust (N)	Stroke (mm)
RCS2-RA5C-①-60-16-②-③-④-⑤		16	12.0	2.0	63.8	
RCS2-RA5C-①-60-8-②-③-④-⑤	60	8	25.0	5.0	127.5	
RCS2-RA5C-①-60-4-②-③-④-⑤		4	50.0	11.5	255.1	50 to 300
RCS2-RA5C-①-100-16-②-③-④-⑤		16	15.0	3.5	105.8	(Every 50mm)
RCS2-RA5C-①-100-8-②-③-④-⑤	100	8	30.0	9.0	212.7	
RCS2-RA5C-①-100-4-②-③-④-⑤		4	60.0	18.0	424.3	
Legend: 1 Encoder type 2 Stroke 3 Compatible Controller	4 Cable I	enath 5	Option			

#### ■Stroke and Maximum Speed

no external force is exerted from outside the direction the rod moves.

Stroke Lead	50 to 250 (every 50mm)	300 (mm)	
16	800	755	
8	400	377 188	
4	200		

(Unit = mm/s)

#### 1 Pricing List By Encoder Type and 2 Stroke

Thomg List by Encoder Type and & Stroke								
	Type code							
		RA	.5C					
② Stroke		① Enco	der type					
(mm)	Increr	nental	Abso	olute				
	Motor wa	ttage (W)	Motor wattage (W)					
	60W	100W	60W	100W				
50	_	_	_	_				
100	_	_	_	_				
150	_	_	_	_				
200	_	_	_	_				
250	_	_	_	_				
300	_	_	_	_				

#### ⑤ Option Price List

Title	Option code	See page	Standard price
Cable Outlet Direction	A2	P437	_
Brake	В	P437	_
Flange	FL	P438	_
Foot bracket	FT	P441	_
High-acceleration/deceleration (*1)	HA	P442	ı
441111			

(\*1) High-acceleration/deceleration cannot be used with any 60W models or 100W-lead 4.

#### 4 Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
	X06 (6m)	to <b>X10</b> (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to <b>R03</b> (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

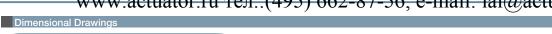
\*See P394 for maintenance cables.

Actuator Specification						
Item	Description					
Drive method	Ball screw φ12mm, rolled C10					
Positioning Repeatability	±0.02mm					
Backlash	0.1mm or less					
Base	Material: Aluminum, white alumite treatment					
Rod diameter	φ30mm					
Non-rotation accuracy of the rod	±0.7 degrees					
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)					

😭 P. 454

60 w

100w



3D CAD

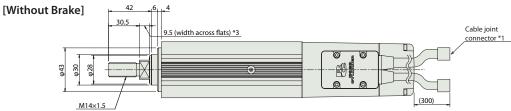
www.intelligentactuator.com

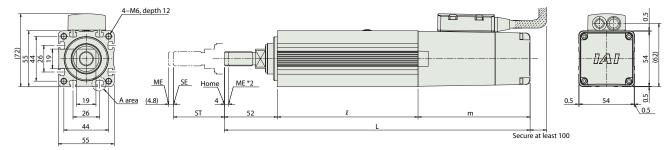
\*Please note that for structural reasons, the reversed-home specification cannot be used for the RA5C type.

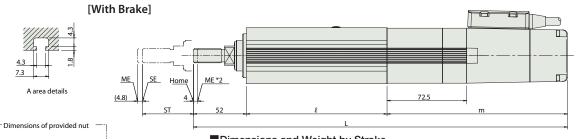
Connect the motor-encoder cable. See P394 for cable details. The slider moves to the ME during home return. Pay attention to prevent contact between the slider and surrounding parts during home return. ME: mechanical end SE: stroke end The orientation of the width across flats differs with the product.

Information on

special orders







#### ■Dimensions and Weight by Stroke RCS2-RA5C (without brake)

	Tiesz Tries (ministratio)								
	S	troke	50	100	150	200	250	300	
I		60W	282	332	382	432	482	532	
ı	L	100W	300	350	400	450	500	550	
I	Q		138	188	238	288	338	388	
I		60W		92					
	m	100W		110					
	Weight (kg)		1.9	2.2	2.5	2.8	3.1	3.4	

RCS2-RA5C (with brake)								
Stroke		50	100	150	200	250	300	
L	60W	354.5	404.5	454.5	504.5	554.5	604.5	
L	100W	372.5	422.5	472.5	522.5	572.5	622.5	
Q		138	188	238	288	338	388	
60W		164.5						
m	100W		182.5					
Weight (kg)		2.2	2.5	2.8	3.1	3.4	3.7	

## Compatible Controllers

M14 × 1.5

A area details

Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page		
Positioner mode			Up to 512-point positioning possible	512 points						
Solenoid valve mode		SCON-C-60①-NP-2-③	Same as solenoid valve Controlled operation enabled	7 points Single-phase	AC	AC	AC			P385
Serial communication type		SCON-C-100①②-NP-2-③	Serial communications Special type	64 points	Single-phase AC	Maximum 360VA *1-axis specification for 150W operation	_	1 303		
Pulse train input control type			Pulse train input type Special type	(-)	200V Three-phase AC		specification for 150W	specification for 150W		
Program control 1-2 axis type		SSEL-C-1-60①-NP-2-③ SSEL-C-1-100①②-NP-2-③	Programmable type capable of operating up to 2 axes	20000 points	200V (XSEL-P/Q only)		-	P415		
Program control		XSEL-4-1-601-N1-EEE-2-3 XSEL-4-1-10012-N1-EEE-2-5	Programmed operation enabled Can drive up to	4000 points			-	P425		

\*SSEL, XSEL are for 1-axis specification.
\*(1) Indicates the encoder type (I: Incremental/A: Absolute).
\*(2) HA indicates high-acceleration/deceleration.
\*(3) Indicates the power supply voltage type (1: 100V/2: single-phase 200V).
\*(4) Indicates XSEL type (J/K/P/Q).
\*(5) Indicates the power supply voltage type (1: 100V, 2: single-phase 200V, 3: three-phase 200V).

IAI

ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

ROBO Cylinder, Rod Type, Actuator Width 37mm, 200-V Servo Motor, Built-in Motor (Direct connection) Specification

lacktriangledown Model Description RCS2-RA4D-

RCS2 ROBO Cylinder

See preceding section for model descriptions.

Encoder type

Motor type specification 20W A: Absolute specification 30W

20: Servo motor 12: 12mm 30: Servo motor

6: 6mm 3: 3mm

50:50mm 300:300mm (Set steps every 50mm)

Stroke

Compatible Controllers T1: XSEL-J/K T2: SCON SSEL

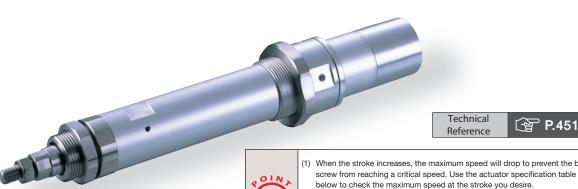
XSEL-P/O

N: None P: 1m S: 3m

Option Options below See Pricing List

X: Length designation R: Robot cable

Cable length



- (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.
- The load capacity is based on operation at an acceleration of 0.3G (or 0.2G if the lead is 3). The above values are maximum acceleration.
- (3) The horizontal load capacity is the value when external guides are used and no external force is exerted from outside the direction the rod moves.

#### Actuator Specifications Table

#### ■Leads and Payloads

Model		Lead (mm)	Max. p Horizontal (kg)		Thrust (N)	Stroke (mm)		
RCS2-RA4D-① -20-12-② -③ -④ -⑤	output	12	3.0	1.0	18.9	(11111)		
NO32-NA4D-[0]-20-12-[6]-[6]-[6]-		12	3.0	1.0	10.9			
RCS2-RA4D-①-20-6-②-③-④-⑤	20	6	6.0	2.0	37.7			
RCS2-RA4D-①-20-3-②-③-④-⑤		3	12.0	4.0	75.4	50 to 300		
RCS2-RA4D-①-30-12-②-③-④-⑤		12	4.0	1.5	28.3	(Every 50mm)		
RCS2-RA4D-①-30-6-②-③-④-⑤	30	6	9.0	3.0	56.6			
RCS2-RA4D-①-30-3-②-③-④-⑤		3	18.0	6.5	113.1			
egend: 1 Encoder type 2 Stroke 3 Compatible Controller 4 Cable length 5 Option								

#### ■Stroke and Maximum Speed

Stroke Lead	50 to 300 (Every 50mm)
12	600
6	300
3	150

(Unit = mm/s)

#### 1 Pricing List By Encoder Type and 2 Stroke

Thomas List by Encoder Type and & Stroke								
		Туре	code					
		RA	4D					
② Stroke		① Encoder type						
(mm)	Incren	nental	Abso	olute				
	Motor wa	ttage (W)	Motor wattage (W)					
	20W	30W	20W	30W				
50	_	_	_	_				
100	_	_	_	_				
150	_	_	_	_				
200	_	_	_	_				
250	_	_	_	_				
300			_	_				

4	Cable	Length	Price	List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
Special length	X06 (6m)	to <b>X10</b> (10m)	_
	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to <b>R03</b> (3m)	_
Robot cable	R04 (4m)	to <b>R05</b> (5m)	_
	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

\*See P394 for maintenance cables

#### ⑤ Option Price List

Title	Option code	See page	Standard price
Foot bracket	FT	P440	_
Flange bracket (front)	FL	P438	_
Flange bracket (rear)	FLR	P439	-
Home check sensor	HS	P442	_
Knuckle joint	NJ	P443	_
Reversed-home specification	NM	P442	-
Trunion bracket (front)	TRF	P446	_
Trunion bracket (rear)	TRR	P446	-

\*The home check sensor cannot be used with the reversed-home

Actuator Specification				
Item	Description			
Drive method	Ball screw φ10mm, rolled C10			
Positioning Repeatability	±0.02mm			
Backlash	0.1mm or less			
Base	Material: Aluminum, white alumite treatment			
Rod diameter	φ20mm			
Non-rotation accuracy of the rod	±1.0 degrees			
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)			

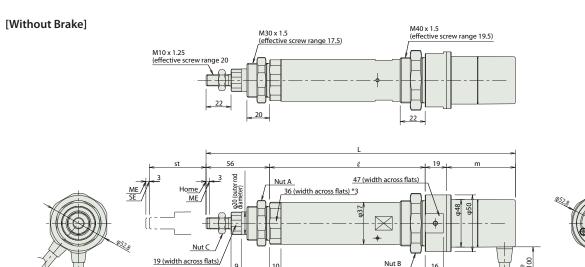
www.intelligentactuator.com

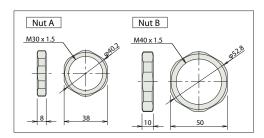
Information on special orders

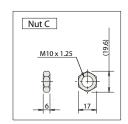




- Connect the motor-encoder cable. See P394 for cable details.
  The slider moves to the ME during home return.
  Pay attention to prevent contact between the slider and surrounding parts during home return.
  ME: mechanical end SE: stroke end
  The orientation of the width across flats differs with the product.







Cable joint connector \*1

#### ■Dimensions and Weight by Stroke

RCS2-RA4D (without brake)

S	troke	50	100	150	200	250	300	
	20W	270.5	320.5	370.5	420.5	470.5	520.5	
L	30W	285.5	335.5	385.5	435.5	485.5	535.5	
Q		137	187	237	287	337	487	
	20W		58.5					
m 30W				73	.5			
Weight (kg)		1.0	1.2	1.3	1.5	1.6	1.8	

No brake-equipped setting for RCS2-RA4D.

#### Compatible Controllers

The RCS2 Seri	The RCS2 Series actuators can be operated with the following controllers. Select the type that is compatible with your application.											
Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page				
Positioner mode			Up to 512-point positioning possible	512 points								
Solenoid valve mode		SCON-C-20①-NP-2-② SCON-C-30D①-NP-2-②	Same as solenoid valve Controlled operation enabled	7 points	Single-phase AC 100V  Single-phase AC  Maximum 360VA			P385				
Serial communication type			Serial communications Special type	64 points		_	F363					
Pulse train input control type			Pulse train input type Special type	(-)	200V Three-phase	*1-axis specification for 150W operation						
Program control 1-2 axis type		SSEL-C-1-20①-NP-2-② SSEL-C-1-30D①-NP-2-②	Programmable type capable of operating up to 2 axes	20000 points	AC 200V (XSEL-P/Q only)	555.33011			· 	· 	-	P415
Program control 1-6 axis type		XSEL-③-1-20①-N1-EEE-2-④ XSEL-③-1-30D①-N1-EEE-2-④	Programmed operation enabled Can drive up to 6 axis	4000 points			-	P425				

\*SSEL, XSEL are for 1-axis specification.

- $^\star \ensuremath{\textcircled{1}}$  Indicates the encoder type (I: Incremental/A: Absolute).

- "② Indicates the power supply voltage type (1: 100V/2: single-phase 200V).

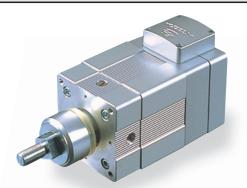
  \*③ Indicates the XSEL type (J/K/P/Q).

  \*④ Indicates the power supply voltage type (1: 100V/2: single-phase, 200V/3: three-phase, 200V).

RCS2 ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

ROBO Cylinder, Rod Type, Actuator Width 75mm, 200-V Servo Motor, Built-in Motor (Direct connection) Specification

■ Model Description RCS2 — RA7AD — Compatible Controllers Cable length Motor type Stroke Option N: None P: 1m S: 3m 50:50mm T1: XSEL-J/K Options below specification 60W T2: SCON See Pricing List 300:300mm 100: Servo motor 3: 3mm SSEL (Set steps every 50mm) XSEL-P/O X: Length designation R: Robot cable 100W



\*Lead 3 setting is only for 60W.

Technical Reference 译 P.451



- (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 load capacity is based on operation at an acceleration of 0.15G (lead 12), 0.1G (lead 6) or 0.05G (lead 3) with a motor output of 60W.
- (3) The horizontal load capacity is the value when external guides are used and no external force is exerted from outside the direction the rod moves.

#### Actuator Specifications Tabl

See preceding section for model descriptions.

#### Leads and Payloads

Model	Motor output	Lead (mm)		ayload Vertical (kg)	Thrust (N)	Stroke (mm)
RCS2-RA7AD-I-60-12-①-②-③-④		12	10.0	2.5	85.3	
RCS2-RA7AD-I-60-6-①-②-③-④	60	6	20.0	7.0	169.5	
RCS2-RA7AD-I-60-3-①-②-③-④		3	40.0	15.0	340.1	50 to 300 (Every 50mm)
RCS2-RA7AD-I-100-12-①-②-③-④	100	12	15.0	5.5	141.1	30(1111)
RCS2-RA7AD-I-100-6-①-②-③-④	100	6	30.0	12.5	283.2	
Legend: ① Stroke ② Compatible Controller ③ Cable length ④ Option						

#### ■Stroke and Maximum Speed

Stroke	50 to 250 (every 50mm)	300 (mm)
12	600	505
6	300	250
3	150	125

(Unit = mm/s)

#### ① Pricing List By Stroke

	Type code			
	RA7AD			
① Stroke	Encod	er type		
(mm)	Increr	mental		
	Motor wattage (W)	Motor wattage (W)		
	60W	100W		
50	_	_		
100	_	_		
150	_	_		
200	_	_		
250	_	_		
300	_	_		

#### 3 Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
	X06 (6m)	to <b>X10</b> (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to <b>R03</b> (3m)	_
Robot cable	R04 (4m)	to <b>R05</b> (5m)	_
	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to R15 (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

<sup>\*</sup>See P394 for maintenance cables.

