

# RCA2-GS3N

ROBO Cylinder Mini Rod type Short Length Single-Guide Free Mount type Actuator Width 28mm 24V servo motor Lead screw specification

<b>Model Description</b>	<b>RCA2</b>	<b>GS3N</b>	<b>I</b>	<b>10</b>		<b>30</b>			
	Series	Type	Encoder type	Motor type	Lead	Stroke	Compatible Controllers	Cable length	Option
			I: Incremental specification * Model number is "I" when used with simple absolute unit.	10: Servo Motor 10W	4S: Lead screw 4mm 2S: Lead screw 2mm 1S: Lead screw 1mm	30: 30mm	A1: ACON RACON ASEL A3: ASEP	N: None P: 1m S: 3m M: 5m X□□: Length Designation	Following options Refer to price table

\*See page 11 for details on the model descriptions.



**POINT**  
Notes on selection

- (1) The horizontal payload is the value when used in combination with the guide so that a radial load and moment load are not applied to the rod.
- (2) See P99 for correlation diagrams of the tip load and service life when a guide is not installed.
- (3) The load capacity is the value when operated at 0.2G acceleration. Acceleration limit is value indicated above.

### Actuator Specification Table

#### Leads and Payloads

Model	Motor output (W)	Feed screw	Lead (mm)	Maximum payload		Rated thrust (N)	Positioning Repeatability (mm)	Stroke (mm)
				Horizontal (kg)	Vertical (kg)			
RCA2-GS3N-I-10-4S-30-①-②-③	10	Lead screw	4	0.25	0.125	25.1	±0.05	30 (Fixed)
RCA2-GS3N-I-10-2S-30-①-②-③			2	0.5	0.25	50.3		
RCA2-GS3N-I-10-1S-30-①-②-③			1	1	0.5	100.5		

Legend ① Compatible Controllers ② Cable length ③ Option

#### Stroke and Maximum Speed

Lead	Stroke	
	30 (mm)	30 (mm)
Lead screw	4	200
	2	100
	1	50

(Unit = mm/s)

#### Price list (by stroke)

Stroke (mm)	Type code
	GS3N
	Encoder type
	Incremental
	Feed screw
Lead screw	
<b>30</b>	-

#### (2) Cable length (price chart)

Type	Cable symbol	Standard price
Standard type (Robot cable)	P (1m)	-
	S (3m)	-
	M (5m)	-
Special length	X06 (6m) to X10 (10m)	-
	X11 (11m) to X15 (15m)	-
	X16 (16m) to X20 (20m)	-

\* Robot type cable comes as standard with the RCA2 actuator.  
\* See page 113 for maintenance cables.

#### (3) Option price list (standard price)

Title	Option code	See page	Standard price
Change the cable connector outlet direction	K2	→P38	-

#### Actuator Specification

Item	Description
Drive System	Lead screw, φ4mm, rolled C10
Backlash	0.3mm or less (initial value)
Frame	Material: Aluminum, white alumite treated
Ambient operating temperature, humidity	0 to 40 °C, 85% RH or less (no condensation)
Service life	Horizontal specification: 10 million cycles, Vertical specification: 5 million cycles

