

# RCP2-GR

RCP2-GRS



RCP2-GRM



RCP2-GRST



RCP2-GRHM



RCP2-GRHB

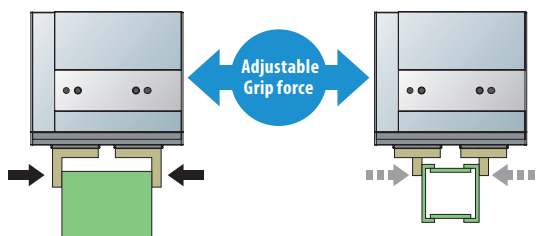


# A high-force gripper series offering much greater gripping force and moment rigidity is now available! The full lineup includes models of various sizes from small to large.

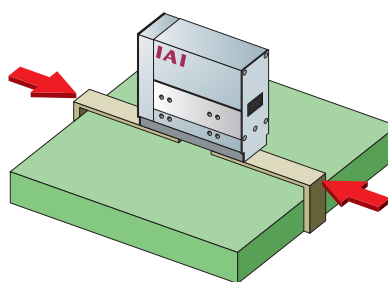


## Features

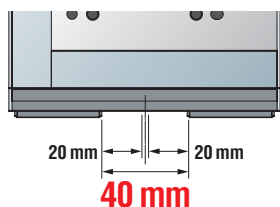
**1 Greater gripping force**  
The maximum gripping force is 200 N (~45lb), meaning that even heavy work parts can be gripped without fail. It is also possible to adjust the gripping force for each work part, so difficult-to-handle work parts such as those that deform easily are also supported.



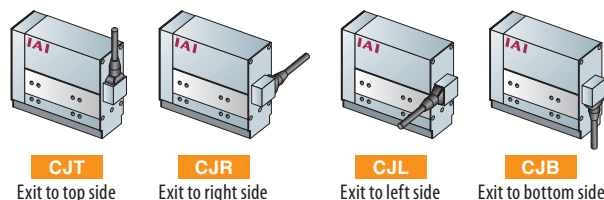
**2 Higher rigidity**  
Moment rigidity is achieved using internal ball guides. Large work parts can be supported.



**3 Longer stroke**  
Long strokes of up to 40 mm (20 mm per side) are supported, so work parts of different sizes can also be handled.

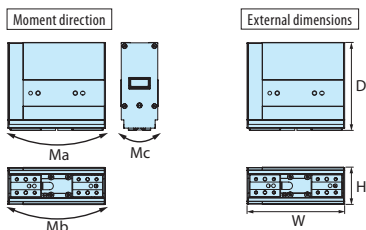


**4 Cable exit direction (optional)**  
The cables can exit to one of four directions including top, bottom, left and right.



## Gripper Lineup

Name	Smallest slide type	Small slide type	Small long-stroke type	Medium slide type	Medium high-force slide type	Large high-force slide type	
Model number	GRSS	GRS	GRST	GRM	GRHM	GRHB	
External View							
Opening/closing stroke (total of both sides)	8mm	10mm	100mm	14mm	32mm	40mm	
Maximum gripping force (N)	14	21	20/40	80	125	200	
Maximum opening/closing speed (mm/s)	78	33.3	75/34	36.7	100	100	
Allowable static load moment (N·m)	Ma	0.5	6.3	2.93	6.3	11.7	15.7
	Mb	0.5	6.3	2.93	6.3	16.7	26.4
	Mc	1.5	7	5	8.3	46.5	59.8
External dimensions (mm)	W	42	69	190	74	116	131
	H	24	30	33	36	44	50
	D	71	71	53.5	79	105	118
Mass (kg)	0.2	0.36	0.66	0.5	1.14	1.5	



NEW

NEW

## RCP2-GRSS ROBO Cylinder 2-Finger Gripper Mini Slider Type 42mm Width Pulse Motor

**Configuration:** RCP2 — GRSS — I — 20P — 30 — 8 —  —  —   
 Series — Type — Encoder — Motor — Deceleration Ratio — Stroke — Compatible Controllers — Cable Length — Option  
 I: Incremental  
 \* The Simple absolute encoder is also considered type "I".  
 20P: 20 □ size Pulse motor  
 30: 1/30 deceleration ratio  
 8: 8mm (4mm per side)  
 P1: PCON RPCON PSEL P3: PMEC PSEP  
 N: None P: 1m S: 3m M: 5m X   : Custom  
 NM: Reversed-home  
 FB: Flange bracket  
 SB: Shaft bracket  
 \* See page Pre-35 for an explanation of the naming convention.