#### 4 Option Price List

Title	Option code	See page	Standard price
Cable Outlet Direction	A1 to A3	P437	_
Brake	В	P437	_
Flange	FL	P439	_
Foot bracket	FT	P441	_

#### Actuator Specification

Item	Description
Drive method	Ball screw φ10mm, rolled C10
Positioning Repeatability	±0.02mm
Backlash	0.1mm or less
Base	Material: Aluminum, white alumite treatment
Rod diameter	φ30mm
Non-rotation accuracy of the rod	±0.7 degrees
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)





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

If the rod receives external force from the lateral direction or rotating direction, the detent may be damaged.

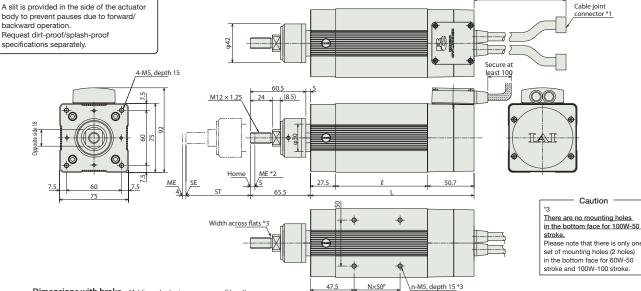
\*Please note that for structural reasons, the reversed-home specification cannot be used for the RA7AD type.

- Connect the motor-encoder cable. See P394 for cable details. The slider moves to the ME during home return. Pay attention to prevent contact between the slider and surrounding parts. ST: stroke SE: stroke end
- ME: mechanical end The 2D orientation differs with the product.

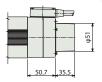
Caution

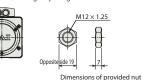
body to prevent pauses due to forward/ backward operation.

specifications separately.



Dimensions with brake





#### ■Dimensions and Weight by Stroke

Stroke		50	100	150	200	250	300
	L	128	178	228	278	328	378
Q		49.8	99.8	149.8	199.8	249.8	299.8
N	60W	ı	1	2	3	4	5
IN	100W	-	-	1	2	3	4
	60W	2	4	6	8	10	12
n	100W	-	2	4	6	8	10
Weight	60W	2.1	2.6	3.0	3.5	3.9	4.4
(kg)	100W	2.2	2.7	3.1	3.6	4.0	4.5

#### Compatible Controllers

The RCS2 Series actuators can be operated with the following controllers. Select the type that is compatible with your application

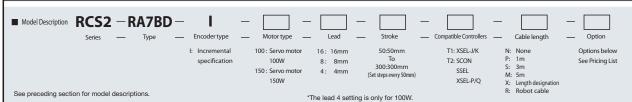
Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page		
Positioner mode			Up to 512-point positioning possible	512 points						
Solenoid valve mode		SCON-C-60I-NP-2-①	Same as solenoid valve Controlled operation enabled	7 points	Single-phase AC		-	P385		
Serial communication type		SCON-C-100I-NP-2-①	Serial communications Special type	64 points	Single-phase AC 200V	*1-axis specification for 150W operation		P303		
Pulse train input control type			Pulse train input type Special type	(-)						
Program control 1-2 axis type		SSEL-C-1-60I-NP-2-① SSEL-C-1-100I-NP-2-①	Programmable type capable of operating up to 2 axes	20000 points	AC 200V (XSEL-P/Q only)					-
Program control 1-6 axis type		XSEL-②-1-60I-N1-EEE-2-③ XSEL-②-1-100I-N1-EEE-2-③	Programmed operation enabled Can drive up to 6 axis	4000 points			-	P425		

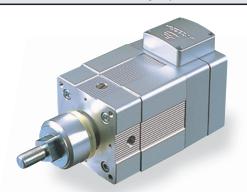
CAUTION: Please note that the 5-axis /6-axis of the XSEL-P/Q type controllers cannot be connected to RA7D/RA7BD type actuators.

- \*SSEL, XSEL are for 1-axis specification.
- \*① Indicates the power supply voltage type (1: 100V, 2: single-phase 200V).
  \*② Indicates the XSEL type (J/K/P/Q) entered.
- \*3 Indicates the power supply voltage type (1: 100V, 2: single-phase, 3: three-phase 200V).

RCS2 ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

ROBO Cylinder, Rod Type, Actuator Width 75mm, 200-V Servo Motor, Built-in Motor (Direct connection) Specification





Technical Reference

译 P.451



- (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 payload is the value when a 100W motor is operated at 0.25G acceleration (lead 16), 0.17G (lead 8), or 0.1G (lead 4), or when a 150W motor is operated at 0.3G acceleration (lead 16) or 0.2G (lead 8).
- (3) The horizontal load capacity is the value when external guides are used and no external force is exerted from outside the direction the rod moves.

#### Actuator Specifications Table

#### ■Leads and Payloads

Model	Motor output	Lead (mm)		ayload Vertical (kg)	Thrust (N)	Stroke (mm)
RCS2-RA7BD-I-100-16-①-②-③-④		16	10.0	3.5	105.8	
RCS2-RA7BD-I-100-8-①-②-③-④	100	8	22.0	9.0	212.7	50 to 300 (every 50mm)
RCS2-RA7BD-I-100-4-①-②-③-④		4	40.0	19.5	424.3	Summ)
RCS2-RA7BD-I-150-16-①-②-③-④	150	16	15.0	6.5	158.8	100 to 300
RCS2-RA7BD-I-150-8-①-②-③-④		8	35.0	14.5	318.5	(every 50mm)
Legend: ① Stroke ② Compatible Controller ③ Cable length ④ Option						

#### ■Stroke and Maximum Speed

Stroke	50 to 300 (every 50mm)
16	800
8	400
4	200

(Unit = mm/s)

#### ① Pricing List By Stroke

	Type code			
	RA7BD			
① Stroke	Encoder type			
(mm)	Incremental			
	Motor wattage (W)	Motor wattage (W)		
	100W	150W		
50	_	_		
100	_	_		
150	_	_		
200	ı	_		
250		_		
300	_	_		

Note: There is no 50 stroke setting for 150W.

#### 3 Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)	_	
	X06 (6m)	to <b>X10</b> (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to <b>R03</b> (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to <b>R10</b> (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

\*See P394 for maintenance cables

φ35mm

Actuator Specification

#### (4) Option Price List

Title	Option code	See page	Standard price
Cable Outlet Direction	A1 to A3	P437	_
Brake	В	P437	_
Flange	FL	P439	_
Foot bracket	FT	P441	_

Item	Description
Drive method	Ball screw φ12mm, rolled C10
Positioning Repeatability	±0.02mm
Backlash	0.1mm or less
Base	Material: Aluminum, white alumite treatment
Rod diameter	φ35mm

Non-rotation accuracy of the rod ±0.7 degrees 0 to 40°C, 85% RH or less (non-condensing) 181

(300)



Cable joint

bottom face for 100W-50 stroke. Please note that there is only one set of mounting holes (2 holes) in the bottom face for 100W and 150W-100 stroke.



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

If the rod receives external force from the lateral direction or rotating direction, the detent may be damaged.

\*Please note that for structural reasons, the reversed-home specification cannot be used for the RA7BD type.

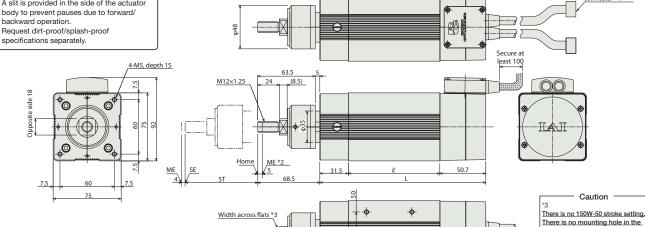
- Connect the motor-encoder cable. See P394 for cable details. The slider moves to the ME during home return. Pay attention to prevent contact between the slider and surrounding parts. ST: stroke SE: stroke end
- ME: mechanical end The 2D orientation differs with the product.

n-M5, depth 15 \*3

Caution

A slit is provided in the side of the actuator body to prevent pauses due to forward/ backward operation.

specifications separately.



Dimensions with brake





\*Adding a brake increases overall length by 35.5mm and weight by 0.3kg.

Dimensions of provided nut

■Dimensions and Weight by Stroke

Stroke		100	150	200	250	300		
100W	133	183	233	283	333	383		
150W	ı	183	233	283	333	383		
100W	50.8	100.8	150.8	200.8	250.8	300.8		
150W	-	100.8	150.8	200.8	250.8	300.8		
100W	-	-	1	2	3	4		
150W	1	-	1	2	3	4		
100W	ı	2	4	6	8	10		
150W	-	2	4	6	8	10		
100W	2.7	3.2	3.6	4.1	4.5	5.0		
150W	-	3.3	3.7	4.2	4.6	5.1		
	100W 150W 100W 150W 100W 150W 100W 150W 100W	100W 133 150W - 100W 50.8 150W - 100W - 150W - 150W - 150W - 150W - 150W - 150W 2.7	100W         133         183           150W         -         183           100W         50.8         100.8           150W         -         100.8           100W         -         -           150W         -         -           100W         -         2           150W         -         2           100W         2.7         3.2	100W         133         183         233           150W         -         183         233           100W         50.8         100.8         150.8           150W         -         100.8         150.8           100W         -         -         1           150W         -         -         1           100W         -         2         4           150W         -         2         4           100W         2.7         3.2         3.6	100W         133         183         233         283           150W         -         183         233         283           100W         50.8         100.8         150.8         200.8           150W         -         100.8         150.8         200.8           100W         -         -         1         2           150W         -         -         1         2           150W         -         2         4         6           150W         -         2         4         6           100W         2.7         3.2         3.6         4.1	100W         133         183         233         283         333           150W         -         183         233         283         333           100W         50.8         100.8         150.8         200.8         250.8           150W         -         100.8         150.8         200.8         250.8           100W         -         -         1         2         3           150W         -         -         1         2         3           100W         -         2         4         6         8           150W         -         2         4         6         8           100W         2.7         3.2         3.6         4.1         4.5		

#### Compatible Controllers

The RCS2 Series actuators can be operated with the following controllers. Select the type that is compatible with your application.

Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page		
Positioner mode			Up to 512-point positioning possible	512 points						
Solenoid valve mode		SCON-C-100I-NP-2-①	Same as solenoid valve Controlled operation enabled	7 points	Single-phase AC 100V Single-phase AC 200V Three-phase		-	P385		
Serial communication type		SCON-C-150I-NP-2-①	Serial communications Special type	64 points		*1-axis specification for 150W operation				
Pulse train input control type			Pulse train input type Special type	(-)						
Program control 1-2 axis type		SSEL-C-1-100I-NP-2-① SSEL-C-1-150I-NP-2-①	Programmable type capable of operating up to 2 axes	20000 points	AC 200V (XSEL-P/Q only)			·		-
Program control 1-6 axis type		XSEL-2-1-100I-N1-EEE-2-3 XSEL-2-1-150I-N1-EEE-2-3	Programmed operation enabled Can drive up to 6 axis	4000 points			-	P425		

CAUTION: Please note that the 5-axis /6-axis of the XSEL-P/Q type controllers cannot be connected to RA7D/RA7BD type actuators.

- \*SSEL, XSEL are for 1-axis specification.
- \*① Indicates the power supply voltage type (1: 100V, 2: single-phase 200V).
  \*② Indicates the XSEL type (J/K/P/Q) entered.
- \*3 Indicates the power supply voltage type (1: 100V, 2: single-phase, 3: three-phase 200V).

# www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

ROBO Cylinder, Rod type, Actuator Width 37mm, 200V Servo Motor, Reverse-mounted Motor Specification

lacktriangledown Model Description  $\begin{subarray}{c} RCS2 - RA4R - \end{subarray}$ 

See preceding section for model descriptions.

RCS2 ROBO Cylinder

Encoder type

specification

specification

A: Absolute

20: Servo motor

20W

30W

30: Servo motor

Lead

50:50mm 6: 6mm 300:300mm 3: 3mm (Set steps every 50mm)

Stroke

Compatible Controllers T1: XSEL-J/K T2: SCON SSEL

XSEL-P/O

N: None P: 1m S: 3m

Options below

See Pricing List

X: Length designation R: Robot cable

Cable length



Technical Reference



- (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 load capacity is based on operation at an acceleration of 0.3G (or 0.2G if the lead is 3). The above values are maximum acceleration.
- (3) The horizontal load capacity is the value when external guides are used and no external force is exerted from outside the direction the rod moves.

#### Actuator Specifications Table

#### ■Leads and Payloads

Model	Motor	Lead (mm)		Vertical (kg)	Thrust (N)	Stroke (mm)
RCS2-RA4R-①-20-12-②-③-④-⑤		12	3.0	1.0	18.9	
RCS2-RA4R-①-20-6-②-③-④-⑤	20	6	6.0	2.0	37.7	
RCS2-RA4R-①-20-3-②-③-④-⑤		3	12.0	4.0	75.4	50 to 300
RCS2-RA4R-①-30-12-②-③-④-⑤		12	4.0	1.5	28.3	(Every 50mm)
RCS2-RA4R-①-30-6-②-③-④-⑤	30	6	9.0	3.0	56.6	
RCS2-RA4R-①-30-3-②-③-④-⑤		3	18.0	6.5	113.1	
Legend: ① Encoder type ② Stroke ③ Compatible Controller ④ Cable length ⑤ Option						

#### ■Stroke and Maximum Speed

Stroke	50 to 300 (Every 50mm)
12	600
6	300
3	150

(Unit = mm/s)

#### 1 Pricing List By Encoder Type and 2 Stroke

	Thomg List by Encoder Type and & Stroke								
		Type code							
			RA4R						
	② Stroke (mm)	① Encoder type							
ı		Incren	nental	Abso	olute				
		Motor wa	ttage (W)	Motor wattage (W)					
		20W	30W	20W	30W				
	50	_	_	_	_				
	100	_	_	_	_				
	150	_	_	_	_				
	200	_	_	_	_				
	250	_	_	_	_				
	300	_	_	_	_				

#### 4 Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)	_	
	X06 (6m)	to <b>X10</b> (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to <b>R03</b> (3m)	_
	. ,	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to R15 (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

\*See P394 for maintenance cables

#### ⑤ Option Price List

Title	Option code	See page	Standard price
Brake	В	P437	_
Foot bracket	FT	P440	_
Flange bracket (front)	FL	P438	_
Flange bracket (rear)	FLR	P439	_
Home check sensor	HS	P442	_
Knuckle joint	NJ	P443	_
Reversed-home specification	NM	P442	_
Clevis bracket	QR	P443	_
Rear mounting plate	RP	P444	_
Trunion bracket (front)	TRF	P446	_

\*The home check sensor cannot be used with the reversed-home specification.

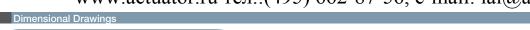
Actuator Specification					
Item	Description				
Drive method	Ball screw φ10mm, rolled C10				
Positioning Repeatability	±0.02mm				
Backlash	0.1mm or less				
Base	Material: Aluminum, white alumite treatment				
Rod diameter	φ20mm				
Non-rotation accuracy of the rod	±1.0 degrees				
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)				

special orders

\*3 The width direction across flats orientation differs with the product.

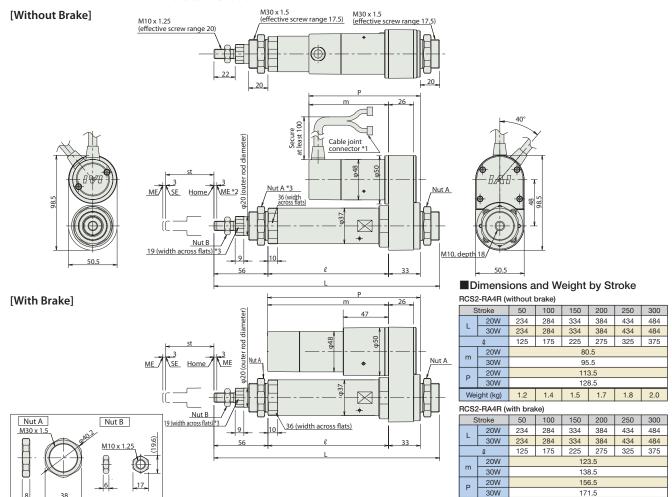
P. 454

30 w



www.intelligentactuator.com

Connect the motor-encoder cable. See P394 for cable details. The slider moves to the ME during home return. Pay attention to prevent contact between the slider and surrounding parts during home return. ME: mechanical end SE: stroke end



## Compatible Controllers

The RCS2 Series actuators can be operated with the following controllers. Select the type that is compatible with your application.

	Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page
	Positioner mode			Up to 512-point positioning possible	512 points				
	Solenoid valve mode		SCON-C-20①-NP-2-② SCON-C-30D①-NP-2-②	Same as solenoid valve Controlled operation enabled	7 points	Single-phase AC 100V  Single-phase AC 200V  Three-phase	Maximum 360VA *1-axis specification for 150W operation		Door
	Serial communication type			Serial communications Special type	64 points			_	P385
	Pulse train input control type			Pulse train input type Special type	(-)				
	Program control 1-2 axis type		SSEL-C-1-20①-NP-2-② SSEL-C-1-30D①-NP-2-②	Programmable type capable of operating up to 2 axes	20000 points	AC 200V (XSEL-P/Q only)		_	P415
	Program control 1-6 axis type		XSEL-③-1-20①-N1-EEE-2-④ XSEL-③-1-30D①-N1-EEE-2-④	Programmed operation enabled Can drive up to 6 axis	4000 points			-	P425

\*SSEL, XSEL are for 1-axis specification.

- \*① Indicates the encoder type (I: Incremental/A: Absolute).
- \*2 Indicates the power supply voltage type (1: 100V/2: single-phase 200V).
- (a) Indicates the XSEL type (J/K/P/Q).

  \*(a) Indicates the XSEL type (J/K/P/Q).

  \*(b) Indicates the power supply voltage type (1: 100V/2: single-phase, 200V/3: three-phase, 200V).

Weight (kg)

2.0 2.2

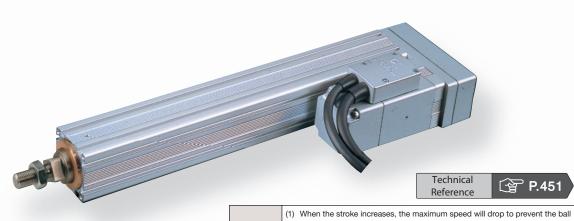
1.9

RCS2 ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

# RCS2-RA5R

ROBO Cylinder, Rod type, Actuator Width 55mm, 220V Servo Motor, Reverse-mounted Motor Specification





- screw from reaching a critical speed. Use the actuator specification table below to check the maximum speed at the stroke you desire.
- The load capacity is based on operation at an acceleration of 0.3G (or 0.2G if the lead is 4 or the actuator is operated vertically). The above values are maximum acceleration.
- (3) The horizontal load capacity is the value when external guides are used and no external force is exerted from outside the direction the rod moves.

#### Actuator Specifications Tab Leads and Payloads

Motor Lead Max. payload Thrust Stroke Model

	output	(mm)	Horizontal (kg)	Vertical (kg)	(14)	(mm)
RCS2-RA5R-①-60-16-②-③-④-⑤		16	12.0	2.0	63.8	50000
RCS2-RA5R-①-60-8-②-③-④-⑤	60	8	25.0	5.0	127.5	50 to 200 (Every 50mm)
RCS2-RA5R-①-60-4-②-③-④-⑤	60 8 25 4 50	50.0	11.5	255.1	Jonnin	
_egend: 1 Encoder type 2 Stroke 3 Compatible Controller	4 Cable I	ength 5	Option			

#### ■Stroke and Maximum Speed

Stroke	50 to 250	300				
Lead	(every 50mm)	(mm)				
16	800	755				
8	400	377				
4	200	188				
(Unit = mm/s)						

#### 1 Pricing List By Encoder Type and 2 Stroke

	Туре	code			
② Stroke	RA5R				
(mm)	① Encoder type				
(11111)	Incremental	Absolute			
		Α			
50	_	_			
100	-	_			
150	_	_			
200	_	_			
250	_	_			
300 —		_			

#### 4 Cable Length Price List

Type	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
	X06 (6m)	to X10 (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to R03 (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

<sup>\*</sup>See P394 for maintenance cables

Actuator Specification

#### 5 Option Price List Title Option code Standard price See page Cable Outlet Direction A2 P437 Brake В P437 Flange FL P438 Foot bracket FT P440

P444

P444

ML

MR

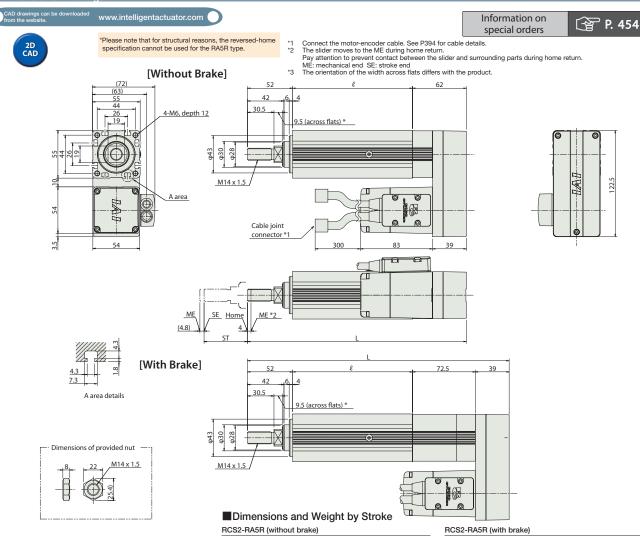
Item	Description
Drive method	Ball screw φ12mm, rolled C10
Positioning Repeatability	±0.02mm
Backlash	0.1mm or less
Guide	Material: Aluminum, white alumite treatment
Rod diameter	φ30mm
Non-rotation accuracy of the rod	±0.7 degrees
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)

Motor reversing on left specification

Motor reversing on right specification

100w





Stroke	50	100	150	200	250	300
L	252	302	352	402	452	502
Q	138	188	238	288	338	388
Weight (kg)	2.3	2.6	2.9	3.2	3.5	3.8

	RCS2-RA5R (with brake)								
0		Stroke	50	100	150	200	250	300	
12		L	301.5	351.5	401.5	451.5	501.5	551.5	
8		Q	138	188	238	288	338	388	
8		Weight (kg)	2.6	2.9	3.2	3.5	3.8	4.1	

Com	patible	Control	lers

The HC52 Series actuators can be operated with the following controllers. Select the type that is compatible with your application.									
Title	External View	Model	Features	positioning points	Input power	Power-supply capacity	Standard price	See page	
Positioner mode				Up to 512-point positioning possible	512 points				
Solenoid valve mode		SCON-C-60①-NP-2-②	Same as solenoid valve Controlled operation enabled	7 points	Single-phase AC 100V			P385	
Serial communication type			SCUN-C-00U-NP-2-@	Serial communications Special type	64 points	Single-phase AC	Maximum 360VA	_	P385
Pulse train input control type			Pulse train input type Special type	(-)	200V Three-phase AC	*1-axis specification for 150W operation			
Program control 1-2 axis type		SSEL-C-1-60①-NP-2-②	Programmable type capable of operating up to 2 axes	20000 points	200V (XSEL-P/Q only)		-	P415	
Program control 1-6 axis type		XSEL-③-1-60①-N1-EEE-2-④	Programmed operation enabled Can drive up to 6 axis	4000 points			-	P425	

\*SSEL, XSEL are for 1-axis specification.

- \*  $\begin{tabular}{ll} \begin{tabular}{ll} \b$

- "② Indicates the power supply voltage type (1: 100V/2: single-phase 200V).

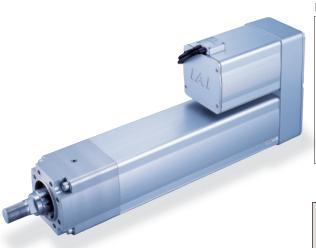
  \*③ Indicates the XSEL type (J/K/P/Q).

  \*④ Indicates the power supply voltage type (1: 100V/2: single-phase, 200V/3: three-phase, 200V).

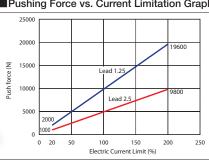
RCS2 ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

ROBO Cylinder, Super-high Thrust Rod Type, Actuator Dimensions 130mm, 200-V Servo Motor, Reverse-mounted Motor Specification





#### ■ Pushing Force vs. Current Limitation Graph



#### Note:

- force and current limitation is a guide and there may be some error in the actual value.
- Since the pushing force may bottom out if the current limitation is low, use a current limitation of 20% or
- · The movement speed during pushing operation is fixed at 10mm/s. The graph is when pushing at 10mm/s. Please note that pushing force will drop when the speed changes
- Depending on the operating conditions, pushing force may decrease as the motor temperature

Technical Reference





- (1) When performing a pushing operation, the continuous service time is determined by the pushing force that is set. In addition, during normal operation, the continuous operating thrust must be set below the rated thrust, taking the load and duty into consideration.
  - See a selection of materials (P494) for details.
- The load capacity is the value when operated at 0.01G acceleration. The above values are maximum acceleration.
- The horizontal load capacity is the value when external guides are used and no external force is exerted from outside the direction the rod moves
- (4) When brake-equipped (option), a brake box (see Accessories P188) is necessary in addition to the actuator body and controller.

#### Actuator Specifications Table

#### Leads and Payloads

Model	Motor output	Lead (mm)	Maximum acceleration (G)	Maximum Horizontal (kg)		Rated thrust (N)	Continuous push force (N)	Maximum pushing force (N)	Stroke (mm)
RCS2-RA13R-① -750-2.5-② -T2-③ -④	750	2.5	0.02	400	200	5106	3567	9800	50 to 200
RCS2-RA13R-① -750-1.25-② -T2-③ -④	750	1.25	0.01	500	300	10211	7141	19600	(every 50mm)
egend: ① Encoder type ② Stroke ③ Cable length ④ Option									

#### ■Stroke and Maximum Speed

			-	
Stroke (mm) Lead (mm)	50	100	150	200
2.5	85	120		125
1.25	62			

(Unit = mm/s)

#### 1 Pricing List By Encoder Type and 2 Stroke

		Type	code					
② Ctroles		RA13R						
② Stroke	① Encoder type							
(mm)	Increr	mental	Absolute					
	1t type (lead 2.5)	2t type (lead 1.25)	1t type (lead 2.5)	2t type (lead 1.25)				
50	_	_	_	_				
100	_	_	_	_				
150	_	_	_	_				
200	_	_	_	_				
200	_	_	_	_				

#### 3 Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
	X06 (6m)	to X10 (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to R03 (3m)	_
	R04 (4m)	to R05 (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

\*See P394 for maintenance cables

## Option Price List

Title	Option code	See page	Standard price
Brake (with brake box)	В	P188	_
Brake (without brake box)	BN	P188	_
Top reverse-mounted motor	MT1/MT2/MT3	P188	_
Right reverse-mounted motor	MR1/MR2	P188	_
Left reverse-mounted motor	ML1/ML3	P188	_
Flange	FL	P439	_
Foot bracket	FT	P441	_

#### Actuator Specification

ltem	Description
Drive System	Ball screw φ32mm, rolled C10
Positioning repeatability	±0.01mm
Backlash	0.2mm or less
Rod diameter	φ50mm (Ball spline)
Allowable load moment	120N·m
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)
Service life	5000km or 10,000,000 pushes (*1)

(\*1) Pushing repetitions are when operated at maximum pushing force and 1mm pushing movement.





- Pay attention to prevent contact between the slider and surrounding parts
  - The 2D width orientation differs with product. SE: stroke end

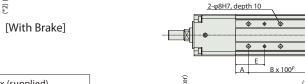
D-M12, depth 18

ME: mechanical end

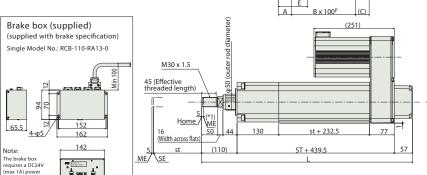
#### Caution

The with brake specification (option-B) always includes a brake box. Select option-BN when ordering the brake-equipped specification if you only want the actuator unit.

8-M12, depth 24 (\*1) (ME Home 77 16 (Width across flats) 50 st + 232.5 (110) ST + 439.5 <u>ME</u>/ \SE



www.intelligentactuator.com



#### ■Dimensions and Weight by Stroke

nooz-naton (without brake)									
Stroke	50	100	150	200					
L	599.5	649.5	699.5	749.5					
Α	40	65	40	65					
В	2	2	3	3					
С	42.5	67.5	42.5	67.5					
D	6	6	8	8					
Е	90	115	90	115					
Weight (kg)	33	34	35	36					

#### BCS2-BA13B (with brake)

RUS2-RAT3R (	RCS2-RAT3R (With brake)								
Stroke	50	100	150	200					
L	656.5	706.5	756.5	806.5					
Α	40	65	40	65					
В	2	2	3	3					
С	42.5	67.5	42.5	67.5					
D	6	6	8	8					
Е	90	115	90	115					
Weight (kg)	35	36	37	38					

#### Reverse-mounted Motor Orientation/Cable Exit Position (Options)

Note: Be sure to enter the code for the motor reverse-mount orientation/cable exit location in the form.

Dimensional Drawings

[Without Brake]











<del>[]</del> []





Option code	MT1	MT2	MT3	MR1	ML1	MR2	ML3
Motor reverse-mount orientation	Top (Standard)	Тор	Тор	Right side	Left side	Right side	Left side
Cable exit location	Top (Standard)	Right side	Left side	Тор	Тор	Right side	Left side

## Compatible Controllers

1110 11002 00110	co dotadioro cari be	operated with the following controller.						
Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page
Positioner mode	ion		Up to 512-point positioning possible	512 points				
Solenoid valve mode		SCON-C-750(1)-NP-2-(2)	Same as solenoid valve Controlled operation enabled	7 points	Single-phase	Maximum 1569VA		P385
Serial communication type		30UN-U-13U(J-NF-2-Z)	Serial communications Special type 64 points 200V	*1-axis specification When operating at	_	1 505		
Pulse train input control type		inpu	Pulse train input type Special type	(-)		750W		

\*1 Indicates the encoder type (I: Incremental/A: Absolute).

\*② Indicates the power supply voltage type (1: 100V/2: single-phase 200V).

RCS2 ROBO Cylinder tor.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

# RCS2-RGS

ROBO Cylinder, Single-guided Rod Type, Actuator Width 37mm, 200-V Servo Motor, Coupling Specification

■ Model Description RCS2 — RGS4C — Motor type Encoder type

specification

30W

A: Absolute

specification

Lead 20W 6: 6mm 30: Servo motor 3: 3mm

50:50mm 300:300mm (Set steps every 50mm)

Stroke

Compatible Controllers T1: XSEL-J/K T2: SCON SSEL

XSEL-P/O

Cable length N: None P: 1m S: 3m

Options below See Pricing List

X: Length designation R: Robot cable

(\*1) Excluding all 20W models and 30W-lead 3

> Technical Reference

P. 451

(\*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.

The load capacity is the value when operated at 0.3G acceleration (0.2G with lead 3) under standard specifications, or at 1G acceleration (except lead 3) under high-acceleration/deceleration specifications. (The maximum capacity loads for

accelerations are shown in the table below) The horizontal load capacity is the value when external guides are used and no external force is exerted from outside the direction the rod moves. Refer to the

technical materials (P500) for weights that can be used in the accessory guide unit.

#### Actuator Specification Table

See preceding section for model descriptions.