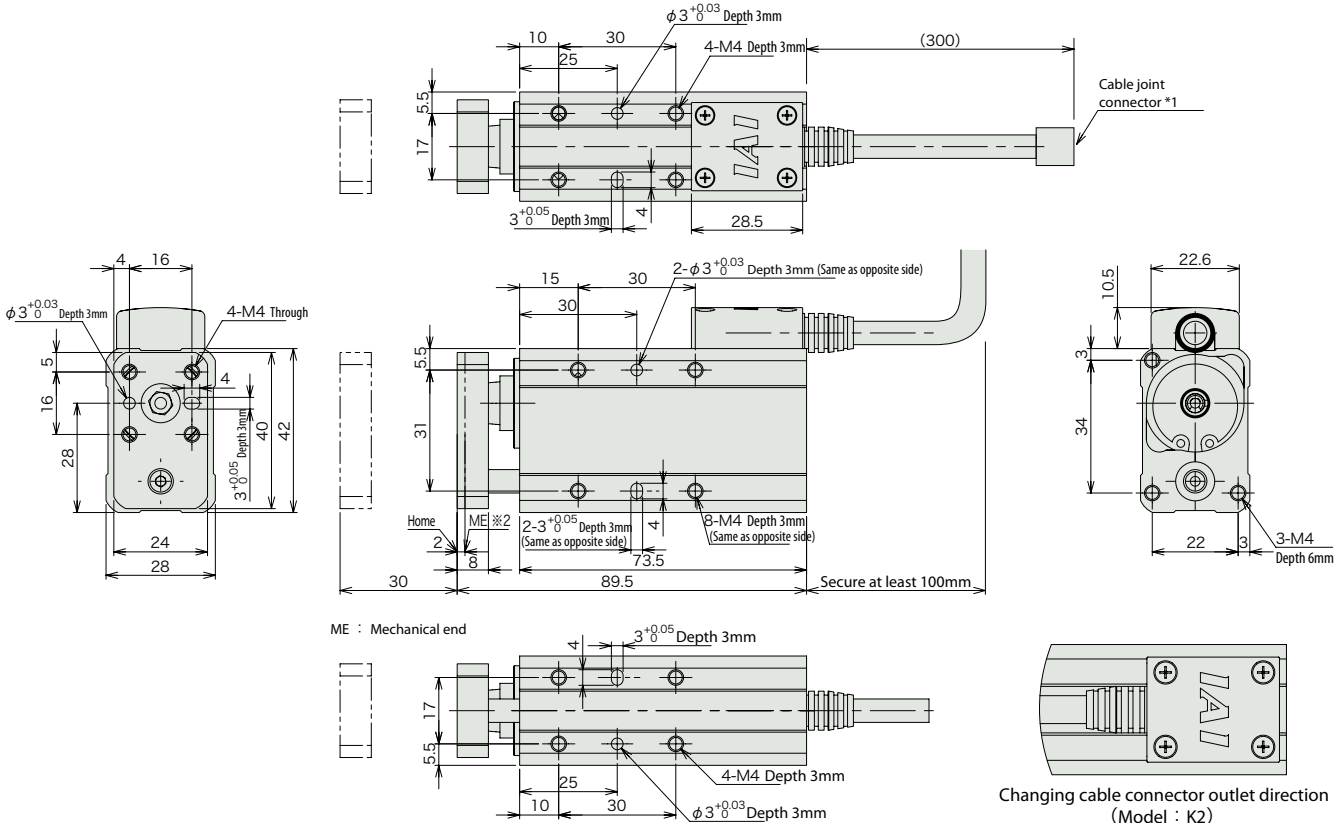
Dimensional Drawings

CAD drawings can be downloaded from the website. [www.intelligentactuator.com](http://www.intelligentactuator.com)



\*1 Connect the motor and encoder cables. See page 113 for cable details.

\*2 During home return, be careful to avoid interference from peripheral objects because the slider travels until the mechanical end.



Changing cable connector outlet direction (Model : K2)

\* Rotate 180° relative to standard specification.

■ Dimensions and Weight by Stroke

Stroke	30
Mass (kg)	0.32

Compatible Controllers

RCA2 series actuators can be operated with the controllers indicated below. Select the type according to your intended application.

Title	External View	Model	Features	Maximum number of positioning points	Input power	Power-supply capacity	Standard price	Reference Page
Solenoid valve type		ASEP-C-1000I-NP-2-0	Simple controller capable of operating with the same signal as the solenoid valve. Supports the use of both the single solenoid and the double solenoid types. Simple Absolute type makes the return to home unnecessary.	3 points	DC24V	See P109.	-	→P101
		ASEP-CW-10I-NP-2-0					-	
Positioner type		ACON-□-10I-NP-2-0 (Note 1)	Up to 512-points positioning possible. By attaching a simple absolute unit (sold separately), the return to home becomes unnecessary.	512 points			-	See the ROBO Cylinder general catalog.
Program type		ASEL-C-1-10I-NP-2-0	Programmable type. Capable of operating up to 2 axes. Simple Absolute unit cannot be used.	1500 points			-	

(Note 1) ACON can be used with C/CG/CY/PL/PO/SE type. Also, ROBOTNET can be used.