Technical References P. A-5

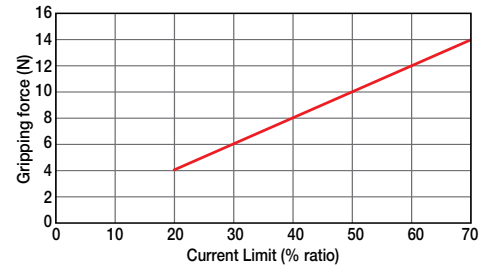


- The maximum opening/closing speed indicates the operating speed on one side. The relative operating speed is twice this value.
- The maximum gripping force is the sum of the gripping forces of both fingers, at a gripping point where there is no offset or overhang distance. The work piece weight that can be actually moved depends on the friction coefficient between the gripper fingers and the work piece, as well as on the shape of the work piece. As a rough guide, a work piece's weight should not exceed 1/10 to 1/20 of the gripping force. (See page A-74 for details.)
- The rated acceleration while moving is 0.3G.

### Gripping Force Adjustment

The gripping (pushing) force can be adjusted freely within the range of current limits of 20% to 70%.

\* The gripping forces in the following diagrams indicate the sums of gripping forces of both fingers.



\* Please note that, when gripping (pushing), the speed is fixed at 5mm/s.

### Actuator Specifications

#### Lead and Load Capacity

Model	Deceleration Ratio	Max. Gripping Force (N)	Stroke (mm)
RCP2-GRSS-I-20P-30-8-①-②-③	30	14	8 (4 per side)

Legend: ① Compatible controllers ② Cable length ③ Options

#### Stroke and Maxi. Opening/Closing Speed

Deceleration Ratio	Stroke	8 (mm)
	30	78

(Unit: mm/s)

#### Stroke List

Stroke (mm)	Standard Price
8	—

#### ② Cable List

Type	Cable Symbol	Standard Price
Standard Type (Robot Cables)	P (1m)	—
	S (3m)	—
	M (5m)	—
Special Lengths	X06 (6m) ~ X10 (10m)	—
	X11 (11m) ~ X15 (15m)	—
	X16 (16m) ~ X20 (20m)	—
		—

\* The standard cable is the motor-encoder integrated robot cable.

\* See page A-39 for cables for maintenance.

#### ③ Option List

Name	Option Code	See Page	Standard Price
Reversed-home	NM	→ A-33	—
Flange bracket	FB	→ A-26	—
Shaft bracket	SB	→ A-36	—

#### Actuator Specifications

Item	Description
Drive System	Worm gear + helical gear + helical rack
Positioning Repeatability	±0.01 mm
Backlash	0.2mm or less per side (constantly pressed out by a spring)
Lost Motion	0.05mm or less per side
Guide	Linear guide
Allowable Static Load Moment	Ma: 0.5 N·m Mb: 0.5 N·m Mc: 1.5 N·m
Weight	0.2kg
Ambient Operating Temp./Humidity	0~40°C, 85% RH or less (non-condensing)

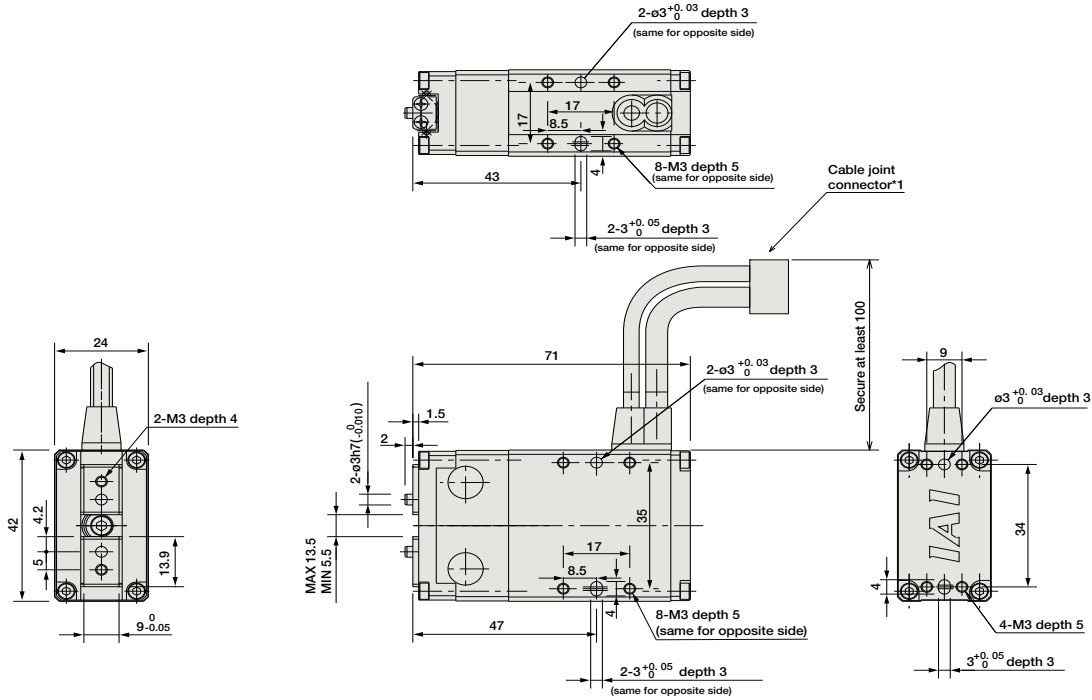
Dimensions

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



- \* The opening side of the slider is the home position.
- \*1 The motor-encoder cable is connected here. See page A-39 for details on cables.