#### ■Leads and Payloads

Model	Motor output	Lead (mm)		Vertical (kg)	Thrust (N)	Stroke (mm)
RCS2-RGS4C-①-20-12-②-③-④-⑤		12	3.0	0.5	18.9	
RCS2-RGS4C-①-20-6-②-③-④-⑤	20	6	6.0	1.5	37.7	
RCS2-RGS4C-①-20-3-②-③-④-⑤		3	12.0	3.5	75.4	50 to 300
RCS2-RGS4C-①-30-12-②-③-④-⑤		12	4.0	1.0	28.3	(Every 50mm)
RCS2-RGS4C-①-30-6-②-③-④-⑤	30	6	9.0	2.5	56.6	
RCS2-RGS4C-①-30-3-②-③-④-⑤		3	18.0	6.0	113.1	
Legend: 1 Encoder type 2 Stroke 3 Compatible Controller	4 Cable	length 5	Option			

#### ■Stroke and Maximum Speed

Stroke Lead	50 to 300 (Every 50mm)
12	600
6	300
3	150

#### 1 Pricing List By Encoder Type and 2 Stroke

S : Herrig Elect 2) Electrics: Type and S & Colore								
	Type code							
	RGS4C							
② Stroke		① Enco	der type					
(mm)	Increr	mental	Absolute					
	Motor wa	Motor wattage (W)		ittage (W)				
	20W	30W	20W	30W				
50	_	_	_	_				
100	_	_	_	_				
150	_	_	_	_				
200	_	_	_	_				
250	_	_	_	_				
300	_	_	_	_				

#### ⑤ Option Price List

Title	Option code	See page	Standard price
Brake	В	P437	_
Foot bracket	FT	P440	_
High-acceleration/deceleration (*1)	HA	P442	_
Home check sensor (*2)	HS	P442	_
Reversed-home specification	NM	P442	_
Trunion (rear)	TRR	P446	_

(\*1) High-acceleration/deceleration cannot be used with any 20W models or 30W-lead 3. (\*2) Home check sensor cannot be used with reversed-home specification.

#### 4 Cable Length Price List

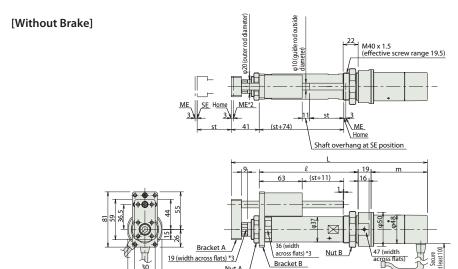
Туре	Cab	Standard price		
	<b>P</b> (1m)		_	
Standard type	<b>S</b> (3m)	_		
	<b>M</b> (5m)		_	
	X06 (6m)	to <b>X10</b> (10m)	_	
Special length	X11 (11m)	to X15 (15m)	_	
	X16 (16m)	to X20 (20m)	_	
	R01 (1m)	to <b>R03</b> (3m)	_	
	R04 (4m)	to <b>R05</b> (5m)	_	
Robot cable	R06 (6m)	to <b>R10</b> (10m)	_	
	R11 (11m)	to <b>R15</b> (15m)	_	
	R16 (16m)	to <b>R20</b> (20m)	_	

\*See P394 for maintenance cables.

Actuator Specification	on
Item	Description
Drive method	Ball screw φ10mm, rolled C10
Positioning Repeatability	±0.02mm
Backlash	0.1mm or less
Guide	Single-guide, φ10mm Diameter Guide, Rod Ball Push Type
Rod diameter	φ20mm
Non-rotation accuracy of the rod	±0.05 degrees
Ambient operating temperature, humidity	0 to 40°C 85% BH or less (non-condensing)

Connect the motor-encoder cable. See P394 for cable details. The slider moves to the ME during home return. Pay attention to prevent contact between the slider and surrounding parts during home return. ME: mechanical end SE: stroke end

\*3 The width direction across flats orientation differs with the product.

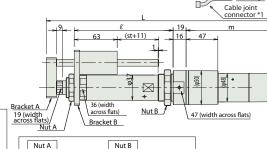




[With Brake]

Bracket A

6-M5 through



M40 x 1.5

Bracket B



#### ■Dimensions and Weight by Stroke

RCS2-RGS4C (without brake)

11002	. 1100-10	(*********	i bianc,				
Stroke		50	100	150	200	250	300
	20W	285.5	335.5	385.5	435.5	485.5	535.5
L .	30W	300.5	350.5	400.5	450.5	500.5	550.5
Q		145	195	245	295	345	395
	20W	80.5					
111	30W			95	5.5		
Wei	ght (kg)	1.5	1.6	1.8	2.0	2.2	2.4
	L	Stroke L 20W 30W 20W 20W	Stroke 50  20W 285.5 30W 300.5  2 145  m 20W 30W	Stroke         50         100           L         20W         285.5         335.5           30W         300.5         350.5           q         145         195           m         20W           30W         30W	L 20W 285.5 335.5 385.5 30W 300.5 350.5 400.5 40.5 40.5 40.5 40.5 40.5 40.5	Stroke         50         100         150         200           L         20W         285.5         335.5         385.5         435.5           30W         300.5         350.5         400.5         450.5           u         145         195         245         295           m         20W         80.5           30W         95.5	Stroke         50         100         150         200         250           L         20W         285.5         335.5         385.5         435.5         485.5           30W         300.5         350.5         400.5         450.5         500.5           u         145         195         245         295         345           m         20W         80.5           30W         95.5

#### RCS2-RGS4C (with brake)

	S	troke	50	100	150	200	250	300	
		20W	328.5	378.5	428.5	478.5	528.5	578.5	
	_	30W	343.5	393.5	443.5	493.5	543.5	593.5	
	Q		145	195	245	295	345	395	
	m 20W 30W		123.5						
					13	8.5			
	Wei	ght (kg)	1.7	1.8	2.0	2.2	2.4	2.6	

#### Compatible Controllers

Bracket B

4-M5

29 37

M30 x 1.5

Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page
Positioner mode			Up to 512-point positioning possible	512 points	Single-phase		-	
Solenoid valve mode		SCON-C-20①-NP-2-③ SCON-C-30D①②-NP-2-③	Same as solenoid valve Controlled operation enabled	7 points				P385
Serial communication type			Serial communications Special type	64 points		*1-axis specification		F303
Pulse train input control type				· ·	Three-phase			
Program control 1-2 axis type		SSEL-C-1-20①-NP-2-③ SSEL-C-1-30D①②-NP-2-③	Programmable type capable of operating up to 2 axes	20000 points	AC 200V (XSEL-P/Q only)		_	P415
Program control 1-6 axis type	Pilla	XSEL-4-1-201-N1-EEE-2-3 XSEL-4-1-30D12-N1-EEE-2-5	Programmed operation enabled Can drive up to 6 axis	4000 points			-	P425

\*SSEL, XSEL are for 1-axis specification.
\*(1) Indicates the encoder type (I: Incremental/A: Absolute).
\*(2) HA indicates high-acceleration/deceleration.
\*(3) Indicates the power supply voltage type (1: 100V/2: single-phase 200V).
\*(4) Indicates XSEL type (J/K/P/Q).
\*(5) Indicates the power supply voltage type (1: 100V, 2: single-phase 200V, 3: three-phase 200V).

IAI

RCS2-RGS4C

20 w

86 P Servo Motor

Servo Motor

30 w

60 w Servo Motor

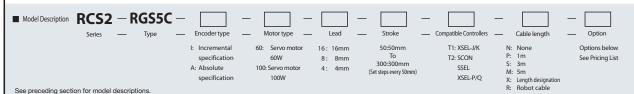
Servo Motor 150 w

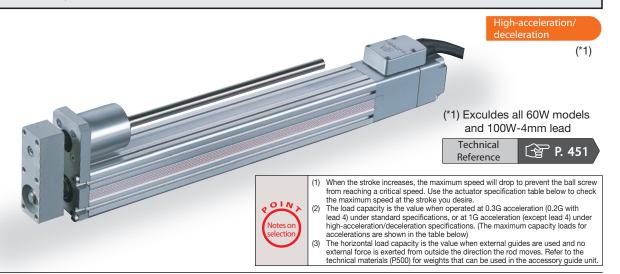
Servo Motor 750 w

RCS2 ROBE CALLET TET.: (495) 662-87-56, e-mail: iai@actuator.ru

# RCS2-RGS5C

ROBO Cylinder, Single-guided Rod Type, Actuator Width 55mm, 200-V Servo Motor, Coupling Specification





#### Actuator Specification Table ■Leads and Payloads Motor Lead Max. payload Stroke Model output (mm) izontal (kg) Vertical (ko (mm) RCS2-RGS5C-1 -60-16-2 - 3 - 4 - 5 120 16 1.3 63.8 RCS2-RGS5C-1 -60-8-2 - 3 - 4 - 5 8 25.0 4.3 127.5 RCS2-RGS5C-1 -60-4-2 -3 -4 -5 4 50.0 10.8 255.1 50 to 300 RCS2-RGS5C-1 -100-16-2 - 3 - 4 - 5 16 15.0 2.8 105.8 50mm)

8

30.0

60.0

8.3

17.3

212.7

424.3

# Stroke 50 to 250 300 (every 50mm) (mm) 16 800 755 8 400 377 4 200 188

■Stroke and Maximum Speed

(Unit = mm/s)

#### 1 Pricing List By Encoder Type and 2 Stroke

RCS2-RGS5C- 1 -100-8- 2 - 3 - 4 - 5

RCS2-RGS5C-①-100-4-②-③-④-⑤

The state of the s					
	Type code				
		RG	S5C		
② Stroke		① Enco	der type		
(mm)	Incremental  Motor wattage (W)		Absolute		
			Motor wattage (W)		
	60W	100W	60W	100W	
50	_	_	_	-	
100	_	_	_	_	
150	_	_	_	_	
200	_	_	_	_	
250	_	_	_	_	
300	_	_	_	_	

Legend: 1 Encoder type 2 Stroke 3 Compatible Controller 4 Cable length 5 Option

300	
(5) Option F	Price List

Title	Option code	See page	Standard price
Change the cable connector outlet direction	A2	P437	_
Brake	В	P437	_
Foot bracket	FT	P441	_
Change guide orientation	GS2 to GS4	Page at right	_
High-acceleration/deceleration (*1)	HA	P442	

(\*1) High-acceleration/deceleration cannot be used with any 60W models or 100W-lead 4.

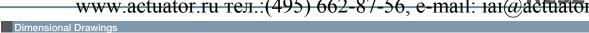
#### 4 Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
Special length	X06 (6m)	to <b>X10</b> (10m)	_
	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to <b>R03</b> (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to <b>R10</b> (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

\*See P394 for maintenance cables

#### Actuator Specification Item Description Drive method Ball screw $\phi 12mm$ , rolled C10 Positioning Repeatability ±0.02mm Backlash 0.1mm or less Guide Single-guide, φ12mm Diameter Guide, Rod Ball Push Type Rod diameter φ30mm Non-rotation accuracy of the rod ±0.1 degrees 0 to 40°C, 85% RH or less (non-condensing) Ambient operating temperature, humidity

100w





2D CAD

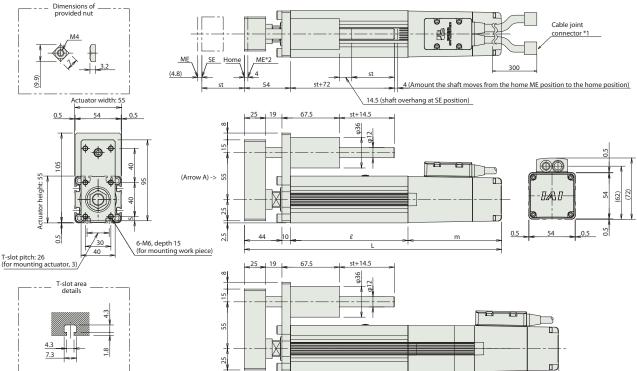
\*Please note that for structural reasons, the reversed-home specification cannot be used for the RGS5C type.

Connect the motor-encoder cable. See P394 for cable details. The slider moves to the ME during home return. Pay attention to prevent contact between the slider and surrounding parts during home return. ME: mechanical end SE: stroke end

Information on

special orders

😭 P. 454



■Dimensions and Weight by Stroke

10

RCS2-RGS5C

2.5

Stroke 50 100 150 200 250 300 60W 284 334 384 434 484 534 100W 302 352 402 452 502 552 138 188 238 288 338 388 60W m 110 100W Weight (kg) 2.8 3.6 3.9

BCS2-BGS5C (with brake)

72.5

nus	1032-h0330 (With brake)						
5	Stroke		100	150	200	250	300
	60W	356.5	406.5	456.5	506.5	556.5	606.5
-	100W	374.5	424.5	474.5	524.5	574.5	624.5
	Q	138	188	238	288	338	388
	60W	164.5					
m	100W			18	2.5		
We	ight (kg)	2.8	3.1	3.5	3.9	4.2	4.6

#### Compatible Controllers

Guide mounting orientation (for arrow A)

Top mount

Actuato

GS3

**Bottom** 

Right

Left

Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page
Positioner mode			Up to 512-point positioning possible	512 points				
Solenoid valve mode		SCON-C-60①-NP-2-③	Same as solenoid valve Controlled operation enabled	7 points	Single-phase AC	Maximum 360VA		P385
Serial communication type		SCON-C-100①②-NP-2-③	Serial communications Special type	64 points	100V Single-phase AC		_	P303
Pulse train input control type			Pulse train input type Special type	(-)	200V Three-phase	*1-axis specification For 150W operation		
Program control 1-2 axis type		SSEL-C-1-60①-NP-2-③ SSEL-C-1-100①②-NP-2-③	Programmable type capable of operating up to 2 axes	20000 points	AC 200V (XSEL-P/Q only)		_	P415
Program control 1-6 axis type		XSEL-4-1-601-N1-EEE-2-5 XSEL-4-1-10012-N1-EEE-2-5	Programmed operation enabled Can drive up to 6 axis	4000 points			-	P425

\*SSEL, XSEL are for 1-axis specification.
\*(1) Indicates the encoder type (I: Incremental/A: Absolute).
\*(2) HA indicates high-acceleration/deceleration.
\*(3) Indicates the power supply voltage type (1: 100V/2: single-phase 200V).
\*(4) Indicates XSEL type (J/K/P/Q).
\*(5) Indicates the power supply voltage type (1: 100V, 2: single-phase 200V, 3: three-phase 200V).

IAI

RCS2 www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

# RCS2-RGS4

ROBO Cylinder, Single-guided Rod Type, Actuator Width 37mm, 200-V Servo Motor, Built-in Motor Specification

■ Model Description RCS2 — RGS4D —

See preceding section for model descriptions.

Encoder type specification

A: Absolute

specification

20W

30W

30: Servo motor

6: 6mm 300:300mm 3: 3mm (Set steps every 50mm)

Stroke 50:50mm Compatible Controllers T1: XSEL-J/K T2: SCON SSEL

XSEL-P/O

N: None P: 1m S: 3m

X: Length designation R: Robot cable

Options below

See Pricing List

译 P. 451

Cable length

Technical

(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.

Reference

The load capacity is based on operation at an acceleration of 0.3G (or 0.2G if the lead is 3). The above values are maximum acceleration.

(3) The horizontal load capacity is the value when external guides are used and no external force is exerted from outside the direction the rod moves. Refer to the technical materials (P500) for weights that can be used in the accessory guide unit.