- Mini Slider type
- Mini Rod type
- Mini Table type
- Mini Linear Servo type
- Controller
- Compact
- Wide
- Flat
- Coupling
- Reverse-mounted

# RCA2-GS4N

ROBO Cylinder Mini Rod type Short Length Single-Guide Free Mount type Actuator Width 34mm 24V servo motor  
Ball screw specification/ Lead screw specification

<b>Model Description</b>	<b>RCA2</b>	<b>GS4N</b>	<b>I</b>	<b>20</b>		<b>30</b>			
	Series	Type	Encoder type	Motor type	Lead	Stroke	Compatible Controllers	Cable length	Option
			I: Incremental specification * Model number is "I" when used with simple absolute unit.	20: Servo Motor 20W	6: Ball screw 6mm 4: Ball screw 4mm 2: Ball screw 2mm 6S: Lead screw 6mm 4S: Lead screw 4mm 2S: Lead screw 2mm	30: 30mm	A1: ACON RACON ASEL A3: ASEP	N: None P: 1m S: 3m M: 5m X□□: Length Designation	Following options Refer to price table

\*See page 11 for details on the model descriptions.



(1) The horizontal payload is the value when used in combination with the guide so that a radial load and moment load are not applied to the rod.

(2) See P99 for correlation diagrams of the tip load and service life when a guide is not installed.

(3) The load capacity is the value when operated at 0.2G acceleration. Acceleration limit is value indicated above.

### Leads and Payloads

Model	Motor output (W)	Feed screw	Lead (mm)	Maximum payload		Rated thrust (N)	Positioning Repeatability (mm)	Stroke (mm)
				Horizontal (kg)	Vertical (kg)			
RCA2-GS4N-I-20-6-30-①-②-③	20	Ball screw	6	2	0.5	33.8	±0.02	30 (Fixed)
RCA2-GS4N-I-20-4-30-①-②-③			4	3	0.75	50.7		
RCA2-GS4N-I-20-2-30-①-②-③			2	6	1.5	101.5		
RCA2-GS4N-I-20-6S-30-①-②-③	20	Lead screw	6	0.25	0.125	19.9	±0.05	30 (Fixed)
RCA2-GS4N-I-20-4S-30-①-②-③			4	0.5	0.25	29.8		
RCA2-GS4N-I-20-2S-30-①-②-③			2	1	0.5	59.7		

Legend ① Compatible Controllers ② Cable length ③ Option

### Stroke and Maximum Speed

Lead	Stroke	
	6 (mm)	30 (mm)
Ball screw	6	270 <220>
	4	200
	2	100
Lead screw	6	220
	4	200
	2	100

\* < > Indicates Vertical Use (Unit = mm/s)

### Price list (by stroke)

Stroke (mm)	Type code	
	GS4N	
	Encoder type	
	Incremental	
	Feed screw	
	Ball screw	Lead screw
30	-	-

### (2) Cable length (price chart)

Type	Cable symbol	Standard price
Standard type (Robot cable)	P (1m)	-
	S (3m)	-
	M (5m)	-
Special length	X06 (6m) to X10 (10m)	-
	X11 (11m) to X15 (15m)	-
	X16 (16m) to X20 (20m)	-
		-

\* Robot type cable comes as standard with the RCA2 actuator.  
\* See page 113 for maintenance cables.

### (3) Option price list (standard price)

Title	Option code	See page	Standard price
Change the cable connector outlet direction	K2	Please refer to P40	-

### Actuator Specification

Item	Description
Drive System	Ball screw/Lead screw, φ6mm, rolled C10
Backlash	Ball screw: 0.1mm or Less/Lead screw: 0.3mm or less (initial state)
Frame	Material: Aluminum, white alumite treated
Ambient operating temperature, humidity	0 to 40 °C, 85% RH or less (no condensation)
Service life	Horizontal specification: 10 million cycles, Vertical specification: 5 million cycles