#### Actuator Specification Table

#### Leads and Payloads

Model	Motor output	Lead (mm)		vertical (kg)	Thrust (N)	Stroke (mm)
RCS2-RGS4D-①-20-12-②-③-④-⑤		12	3.0	0.5	18.9	
RCS2-RGS4D-①-20-6-②-③-④-⑤	20	6	6.0	1.5	37.7	
RCS2-RGS4D-①-20-3-②-③-④-⑤		3	12.0	3.5	75.4	50 to 300
RCS2-RGS4D-①-30-12-②-③-④-⑤		12	4.0	1.0	28.3	(Every 50mm)
RCS2-RGS4D-①-30-6-②-③-④-⑤	30	6	9.0	2.5	56.6	
RCS2-RGS4C-①-30-3-②-③-④-⑤		3	18.0	6.0	113.1	

#### ■Stroke and Maximum Speed

Stroke Lead	50 to 300 (Every 50mm)
12	600
6	300
3	150

#### 1 Pricing List By Encoder Type and 2 Stroke

Thomas Elst By Encoder Type and & Stroke						
	Type code					
		RGS4D				
<li>② Stroke</li>		① Enco	der type			
(mm)	Incren	nental	Absolute			
	Motor wa	ttage (W)	Motor wattage (W)			
	20W	30W	20W	30W		
50	_	_	_	_		
100	_	_	_	_		
150	_	_	_	_		
200	_	_	_	_		
250	_	_	_	_		
300	_	_	_	_		

Legend: 1 Encoder type 2 Stroke 3 Compatible Controller 4 Cable length 5 Option

Title	Option code	See page	Standard price
Foot bracket	FT	P440	_
Home check sensor	HS	P442	_
Reversed-home specification	NM	P442	_
Trunion (rear)	TRR	P446	_

<sup>\*</sup>The home check sensor cannot be used with the reversed-home specification.

#### 4 Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
Special length	X06 (6m)	to <b>X10</b> (10m)	_
	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to R03 (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

\*See P394 for maintenance cables.

Actuator Specification			
Item	Description		
Drive method Ball screw φ10mm, rolled C10			
Positioning Repeatability	±0.02mm		
Backlash	0.1mm or less		
Guide	Single-guide, φ10mm Diameter Guide, Rod Ball Push Type		
Rod diameter	φ20mm		
Non-rotation accuracy of the rod	±0.05 degrees		
Ambient operating temperature, humidity	0 to 40°C 85% BH or less (non-condensing)		

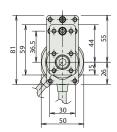


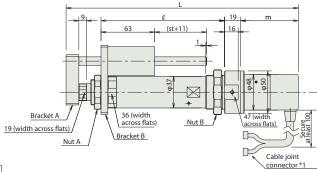


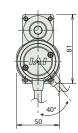
Connect the motor-encoder cable. See P394 for cable details. The slider moves to the ME during home return. Pay attention to prevent contact between the slider and surrounding parts during home return.

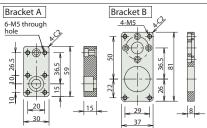
ME: mechanical end SE: stroke end

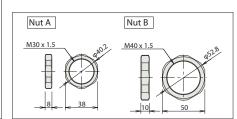
(outer rod diameter M40 x 1.5 (effective screw range 19.5) φ20 ( SE Home ME\*2 \<u>Hom</u>e Shaft overhang at SE position











#### ■Dimensions and Weight by Stroke

- 1	RCS2-RGS4D (without brake)								
	Stroke		50	100	150	200	250	300	
	1	20W	263.5	313.5	363.5	413.5	463.5	513.5	
	L	30W	278.5	328.5	378.5	428.5	478.5	528.5	
		Q	145	195	245	295	345	395	
ı		20W	58.5						
	m 30W				73	3.5			
	Weight (kg)		1.3	1.5	1.7	1.9	2.1	2.3	

No brake-equipped setting for RCS2-RGS4D.

#### Compatible Controllers

The RCS2 Series actuators can be operated with the following controllers. Select the type that is compatible with your application

Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page		
Positioner mode					Up to 512-point positioning possible	512 points				
Solenoid valve mode		SCON-C-20①-NP-2-②	Same as solenoid valve Controlled operation enabled	7 points	Single-phase AC 100V Single-phase AC 200V Three-phase	Maximum		P385		
Serial communication type		SCON-C-30D①-NP-2-②	Serial communications Special type	64 points			_	1 505		
Pulse train input control type			Pulse train input type Special type	(-)						
Program control 1-2 axis type		SSEL-C-1-20①-NP-2-② SSEL-C-1-30D①-NP-2-②	Programmable type capable of operating up to 2 axes	20000 points	AC 200V (XSEL-P/Q only)		_	P415		
Program control 1-6 axis type	Pilla	XSEL-3-1-20①-N1-EEE-2-④ XSEL-3-1-30D①-N1-EEE-2-④	Programmed operation enabled Can drive up to 6 axis	4000 points			-	P425		

\*SSEL, XSEL are for 1-axis specification.

- \*① Indicates the encoder type (I: Incremental/A: Absolute).

- "② Indicates the power supply voltage type (1: 100V/2: single-phase 200V).

  \*③ Indicates the power supply voltage type (1: 100V/2: single-phase 200V).

  \*④ Indicates the power supply voltage type (1: 100V/2: single-phase, 200V/3: three-phase, 200V).

IAI

RCS2-RGS4D

**30**w

Servo Motor

**20** w

Servo Motor 60 w

Servo Motor

Servo Motor

Servo Motor 750 w

RCS2 ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

### RCS2-RGS7AD

ROBO Cylinder, Single-guided Rod Type, Actuator Width 75mm, 200-V Servo Motor, Built-in Motor (Direct connection) Specification

■ Model Description RCS2 —RGS7AD— Compatible Controllers Cable length Encoder type Motor type Lead Stroke Option N: None P: 1m S: 3m I: Incremental 50:50mm T1: XSEL-J/K Options below specification 60W 6mm T2: SCON See Pricing List 300:300mm 100: Servo motor 3: 3mm SSEL (Set steps every 50mm) XSEL-P/O X: Length designation R: Robot cable 100W See preceding section for model descriptions. \*Lead 3 setting is only for 60W.



Technical Reference

**全 P. 451** 



- (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.
- the maximum speed at the stroke you desire.

  (2) The load capacity is the value when a 60W motor is operated at 0.15G acceleration (lead 12), 0.1G (lead 6), or 0.05G (lead 3), or when a 100W motor is operated at 0.2G acceleration (lead 12) or 0.1G (lead 6).
- (3) The horizontal load capacity is the value when external guides are used and no external force is exerted from outside the direction the rod moves. Refer to the technical materials (P500) for weights that can be used in the accessory guide unit.

#### Actuator Specification Table

#### Leads and Payloads

Model	Motor output	Lead (mm)		ayload Vertical (kg)	Thrust (N)	Stroke (mm)
RCS2-RGS7AD-I-60-12-①-②-③-④		12	10.0	1.5	85.3	
RCS2-RGS7AD-I-60-6-①-②-③-④	60	6	20.0	6.0	169.5	
RCS2-RGS7AD-I-60-3-①-②-③-④		3	40.0	14.5	340.1	50 to 300 (every 50mm)
RCS2-RGS7AD-I-100-12-①-②-③-④	100	12	15.0	4.5	141.1	Sommy
RCS2-RGS7AD-I-100-6-①-②-③-④	100	6	30.0	11.5	283.2	
Legend: 1 Stroke 2 Compatible Controller 3 Cable length	4 Option	•				

#### ■Stroke and Maximum Speed

Stroke Lead	50 to 250 (every 50mm)	300 (mm)
12	600	505
6	300	250
3	150	125

(Unit = mm/s)

#### Pricing List By Stroke

	Type code				
	RGS7AD				
(1) Stroke	Encod	er type			
(mm)	Increr	mental			
	Motor wattage (W)	Motor wattage (W)			
	60W	100W			
50	_	_			
100	_	_			
150	_	_			
200	_	_			
250	_	_			
300	_	_			

#### ③ Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)	_	
Special length	X06 (6m)	to <b>X10</b> (10m)	_
	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to <b>R03</b> (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

<sup>\*</sup>See P394 for maintenance cables.

#### 4 Option Price List

Title	Option code	See page	Standard price
Change the cable connector outlet direction	A1 to A3	P437	_
Brake	В	P437	_
Foot bracket	FT	P441	_
Change guide orientation	GS2 to GS4	Page at right	_

#### Actuator Specification

Item	Description
Drive method	Ball screw φ10mm, rolled C10
Positioning Repeatability	±0.02mm
Backlash	0.1mm or less
Guide	Single-guide, φ16mm Diameter Guide, Rod Ball Push Type
Rod diameter	φ30mm
Non-rotation accuracy of the rod	±0.1 degrees
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)

Stroke +6.6

ф16

60 w

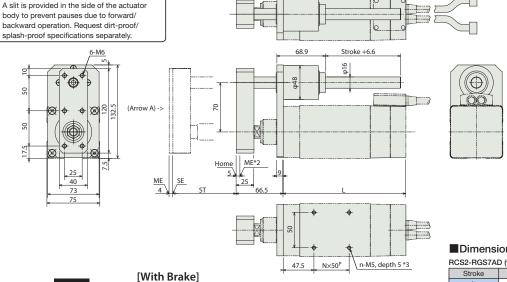
100w



www.intelligentactuator.com

[Without Brake]

\*Please note that for structural reasons, the reversed-home specification cannot be used for the RGS7AD type.



cable. See P394 for cable details.

Information on

special orders

Cable joint connector \*1

(300)

The slider moves to the ME during home return. Pay attention to prevent contact between the slider and surrounding parts.

😭 P. 454

ST: stroke SE: stroke end ME: mechanical end

Caution

There are no mounting holes in the bottom face for 100W-50 stroke.
Please note that there is only one

set of mounting holes (2 holes) in the bottom face for 60W-50 stroke and 100W-100 stroke.

#### ■Dimensions and Weight by Stroke

	RCS2	RCS2-RGS7AD (without brake)									
	S	troke	50	100	150	200	250	300			
		L	128	178	228	278	328	378			
	N	60W	-	1	2	3	4	5			
	IN	100W	-	-	1	2	3	4			
		60W	2	4	6	8	10	12			
	n	100W	-	2	4	6	8	10			
	Weight	60W	3.2	3.8	4.3	4.8	5.3	5.9			
1	(kg)	100W	3.3	3.9	4.4	4.9	5.4	6.0			

			120	170			020	0,0
	N	60W	-	1	2	3	4	5
	IN	100W	-	-	1	2	3	4
		60W	2	4	6	8	10	12
	n	100W	-	2	4	6	8	10
	Weight	60W	3.2	3.8	4.3	4.8	5.3	5.9
1	(kg)	100W	3.3	3.9	4.4	4.9	5.4	6.0
	RCS2	-RGS7AI	D (with I	orake)				
1	S	troke	50	100	150	200	250	300

φ51	RCS2	-RGS7AI	D (with I	orake)				
↓	S	troke	50	100	150	200	250	300
		L	163.5	213.5	263.5	313.5	363.5	413.5
	N	60W	-	1	2	3	4	5
	IN	100W	-	-	1	2	3	4
		60W	2	4	6	8	10	12
	n	100W	-	2	4	6	8	10
	Weight	60W	3.5	4.1	4.6	5.1	5.6	6.2
	(kg)	100W	3.6	4.2	4.7	5.2	5.7	6.3

#### Compatible Controllers

Top mount

Actuato

GS3

Bottom

Guide mounting orientation (for arrow A)

Right

Left

mount

The RCS2 Series actuators can be operated with the following controllers. Select the type that is compatible with your application

\_ 25

Home

Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page	
Positioner mode			Up to 512-point positioning possible 512 points	positioning 512 points					
Solenoid valve mode		SCON-C-60I-NP-2-① SCON-C-100I-NP-2-①	Same as solenoid valve Controlled operation enabled	7 points	Single-phase AC 100V  Single-phase AC  AC  Maximum 360VA			P385	
Serial communication type			Serial communications Special type	64 points				P303	
Pulse train input control type			Pulse train input type Special type	(-)	200V Three-phase AC	specification For 150W operation			
Program control 1-2 axis type		SSEL-C-1-60I-NP-2-① SSEL-C-1-100I-NP-2-①	Programmable type capable of operating up to 2 axes	20000 points	200V (XSEL-P/Q only)		_	P415	
Program control 1-6 axis type		XSEL-②-1-60I-N1-EEE-2-③ XSEL-②-1-100I-N1-EEE-2-③	Programmed operation enabled Can drive up to 6 axis	4000 points			_	P425	

CAUTION: Please note that the 5-axis /6-axis of the XSEL-P/Q type controllers cannot be connected to RA7D/RA7BD type actuators. \*SSEL, XSEL are for 1-axis specification.

\*① Indicates the power supply voltage type (1: 100V, 2: single-phase 200V).
\*② Indicates the XSEL type (J/K/P/Q) entered.

\*3 Indicates the power supply voltage type (1: 100V, 2: single-phase, 3: three-phase 200V).

Servo Motor

Servo Motor

60 w Servo Motor

100 w Servo Motor

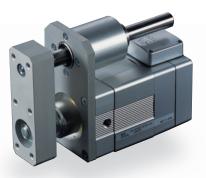
Servo Motor

RCS2 ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

## RCS2-RGS7BD

ROBO Cylinder, Single-guided Rod Type, Actuator Width 75mm, 200-V Servo Motor, Built-in Motor (Direct connection) Specification

■ Model Description RCS2 —RGS7BD— Compatible Controllers Cable length Encoder type Motor type Lead Stroke Option N: None P: 1m S: 3m I: Incremental 100: Servo 50:50mm T1: XSEL-J/K Options below specification motor100W 8: 8mm T2: SCON See Pricing List 300:300mm 150: Servo 4: 4mm SSEL (Set steps every 50mm) motor150W XSEL-P/O X: Length designation R: Robot cable See preceding section for model descriptions. \* The lead 4 setting is only for 100W.



Technical Reference **译 P. 451** 



- 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.
   The load capacity is the value when a 100W motor is operated at 0.25G
- (2) The load capacity is the value when a 100W motor is operated at 0.25G acceleration (lead 16), 0.17G (lead 8), or 0.1G (lead 4), or when a 150W motor is operated at 0.3G acceleration (lead 16) or 0.2G (lead 8).
- (3) The horizontal load capacity is the value when external guides are used and no external force is exerted from outside the direction the rod moves. Refer to the technical materials (P500) for weights that can be used in the accessory guide unit.

#### Actuator Specification Table

#### Leads and Payloads

Model	Motor output	Lead (mm)		ayload Vertical (kg)	Thrust (N)	Stroke (mm)	
RCS2-RGS7BD-I-100-16-①-②-③-④		16	10.0	2.5	105.8		
RCS2-RGS7BD-I-100-8-①-②-③-④	100	8	22.0	8.0	212.7		
RCS2-RGS7BD-I-100-4-①-②-③-④		4	40.0	18.5	424.3	50 to 300 (every 50mm)	
RCS2-RGS7BD-I-150-16-①-②-③-④	450	16	15.0	5.5	158.8	30(1)(1)	
RCS2-RGS7BD-I-150-8-①-②-③-④	150	8	35.0	13.5	318.5		
Legend: ① Stroke ② Compatible Controller ③ Cable length ④ Option							

#### ■Stroke and Maximum Speed

Stroke Lead	50 to 300 (every 50mm)
16	800
8	400
4	200

(Unit = mm/s)

#### ① Pricing List By Stroke

	Type code			
	RGS7BD			
(1) Stroke	Encoder type			
(mm)	Increr	nental		
	Motor wattage (W)	Motor wattage (W)		
	100W	150W		
50	_	_		
100	_	_		
150	_	_		
200	_	_		
250	_	_		
300		_		

Note: There is no 50 stroke setting for 150W.

#### 3 Cable Length Price List

T	0-1-	Charadanal and a	
Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
	X06 (6m)	to X10 (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to R03 (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to R20 (20m)	_

0 to 40°C, 85% RH or less (non-condensing)

\*See P394 for maintenance cables

Actuator Specification

Ambient operating temperature, humidity

Non-rotation accuracy of the rod ±0.1 degrees

#### 4 Option Price List

Title	Title Option code		Standard price	
Change the cable connector outlet direction	A1 to A3	P437	_	
Brake	В	P437	_	
Foot bracket	FT	P441	_	
Change guide orientation	GS2 to GS4	Page at right	_	

Item	Description
Drive method	Ball screw φ12mm, rolled C10
Positioning Repeatability	±0.02mm
Backlash	0.1mm or less
Guide	Single-guide, φ16mm Diameter Guide, Rod Ball Push Type
Rod diameter	φ35mm



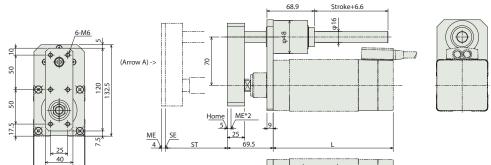


\*Please note that for structural reasons, the reversed-home specification cannot be used for the RGS7BD type.

# [Without Brake]

A slit is provided in the side of the actuator body to prevent pauses due to forward/ backward operation. Request dirt-proof/ splash-proof specifications separately.

[With Brake]



51.5

n-M5, depth 5 \*3

50.7

35.5

Stroke+6.6

cable. See P394 for cable details.

😭 P. 454

Information on

special orders

Cable joint connector \*1

(300)

The slider moves to the ME during home return. Pay attention to prevent contact between the slider and surrounding parts.

ST: stroke SE: stroke end ME: mechanical end

#### Caution

There is no 50W-50 stroke setting. There is no mounting hole in the bottom face for 100W-50 stroke. Please note that there is only one set of mounting holes (2 holes) in the bottom face for 100W and 150W-100 stroke.

#### ■Dimensions and Weight by Stroke

BCS2-BGS7BD (without brake)

11002 Tido I DD (Williout Branc)							
Stroke		50	100	150	200	250	300
L	100W	133	183	233	283	333	383
	150W	-	183	233	283	333	383
N.	100W	-	-	1	2	3	4
N	150W	-	-	1	2	3	4
n	100W	-	2	4	6	8	10
n	150W	-	2	4	6	8	10
Weight	100W	3.8	4.4	4.9	5.4	5.9	6.5
(kg)	150W	-	4.5	5.0	5.5	6.0	6.6

ļ	1	RCS2	-RGS7B	D (with I	orake)				
!	φ21	S	troke	50	100	150	200	250	300
ŀ		L	100W	168.5	218.5	268.5	318.5	368.5	418.5
t			150W	-	218.5	268.5	318.5	368.5	418.5
		N	100W	-	-	1	2	3	4
			150W	-	-	1	2	3	4
>		n	100W	-	2	4	6	8	10
-			150W	-	2	4	6	8	10
		Weight (kg)	100W	4.1	4.7	5.2	5.7	6.2	6.8
			150W	-	4.8	5.3	5.8	6.3	6.9

#### Compatible Controllers

mount

Actuato

GS3 **Bottom** mount

Guide mounting orientation (for arrow A)

Left

mount

Right

mount

The RCS2 Series actuators can be operated with the following controllers. Select the type that is compatible with your application.

ME\*2

Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page
Positioner mode			Up to 512-point positioning possible	512 points				
Solenoid valve mode		SCON-C-100I-NP-2-①	Same as solenoid valve Controlled operation enabled	7 points	Single-phase AC 100V Single-phase AC	Maximum 360VA *1-axis specification For 150W operation		Door
Serial communication type		SCON-C-150I-NP-2-①	Serial communications Special type	64 points			_	P385
Pulse train input control type			Pulse train input type Special type	(-)	200V Three-phase			
Program control 1-2 axis type		SSEL-C-1-100I-NP-2-① SSEL-C-1-150I-NP-2-①	Programmable type capable of operating up to 2 axes	20000 points	AC 200V (XSEL-P/Q only)		_	P415
Program control 1-6 axis type		XSEL-②-1-100I-N1-EEE-2-③ XSEL-②-1-150I-N1-EEE-2-③	Programmed operation enabled Can drive up to 6 axis	4000 points			_	P425

CAUTION: Please note that the 5-axis /6-axis of the XSEL-P/Q type controllers cannot be connected to RA7D/RA7BD type actuators.

- \*SSEL, XSEL are for 1-axis specification.
- \*1 Indicates the power supply voltage type (1: 100V, 2: single-phase 200V).
- \*2 Indicates the XSEL type (J/K/P/Q) entered.
- \*3 Indicates the power supply voltage type (1: 100V, 2: single-phase, 3: three-phase 200V).

RCS2 ROBO Cylinder tor.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

Lead

## CS2-RG

ROBO Cylinder, Double-guided Rod Type, Actuator Diameter 37mm, 200-V Servo Motor, Coupling Specification

■ Model Description RCS2 — RGD4C — Encoder type

See preceding section for model descriptions.

specification

A: Absolute

specification

Motor type 20: Servo motor 12: 12mm 20W 6: 6mm 30: Servo motor 3: 3mm

30W

50:50mm 300:300mm (Set steps every 50mm)

Stroke

Compatible Controllers T1: XSEL-J/K T2: SCON SSEL XSEL-P/O

N: None P: 1m S: 3m

M· 5m X: Length designation R: Robot cable

Cable length

Option

Options below

See Pricing List

(\*1) Excluding all 20W models and 30W-3mm lead

Technical Reference

P. 451

(\*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.

The load capacity is the value when operated at 0.3G acceleration (0.2G with lead

3) under standard specifications, or at 1G acceleration (except lead 3) under high-acceleration/deceleration specifications. (The maximum capacity loads for accelerations are shown in the table below)

The horizontal load capacity is the value when external guides are used and no external force is exerted from outside the direction the rod moves. Refer to the technical materials (P500) for weights that can be used in the accessory guide unit.

#### Actuator Specification Table

#### ■Leads and Payloads

Model		Lead (mm)	Max. p  Horizontal (kg)	ayload Vertical (kg)	Thrust (N)	Stroke (mm)	
RCS2-RGD4C-①-20-12-②-③-④-⑤		12	3.0	0.5	18.9		
RCS2-RGD4C-①-20-6-②-③-④-⑤	20	6	6.0	1.5	37.7		
RCS2-RGD4C-①-20-3-②-③-④-⑤		3	12.0	3.5	75.4	50 to 300	
RCS2-RGD4C-①-30-12-②-③-④-⑤		12	4.0	1.0	28.3	(Every 50mm)	
RCS2-RGD4C-①-30-6-②-③-④-⑤	30	6	9.0	2.5	56.6		
RCS2-RGD4C-①-30-3-②-③-④-⑤		3	18.0	6.0	113.1		
Legend: 1 Encoder type 2 Stroke 3 Compatible Controller 4 Cable length 5 Option							

#### ■Stroke and Maximum Speed

Stroke	50 to 300 (Every 50mm)
12	600
6	300
3	150

(Unit = mm/s)

#### 1 Pricing List By Encoder Type and 2 Stroke

Thomas Elect by Ellected Type and & Strente							
	Type code						
		RGD4C					
② Stroke	① Encoder type						
(mm)	Increr	nental	Abso	olute			
	Motor wa	ttage (W)	Motor wattage (W)				
	20W	30W	20W	30W			
50	_	_	_	_			
100	_	_	_	_			
150	_	_	_	_			
200	_	_	_	_			
250	_	_	_	_			
300			_	_			

#### ⑤ Option Price List

Title	Option code	See page	Standard price
Brake	В	P437	_
Foot bracket	FT	P440	-
High-acceleration/deceleration (*1)	HA	P442	_
Home check sensor (*2)	HS	P442	_
Reversed-home specification	NM	P442	_
Trunion (rear)	TRR	P446	_

(\*1) High-acceleration/deceleration cannot be used with any 20W models or 30W-lead 3. (\*2) Home check sensor cannot be used with reversed-home specification.

#### 4 Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
	X06 (6m)	to <b>X10</b> (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	<b>R01</b> (1m)	to <b>R03</b> (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

\*See P394 for maintenance cables.

Actuator Specification				
Item	Description			
Drive method	Ball screw φ10mm, rolled C10			
Positioning Repeatability	±0.02mm			
Backlash	0.1mm or less			
Guide	Double-guide, φ10mm Diameter Guide, Rod Ball, Push Type			
Rod diameter	φ20mm			
Non-rotation accuracy of the rod	±0.05 degrees			
Ambient operating temperature, humidity	0 to 40°C 85% BH or less (non-condensing)			

M40 x 1.5

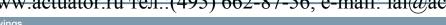
47 (width across flats)

\Home

(effective screw range 19.5)

😭 P. 454

30 w



Dimensional Drawings





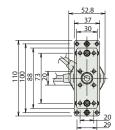
ME \*2

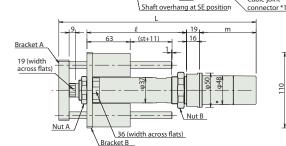
SE Home

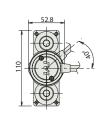
Connect the motor-encoder cable. See P394 for cable details. The slider moves to the ME during home return. Pay attention to prevent contact between the slider and surrounding parts during home return. ME: mechanical end SE: stroke end

# [Without Brake]

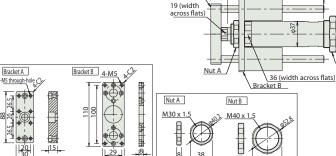
www.intelligentactuator.com







#### [With Brake]



#### ■Dimensions and Weight by Stroke

Information on

special orders

RCS2-RGD4C (without brake)

ı		11002	. Habto	(WILLIOU	t braite,				
l		Stroke		50	100	150	200	250	300
j			20W	285.5	335.5	385.5	435.5	485.5	535.5
ļ		L	30W	300.5	350.5	400.5	450.5	500.5	550.5
ļ		Q		145	195	245	295	345	395
		m 20W 30W Weight (kg)		80.5					
						95	.5		
				1.8	2.0	2.2	2.4	2.6	2.8

#### RCS2-RGD4C (with brake)

	Tiod2 Tid2 To (Tital State)							
	Stroke		50	100	150	200	250	300
		20W	328.5	378.5	428.5	478.5	528.5	578.5
	L	30W	343.5	393.5	443.5	493.5	543.5	593.5
	Q		145	195	245	295	345	395
	m 20W 30W Weight (kg)		123.5					
			138.5					
			2.0	2.2	2.4	2.6	2.8	3.0

#### Compatible Controllers

The RCS2 Series actuators can be operated with the following controllers. Select the type that is compatible with your application

Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page
Positioner mode			Up to 512-point positioning possible	512 points				
Solenoid valve mode		SCON-C-20①-NP-2-③	Same as solenoid valve Controlled operation enabled	7 points	Single-phase AC	Maximum 360VA		P385
Serial communication type		SCON-C-30D①②-NP-2-③	Serial communications Special type	64 points	100V Single-phase AC		_	P303
Pulse train input control type			Pulse train input type Special type	(-)	200V Three-phase	*1-axis specification For 150W operation		
Program control 1-2 axis type		SSEL-C-1-20①-NP-2-③ SSEL-C-1-30D①②-NP-2-③	Programmable type capable of operating up to 2 axes	20000 points	AC 200V (XSEL-P/Q only)		_	P415
Program control 1-6 axis type		XSEL-4-1-201-N1-EEE-2-3 XSEL-4-1-30D12-N1-EEE-2-5	Programmed operation enabled Can drive up to 6 axis	4000 points			_	P425

\*SSEL, XSEL are for 1-axis specification.

\*(1) Indicates the encoder type (i: Incremental/A: Absolute).

\*(2) HA indicates high-acceleration/deceleration.

\*(3) Indicates the power supply voltage type (1: 100V/2: single-phase 200V).

\*(4) Indicates XSEL type (J/K/P/O).

\*(5) Indicates the power supply voltage type (1: 100V, 2: single-phase 200V, 3: three-phase 200V).

Servo Motor 150 w

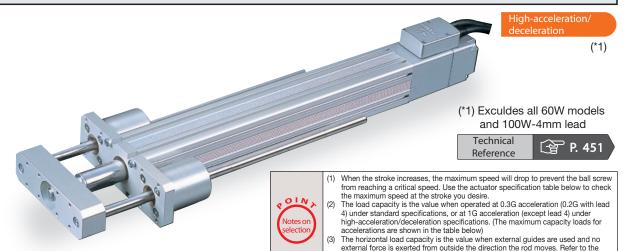
Servo Motor

# RCS2 ROBO Cylinder ator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

### RCS2-RGD5C

ROBO Cylinder, Double-guided Rod Type, Actuator Width 55mm, 200-V Servo Motor, Coupling Specification

N: None P: 1m S: 3m Options below specification 60W 8: 8mm T2: SCON See Pricing List 300:300mm A: Absolute 100: Servo motor 4: 4mm SSEL (Set steps every 50mm) M· 5m specification XSEL-P/O X: Length designation R: Robot cable 100W See preceding section for model descriptions.



#### Actuator Specification Table

#### ■Leads and Payloads

Model	Motor output	Lead (mm)		vertical (kg)	Thrust (N)	Stroke (mm)
RCS2-RGD5C-①-60-16-②-③-④-⑤		16	12.0	1.3	63.8	
RCS2-RGD5C-①-60-8-②-③-④-⑤	60	8	25.0	4.3	127.5	
RCS2-RGD5C-①-60-4-②-③-④-⑤		4	50.0	10.8	255.1	50 to 300
RCS2-RGD5C-①-100-16-②-③-④-⑤		16	15.0	2.8	105.8	(Every 50mm)
RCS2-RGD5C-①-100-8-②-③-④-⑤	100	8	30.0	8.3	212.7	
RCS2-RGD5C-①-100-4-②-③-④-⑤		4	60.0	17.3	424.3	
Legend: Encoder type Stroke Compatible Controller 4 Cable length Option						

#### ■Stroke and Maximum Speed

technical materials (P500) for weights that can be used in the accessory guide unit.

Stroke Lead	50 to 250 (every 50mm)	300 (mm)
16	800	755
8	400	377
4	200	188

Option

(Unit = mm/s)

#### ① Pricing List By Encoder Type and ② Stroke

© : ::::::::g =:::::::::::::::::::::::::					
	Type code				
		RGI	D5C		
② Stroke		① Enco	der type		
(mm)	Incren	nental	Abso	olute	
	Motor wattage (W)		Motor wattage (W)		
	60W	100W	60W	100W	
50	_	_	_	_	
100	_	_	_	_	
150	_	_	_	_	
200	_	_	_	_	
250	_	_	_	_	
300			_	_	

#### ⑤ Option Price List

Title	Option code	See page	Standard price
Change the cable connector outlet direction	A2	P437	_
Brake	В	P437	-
Foot bracket	FT	P441	_
High-acceleration/deceleration (*1)	HA	P442	

<sup>(\*1)</sup> High-acceleration/deceleration cannot be used with any 60W models or 100W-lead 4.

#### 4 Cable Length Price List

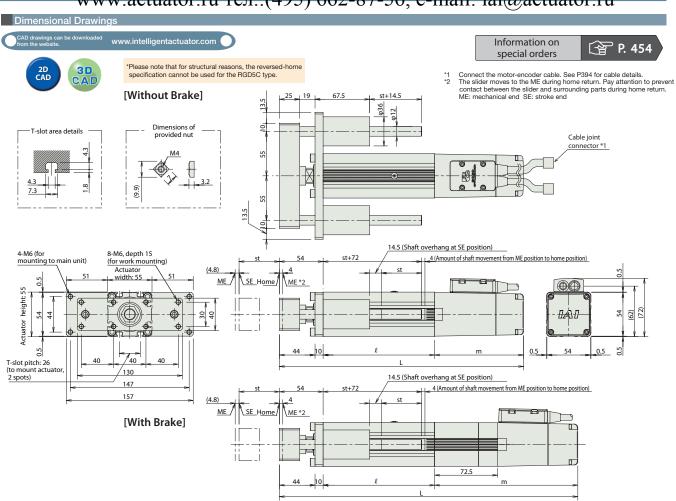
Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
Special length	X06 (6m)	to X10 (10m)	_
	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to <b>R03</b> (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

\*See P394 for maintenance cables

#### oo roo roo mamonano

Actuator Specification				
Item	Description			
Drive method	Ball screw φ12mm, rolled C10			
Positioning Repeatability	±0.02mm			
Backlash	0.1mm or less			
Guide	Double-guide, φ12mm Diameter Guide, Rod Ball, Push Type			
Rod diameter	φ30mm			
Non-rotation accuracy of the rod	±0.08 degrees			
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)			

60 w 100w



#### ■Dimensions and Weight by Stroke

RCS2	2-RGD5C	(withou	t brake)				
S	troke	50	100	150	200	250	300
	60W	284	334	384	434	484	524
L	100W	302	352	402	452	502	552
	Q	138	188	238	288	338	388
L 100V	60W			9	2		
m	100W			11	10		
Wei	aht (ka)	2.7	3.0	3.4	3.8	4.2	5.5

#### RCS2-RGD5C (with brake)

		/*******	۵.,۰۰				
5	Stroke	50	100	150	200	250	300
	60W	356.5	406.5	456.5	506.5	556.5	606.5
-	100W	374.5	424.5	474.5	524.5	574.5	624.5
	Q	138	188	238	288	338	388
100	60W			16	4.5		
m	100W			18	2.5		
We	ight (kg)	3.0	3.3	3.7	4.1	4.5	5.8

#### Compatible Controllers

Title	External View	Model	Features	Maximum number of	Input power	Power-supply capacity	Standard price	See page
Positioner mode	ion put	Model	Up to 512-point positioning possible	positioning points 512 points	input power		otandard price	Oce page
Solenoid valve mode		SCON-C-60①-NP-2-③	Same as solenoid valve Controlled operation enabled	7 points	Single-phase AC 100V Single-phase AC		_	P385
Serial communication type		SCON-C-100①②-NP-2-③	Serial communications Special type	64 points		Maximum 360VA		P303
Pulse train input control type			Pulse train input type Special type	(-)	200V Three-phase	*1-axis specification For 150W operation		
Program control 1-2 axis type		SSEL-C-1-60①-NP-2-③ SSEL-C-1-100①②-NP-2-③	Programmable type capable of operating up to 2 axes	20000 points	AC 200V (XSEL-P/Q only)		_	P415
Program control 1-6 axis type		XSEL-@-1-60①-N1-EEE-2-⑤ XSEL-@-1-100①②-N1-EEE-2-⑤	Programmed operation enabled Can drive up to 6 axis	4000 points			_	P425

\*SSEL, XSEL are for 1-axis specification.
\*(1) Indicates the encoder type (I: Incremental/A: Absolute).
\*(2) HA indicates high-acceleration/deceleration.
\*(3) Indicates the power supply voltage type (1: 100V/2: single-phase 200V).
\*(4) Indicates XSEL type (J/K/P/Q).
\*(5) Indicates the power supply voltage type (1: 100V, 2: single-phase 200V, 3: three-phase 200V).

# RCS2 ROBO Cylinder actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

# RCS2-RGD

ROBO Cylinder, Double-guided Rod Type, Actuator Diameter 37mm, 200-V Servo Motor, Built-in Specification

■ Model Description RCS2 — RGD4D —

See preceding section for model descriptions.

Encoder type

specification

specification

A: Absolute

Lead

20W

30W

30: Servo motor

Stroke 50:50mm 6: 6mm 300:300mm

(Set steps every 50mm)

3: 3mm

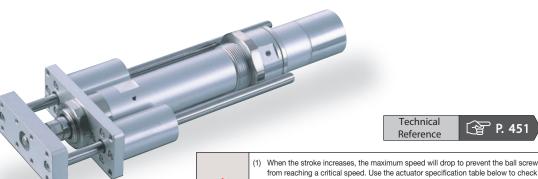
Compatible Controllers T1: XSEL-J/K T2: SCON SSEL XSEL-P/O

N: None P: 1m S: 3m

Options below See Pricing List

Cable length

X: Length designation R: Robot cable



Technical Reference 译 P. 451

from reaching a critical speed. Use the actuator specification table below to check the maximum speed at the stroke you desire. The load capacity is based on operation at an acceleration of 0.3G (or 0.2G if the

lead is 3). The above values are maximum acceleration.

The horizontal load capacity is the value when external guides are used and no external force is exerted from outside the direction the rod moves. Refer to the technical materials (P500) for weights that can be used in the accessory guide unit.

#### Actuator Specification Table

#### ■Leads and Payloads

Model	Motor	Lead	Max. p	ayload	Thrust	Stroke
Model	output	(mm)	Horizontal (kg)	Vertical (kg)	(N)	(mm)
RCS2-RGD4D-①-20-12-②-③-④-⑤		12	3.0	0.5	18.9	
RCS2-RGD4D-①-20-6-②-③-④-⑤	20	6	6.0	1.5	37.7	
RCS2-RGD4D-①-20-3-②-③-④-⑤		3	12.0	3.5	75.4	50 to 300
RCS2-RGD4D-①-30-12-②-③-④-⑤		12	4.0	1.0	28.3	(Every 50mm)
RCS2-RGD4D-①-30-6-②-③-④-⑤	30	6	9.0	2.5	56.6	
RCS2-RGD4D-①-30-3-②-③-④-⑤		3	18.0	6.0	113.1	
egend: 1 Encoder type 2 Stroke 3 Compatible Controller	(4) Cable I	enath 5	Option			

#### ■Stroke and Maximum Speed

	· ·
Stroke Lead	50 to 300 (Every 50mm)
12	600
6	300
3	150

#### 1 Pricing List By Encoder Type and 2 Stroke

<u> </u>	o,oouo,p	<u> </u>						
	Type code							
		RGI	D4D					
② Stroke		① Enco	der type					
(mm)	RGD4D	solute						
	Motor wa	ttage (W)	Motor wa	ttage (W)				
	20W	30W	20W	30W				
50	_	_	_	_				
100	_	_	_	_				
150	_	_	_	_				
200	_	_	_	_				
250	_	_	_	_				
300	_	_	_	_				

#### 5 Option Price List

Title	Option code	See page	Standard price
Foot bracket	FT	P440	_
Home check sensor	HS	P442	_
Reversed-home specification	NM	P442	_
Trunion (rear)	TRR	P446	_

<sup>\*</sup>The home check sensor cannot be used with the reversed-home specification.

#### 4 Cable Length Price List

Туре	Cable symbol		Standard price
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
	X06 (6m)	to <b>X10</b> (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to R03 (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to <b>R20</b> (20m)	_

\*See P394 for maintenance cables.

Actuator Specification	on
Item	Description
Drive method	Ball screw φ10mm, rolled C10
Positioning Repeatability	±0.02mm
Backlash	0.1mm or less
Guide	Double-guide, φ10mm Diameter Guide, Rod Ball, Push Type
Rod diameter	φ20mm
Non-rotation accuracy of the rod	±0.05 degrees
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)

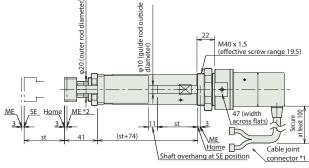
Information on special orders

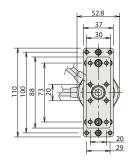


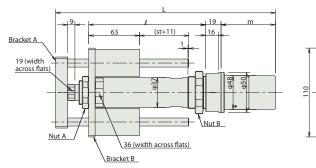


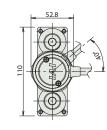
Connect the motor-encoder cable. See P394 for cable details. The slider moves to the ME during home return. Pay attention to prevent contact between the slider and surrounding parts during home return. ME: mechanical end

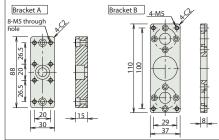
#### [Without Brake]

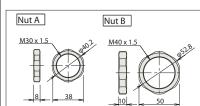












#### ■Dimensions and Weight by Stroke

RCS2-RGD4D (without brake)

S	troke	50	100	150	200	250	300	
	20W	263.5	313.5	363.5	413.5	463.5	513.5	
L	30W	278.5	328.5	378.5	428.5	478.5	528.5	
	Q	145	195	245	295	345	395	
m 20W			58.5					
2 30W	30W			73	.5			
Wei	ght (kg)	1.6	1.8	2.1	2.3	2.5	2.7	

No brake-equipped setting for RCS2-RGD4D.

#### Compatible Controllers

The RCS2 Series actuators can be operated with the following controllers. Select the type that is compatible with your application.									
Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page	
Positioner mode			Up to 512-point positioning possible	512 points					
Solenoid valve mode		SCON-C-20①-NP-2-②	Same as solenoid valve Controlled operation enabled	7 points	Single-phase AC 100V		-	P385	
Serial communication type		SCON-C-30D①-NP-2-②	Serial communications Special type	64 points	Single-phase AC	Maximum 360VA		1 303	
Pulse train input control type			Pulse train input type Special type	(-)	Three-phase Spe	*1-axis specification For 150W operation			
Program control 1-2 axis type		SSEL-C-1-20①-NP-2-② SSEL-C-1-30D①-NP-2-②	Programmable type capable of operating up to 2 axes	20000 points	AC 200V (XSEL-P/Q only)		_	P415	
Program control 1-6 axis type		XSEL-3-1-20①-N1-EEE-2-④ XSEL-3-1-30D①-N1-EEE-2-④	Programmed operation enabled Can drive up to 6 axis	4000 points			-	P425	

\*SSEL, XSEL are for 1-axis specification.

- \*① Indicates the encoder type (I: Incremental/A: Absolute).

- "② Indicates the power supply voltage type (1: 100V/2: single-phase 200V).

  \*③ Indicates the power supply voltage type (1: 100V/2: single-phase 200V).

  \*④ Indicates the power supply voltage type (1: 100V/2: single-phase, 200V/3: three-phase, 200V).

IAI

RCS2-RGD4D 204

30 w

RCS2 ROBO Cylinder tor.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

# RCS2-RGD7

ROBO Cylinder, Double-guided Rod Type, Actuator Width 75mm, 200-V Servo Motor, Built-in Motor (Direct connection) Specification

■ Model Description RCS2 —RGD7AD— Compatible Controllers Motor type Cable length Lead Stroke Option N: None P: 1m S: 3m I: Incremental 50:50mm T1: XSEL-J/K Options below specification 60W T2: SCON See Pricing List 300:300mm 100: Servo motor 3: 3mm SSEL (Set steps every 50mm) XSEL-P/O X: Length designation R: Robot cable 100W



**Technical** 译 P. 451 Reference



- 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.

  The load capacity is the value when a 60W motor is operated at 0.15G acceleration (lead 12), 0.1G (lead 6), or 0.05G (lead 3), or when a 100W motor is operated at 0.2G acceleration (lead 12) or 0.1G (lead 6).
- The horizontal load capacity is the value when external guides are used and no external force is exerted from outside the direction the rod moves. Refer to the technical materials (P500) for weights that can be used in the accessory guide unit.

#### Actuator Specification Table

See preceding section for model descriptions.

#### ■Leads and Payloads

Model	Motor output	Lead (mm)		ayload Vertical (kg)	Thrust (N)	Stroke (mm)				
RCS2-RGD7AD-I-60-12-①②③④		12	10.0	0.9	85.3					
RCS2-RGD7AD-I-60-6-①②③④	60	6	20.0	5.4	169.5					
RCS2-RGD7AD-I-60-3-①②③④		3	40.0	13.9	340.1	50 to 300 (every 50mm)				
RCS2-RGD7AD-I-100-12-①②③④ (1)	100	12	15.0	3.9	141.4	5011111)				
RCS2-RGD7AD-I-100-6-①②③④	100	6	30.0	10.9	283.2					
Legend: Stroke Compatible Controller Cable length	Legend: 1 Stroke 2 Compatible Controller 3 Cable length 4 Option									

#### ■Stroke and Maximum Speed

Stroke Lead	50 to 250 (every 50mm)	300 (mm)
12	600	505
6	300	250
3	150	125

(Unit = mm/s)

#### ① Pricing List By Stroke

	Type code			
	RGD	7AD		
① Stroke	Encoder type			
(mm)	Incremental			
	Motor wattage (W)	Motor wattage (W)		
	60W	100W		
50	_	_		
100	_	_		
150	_	_		
200	_	_		
250	_	_		
300	_	_		

#### 3 Cable Length Price List

Туре	Cable symbol		Cable symbol		Standard price
	<b>P</b> (1m)		_		
Standard type	<b>S</b> (3m)		_		
	<b>M</b> (5m)		_		
	X06 (6m)	to <b>X10</b> (10m)	_		
Special length	X11 (11m)	to X15 (15m)	_		
	X16 (16m)	to X20 (20m)	_		
	R01 (1m)	to <b>R03</b> (3m)	_		
Robot cable	R04 (4m)	to <b>R05</b> (5m)	_		
	R06 (6m)	to <b>R10</b> (10m)	_		
	R11 (11m)	to <b>R15</b> (15m)	_		
	R16 (16m)	to <b>R20</b> (20m)	_		

<sup>\*</sup>See P394 for maintenance cables.

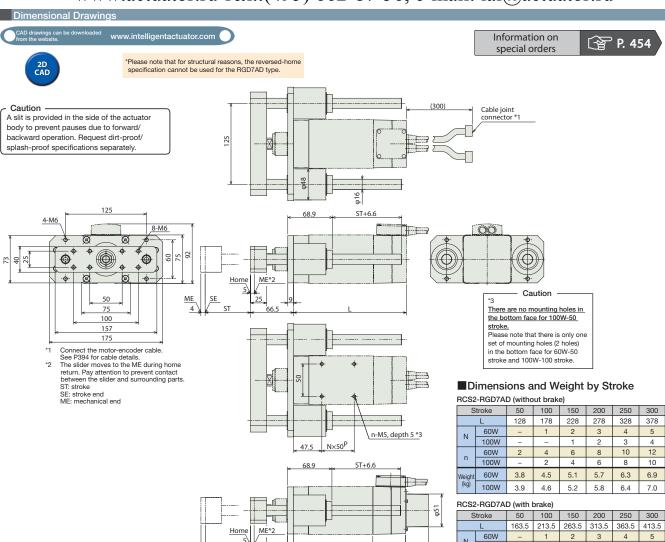
#### 4 Option Price List

Title	Option code	See page	Standard price	
Change the cable connector outlet direction	A1 to A3	P437	_	
Brake	В	P437	_	
Foot bracket	FT	P441	_	

<sup>\*</sup>Note: foot brackets cannot be used with 60W/50 stroke and 100W/50, 100 stroke

Actuator Specification				
Item	Description			
Drive method	Ball screw φ10mm, rolled C10			
Positioning Repeatability	±0.02mm			
Backlash	0.1mm or less			
Guide	Double-guide, φ16mm Diameter Guide, Rod Ball, Push Type			
Rod diameter	φ30mm			
Non-rotation accuracy of the rod	±0.08 degrees			
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)			

100w



Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page	
Positioner mode			Up to 512-point positioning possible	512 points					
Solenoid valve mode			SCON-C-60I-NP-2-①	Same as solenoid valve Controlled operation enabled	7 points	Single-phase AC 100V Single-phase AC			P385
Serial communication type			SCON-C-100I-NP-2-①	Serial communications Special type	64 points		Maximum 360VA		P303
Pulse train input control type			Pulse train input type Special type	(-)	200V Three-phase	*1-axis specification For 150W operation			
Program control 1-2 axis type		SSEL-C-1-60I-NP-2-① SSEL-C-1-100I-NP-2-①	Programmable type capable of operating up to 2 axes	20000 points	AC 200V (XSEL-P/Q only)	200V		_	P415
Program control		XSEL-2-1-60I-N1-EEE-2-3	Programmed operation enabled	4000 points			_	P425	

Can drive up to

6 axis

CAUTION: Please note that the 5-axis /6-axis of the XSEL-P/Q type controllers cannot be connected to RA7D/RA7BD type actuators.

XSEL-2-1-100I-N1-EEE-2-3

ME

Compatible Controllers

control

1-6 axis type

\*SSEL, XSEL are for 1-axis specification.

4000 points

\*1 Indicates the power supply voltage type (1: 100V, 2: single-phase 200V).

Ν 100W

n

60W

100W

60W

100W

4.2

- \*2 Indicates the XSEL type (J/K/P/Q) entered.
- \*3 Indicates the power supply voltage type (1: 100V, 2: single-phase, 3: three-phase 200V).

P425

2 3

6 6.6

6.1 6.7

6 8

4 6 8

5.4

2

4.8

4.9 5.5 4

12

10

7.2

7.3

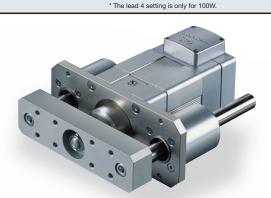
10

RCS2 ROBO Cylinder tor.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

## RCS2-RGD

ROBO Cylinder, Double-guided Rod Type, Actuator Width 75mm, 200-V Servo Motor, Built-in Motor (Direct connection) Specification

■ Model Description RCS2 —RGD7BD— Motor type Compatible Controllers Cable length Lead Stroke Option N: None P: 1m S: 3m I: Incremental 100 : Servo motor 50:50mm T1: XSEL-J/K Options below specification 100W 8: 8mm T2: SCON See Pricing List 300:300mm 150 : Servo motor 4: 4mm SSEL (Set steps every 50mm) 150W XSEL-P/O X: Length designation R: Robot cable



**Technical** P. 451 Reference

- 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.
  The load capacity is the value when a 100W motor is operated at 0.25G acceleration (lead 16), 0.17G (lead 8), or 0.1G (lead 4), or when a 150W motor is operated at 0.3G acceleration (lead 16) or 0.2G (lead 8).
- The horizontal load capacity is the value when external guides are used and no external force is exerted from outside the direction the rod moves. Refer to the technical materials (P500) for weights that can be used in the accessory guide unit.

#### Actuator Specification Table

See preceding section for model descriptions.

#### ■Leads and Payloads

Model	Motor output	Lead (mm)	Max. p Horizontal (kg)	ayload Vertical (kg)	Thrust (N)	Stroke (mm)
RCS2-RGD7BD-I-100-16-①②③④		16	10.0	1.9	105.8	
RCS2-RGD7BD-I-100-8-①②③④	100	8	22.0	7.4	212.7	
RCS2-RGD7BD-I-100-4-①②③④		4	40.0	17.9	424.3	50 to 300 (every 50mm)
RCS2-RGD7BD-I-150-16-①②③④	150	16	15.0	4.9	158.8	30(1)(1)
RCS2-RGD7BD-I-150-8-①②③④	150	8	35.0	12.9	318.5	
Legend: ① Stroke ② Compatible Controller ③ Cable length ④ Option						

#### ■Stroke and Maximum Speed

Stroke	50 to 300 (every 50mm)
16	800
8	400
4	200
	(Unit = mm/s)

#### ① Pricing List By Stroke

	Туре	code	
	RGD7BD Encoder type Incremental		
① Stroke			
(mm)			
	Motor wattage (W)	Motor wattage (W)	
	100W	150W	
50	_	_	
100	_	_	
150	_	_	
200	_	_	
250	_	_	
300	_	_	

Note: There is no 50 stroke setting for 150W.

#### 3 Cable Length Price List

Туре	Cab	Standard price	
	<b>P</b> (1m)		_
Standard type	<b>S</b> (3m)		_
	<b>M</b> (5m)		_
	X06 (6m)	to <b>X10</b> (10m)	_
Special length	X11 (11m)	to X15 (15m)	_
	X16 (16m)	to X20 (20m)	_
	R01 (1m)	to <b>R03</b> (3m)	_
	R04 (4m)	to <b>R05</b> (5m)	_
Robot cable	R06 (6m)	to R10 (10m)	_
	R11 (11m)	to <b>R15</b> (15m)	_
	R16 (16m)	to R20 (20m)	_

\*See P394 for maintenance cables.

#### 4 Option Price List

Title	Option code	See page	Standard price
Change the cable connector outlet direction	A1 to A3	P437	-
Brake	В	P437	_
Foot bracket	FT	P441	_

\*Note: Foot brackets cannot be used with 50, 100 stroke.

Actuator Specification				
Item	Description			
Drive method	Ball screw φ12mm, rolled C10			
Positioning Repeatability	±0.02mm			
Backlash	0.1mm or less			
Guide	Double-guide, φ16mm Diameter Guide, Rod Ball, Push Type			
Rod diameter	φ35mm			
Non-rotation accuracy of the rod	±0.08 degrees			
Ambient operating temperature, humidity	0 to 40°C, 85% RH or less (non-condensing)			

Servo Motor

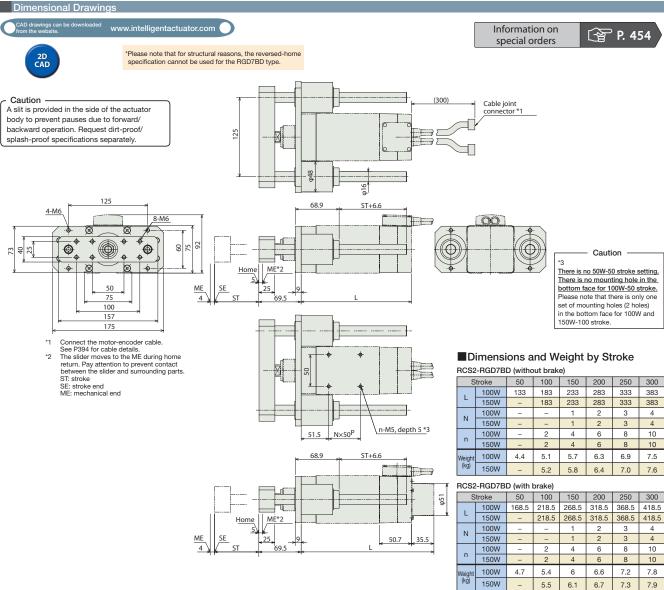
Servo Moto

30 W Servo Moto

Servo Motor

100 W Servo Motor

150w Servo Motor 750w



Com	patible	Control	ers

The RCS2 Series actuators can be operated with the following controllers. Select the type that is compatible with your application.

Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	See page									
Positioner mode			Up to 512-point positioning possible	512 points													
Solenoid valve mode		SCON-C-100I-NP-2-①	Same as solenoid valve Controlled operation enabled	7 points	Single-phase AC 100V			P385									
Serial communication type								SCON-C-150I-NP-2-①	Serial communications Special type	64 points	Single-phase AC Maximum 360VA	_	1 330				
Pulse train input control type			Pulse train input type Special type	(-)	200V Three-phase AC	*1-axis specification For 150W operation											
Program control 1-2 axis type		SSEL-C-1-100I-NP-2-① SSEL-C-1-150I-NP-2-①	Programmable type capable of operating up to 2 axes	20000 points	200V (XSEL-P/Q only)	operation	operane.		·							_	P415
Program control 1-6 axis type	ETTTA	XSEL-②-1-100I-N1-EEE-2-③ XSEL-②-1-150I-N1-EEE-2-③	Programmed operation enabled Can drive up to 6 axis	4000 points			-	P425									

CAUTION: Please note that the 5-axis /6-axis of the XSEL-P/Q type controllers cannot be connected to RA7D/RA7BD type actuators.

- \*SSEL, XSEL are for 1-axis specification.
- \*① Indicates the power supply voltage type (1: 100V, 2: single-phase 200V).
- \*2 Indicates the XSEL type (J/K/P/Q) entered.
- \*3 Indicates the power supply voltage type (1: 100V, 2: single-phase, 3: three-phase 200V).

RCS2 ROBO Cylinder www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru

### RCS2-RGD4R

ROBO Cylinder, Double Guide Rod Type, Actuator Diameter  $\,\phi$  37mm, 200-V Servo Motor, Reverse-mounted Motor Specification

RCS2 - RGD4R -Model Description

See preceding section for model descriptions

Encoder type

A: Absolute

specification

specification



6: 6mm

3: 3mm



(Set steps every 50mm)

T1: XSEL-J/K T2: SCON 300: 300mm SSEL

XSEL-P/Q

: 1m

Refer to the Option Price List below.

S:3m M:5m X:5m X:Length



20W

30: Servo motor

30W

译 P. 451 Reference (1) When the stroke increases, the maximum speed will drop to prevent the ball screw

**Technical** 

the maximum speed at the stroke you desire. (2) The load capacity is based on operation at an acceleration of 0.3G (or 0.2G if the lead is 3). This is the maximum acceleration.

(3) The horizontal load capacity assumes use of an external guide and absence of external force applied from any direction other than the moving direction of the rod. See the Technical Reference (P500).

#### Actuator Specification Table

#### ■Leads and Payloads

Model	Motor output (W)	Lead (mm)	Maximun Horizontal(kg)		Rated thrust (N)	Stroke (mm)
RCS2-RGD4R-① -20-12-② -③ -④ -⑤		12	3.0	0.5	18.9	
RCS2-RGD4R-①-20-6-②-③-④-⑤	20	6	6.0	1.5	37.7	
RCS2-RGD4R-① -20-3-② -③ -④ -⑤		3	12.0	3.5	75.4	50 to 300
RCS2-RGD4R-① -30-12-② -③ -④ -⑤		12	4.0	1.0	28.3	(every 50mm)
RCS2-RGD4R-① -30-6-② -③ -④ -⑤	30	6	9.0	2.5	56.6	
RCS2-RGD4R-①-30-3-②-③-④-⑤		3	18.0	6.0	113.1	
Legend: 1 Encoder type 2 Stroke 3 Controller 4 Cable le	ength 5	Option				

#### ■Stroke and Maximum Speed

Stroke Lead	50 to 300 (every 50mm)
12	600
6	300
3	150

(Unit = mm/s)

#### Price List by 1 Encoder Type /2 Stroke

I fice List by	C Lilcodel Type	/ Stroke						
	Type code							
		RGD4R						
② Stroke	① Encoder type							
(mm)	Increr	nental	Abso	olute				
	Motor v	wattage	Motor wattage					
	20W	30W	20W	30W				
50	-	-	-	-				
100	-	-	-	-				
150	-	-	-	-				
200	-	-	-	-				
250	-	-	-	-				
300	-	-	-	-				

#### 4 Cable Length Price List

Туре	Cable sy		ymbol	Standard price
	<b>P</b> (1m)			-
Standard type	<b>S</b> (3m)			-
	<b>M</b> (5m)			-
	X06 (6m)	to	X10 (10m)	-
Special length	<b>X11</b> (11m)	to	X15 (15m)	-
	X16 (16m)	to	X20 (20m)	-
	R01 (1m)	to	R03 (3m)	-
	R04 (4m)	to	R05 (5m)	-
Robot cable	R06 (6m)	to	R10 (10m)	-
	R11 (11m)	to	R15 (15m)	-
	P (1m) S (3m) M (5m)  X06 (6m) to X11 (11m) to R01 (1m) to R06 (6m) to R06 (6m) to R11 (11m) to	to	R20 (20m)	-

Refer to P394 for maintenance cables.

#### (5) Option Price List

© Option i noo List			
Title	Option code	See page	Standard price
Brake	В	→P437	-
Foot bracket	FT	→P440	-
Flange bracket (rear)	FLR	→P438	-
Home check sensor	HS	→P442	-
Reversed-home specification	NM	→P442	-
Clevis bracket	QR	→P443	-
Rear mounting plate	RP	→P444	-

\*The home check sensor (HS) cannot be used with the reversed-home specification.

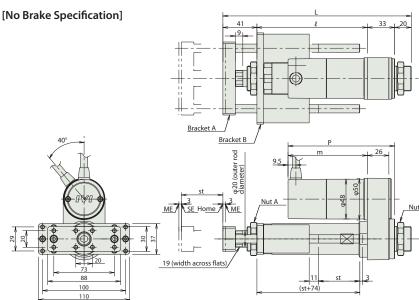
#### Actuator Specification Description Item Drive System Ball screw $\phi$ 10mm, rolled C10 Positioning Repeatability ±0.02mm Backlash 0.1mm or less Base Aluminum with white alumite treatment Rod Diameter **Φ20mm** Non-rotary Rod Precision ±1.0 degree Ambient operating temperature, humidity 0 to 40°C, 85% RH or less (non-condensing)

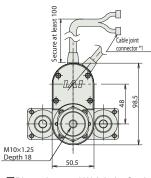
Information on special orders



\*2 The rod moves to the ME during home return. Pay attention to prevent contact between the rod and the surrounding parts. ME: Mechanical End SE: Stroke End

\*3 The orientation of the across flats surface varies depending on the product





#### ■Dimensions and Weight by Stroke

	ness ness in(minoat state)							
S	troke	50	100	150	200	250	300	
	20W	227	277	327	377	427	477	
L	30W	227	277	327	377	427	477	
	Q	133	188	233	288	333	383	
	20W	80.5						
m	30W			95	.5	333		
Р	20W			11:	3.5			
Р	30W			128.5				
Wei	ight (kg)	1.9	2.2	2.3	2.6	2.7	3.0	

#### RCS2-RGD4R(with brake)

RC52-RGD4R(WICH Drake)								
S	troke	50	100	150	200	250	300	
	20W	227	277	327	377	427	477	
L	30W	227	277	327	377	427	477	
	Q		188	233	288	333	383	
	20W	123.5						
m	30W			13	8.5	_		
Р	20W		156.5					
Р	30W		171.5					
Wei	ight (kg)	2.1	2.1 2.4 2.5 2.8 2.9		3.2			

#### [Brake Specification] Bracket A Bracket B p50 ME / Nut A 19 (width across flats), (st+74)

#### Compatible Controllers

RCS2 Series Actuators can be operated with the following controllers. Select the type that is compatible with your application.										
Title	External View	Model	Features	Max. positioning points	Input power	Power-supply capacity	Standard price	See page		
Positioner mode			Up to 512-point positioning possible	512 points						
Solenoid valve mode		SCON-C-20①-NP-2-②	Same as solenoid valve controlled operation enabled	7 points	Single-phase AC 100V					
Serial communication type				SCON-C-30D①-NP-2-②	Serial communications special type	64 points	Single-phase AC 360VA		360VA	→P385
Pulse train input control type			Pulse train input control type Special Type	(-)	200V Three-phase AC	*1-axis specification for 150W operation				
Program control, 1 or 2-axis type		SSEL-C-1-20①-NP-2-② SSEL-C-1-30D①-NP-2-②	Programmable type. Can be operated for up to 2 axes.	20000 points	200V (XSEL-P/Q only)		-	→P415		
Program control, 1 to 6 axis type	Filla	XSEL-③-1-20①-N1-EEE-2-④ XSEL-③-1-30D①-N1-EEE-2-④	Programmable type, capable of operating up to 6 axes	4000 points			-	→P425		

\*The SSEL and XSEL model names are based on a 1-axis specification.

\*① indicates an encoder type (I: Incremental, A: Absolute).
\*② indicates the power-supply voltage type (1: 100V, 2: Single-phase 200V).
\*③ indicates the XSEL type (J/K/P/Q).

\*(4) indicates the power-supply voltage type (1: 100V, 2: Single-phase 200V, 3: Three-phase 200V).

IAI

RCS2-RGD4R 2

30w

Controller	www.actuator.ru тел.:(495) 662-87-56, e-mail: iai@actuator.ru
Slider	MEMO
Rod	
Table	
Grippe	
r/ Cleanroc	
Splash	
- Contro	
oller	
C	
D	
R	
Aotor P Aotor	
P	
P otor	
lotor	
P lotor	
W Motor W	
lotor <b>W</b>	
flotor W flotor	
W lotor	
otor	211

30 w Servo Motor

Servo Motor 60 w

Servo Motor 100 w

Servo Moto

Servo Motor 750 w