For Special Orders P. A-9



Weight (kg) 0.2

① Compatible Controllers

The RCP2 series actuators can operate with the controllers below. Select the controller according to your usage.

Name	External View	Model	Description	Max. Positioning Points	Input Voltage	Power Supply Capacity	Standard Price	See Page
Solenoid Valve Type		PMEC-C-20PI-NP-2-①	Easy-to-use controller, even for beginners	3 points	AC100V AC200V	P481 See	-	→ P477
	Splash-Proof Solenoid Valve Type		PSEP-C-20PI-NP-2-0					
Positioner Type			PCON-C-20PI-NP-2-0	Positioning is possible for up to 512 points	512 points	-	-	
Safety-Compliant Positioner Type		PCON-CG-20PI-NP-2-0						
Pulse Train Input Type (Differential Line Driver)		PCON-PL-20PI-NP-2-0	Pulse train input type with differential line driver support	(-)	DC24V	2A max.	-	→ P525
Pulse Train Input Type (Open Collector)		PCON-PO-20PI-NP-2-0	Pulse train input type with open collector support					
Serial Communication Type		PCON-SE-20PI-N-0-0	Dedicated to communication	64 points				
Field Network Type		RPCON-20P	Dedicated to field network	768 points				→ P503
Program Control Type		PSEL-C-1-20PI-NP-2-0	Programmed operation is possible Operation is possible on up to 2 axes	1500 points				→ P557

\* This is for the single-axis PSEL.  
\* ① is a placeholder for the power supply voltage (1: 100V, 2: 100 ~ 240V).

- Slider Type
- Mini
- Standard
- Controllers Integrated
- Rod Type
- Mini
- Standard
- Controllers Integrated
- Table/Arm/Flat Type
- Mini
- Standard
- Gripper/Rotary Type
- Linear Servo Type
- Cleanroom Type
- Splash-Proof
- Controllers
- PMEC/AMEC
- PSEP/ASEP
- ROBO NET
- ERC2
- PCON
- ACON
- SCON
- PSEL
- ASEL
- SSEL
- XSEL
- Pulse Motor
- Servo Motor (24V)
- Servo Motor (200V)
- Linear Servo Motor



# RCP2-GRS

ROBO Cylinder 2-Finger Gripper Mini Slider Type 69mm Width Pulse Motor

■ Configuration: **RCP2** — **GRS** — **I** — **20P** — **1** — **10** —  —  —

Series — Type — Encoder — Motor — Deceleration Ratio — Stroke — Compatible Controllers — Cable Length — Option

I: Incremental  
\* The Simple absolute encoder is also considered type "I".

20P: 20 □ size Pulse motor  
1: 1/1 deceleration ratio  
10: 10mm (5mm per side)

P1: PCON  
RPCON  
PSEL  
P3: PMEC  
PSEP

N: None  
P: 1m  
S: 3m  
M: 5m  
X  : Custom  
R  : Robot cable

SB: Shaft bracket  
FB: Flange bracket

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



Technical References P. A-5

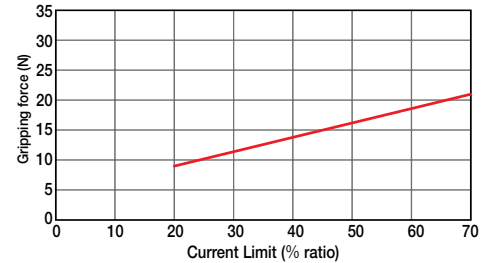


- (1) The maximum opening/closing speed indicates the operating speed on one side. The relative operating speed is twice this value.
- (2) The maximum gripping force is the sum of the gripping forces of both fingers, at a gripping point where there is no offset or overhang distance. The work piece weight that can be actually moved depends on the friction coefficient between the gripper fingers and the work piece, as well as on the shape of the work piece. As a rough guide, a work piece's weight should not exceed 1/10 to 1/20 of the gripping force. (See page A-74 for details.)
- (3) The rated acceleration while moving is 0.3G.

### ■ Gripping Force Adjustment

The gripping (pushing) force can be adjusted freely within the range of current limits of 20% to 70%.

\* The gripping forces in the following diagrams indicate the sums of gripping forces of both fingers.



\* Please note that, when gripping (pushing), the speed is fixed at 5mm/s.

### Actuator Specifications

#### ■ Lead and Load Capacity

Model	Deceleration Ratio	Max. Gripping Force (N)	Stroke (mm)
RCP2-GRS-I-20P-1-10-①-②-③	1	21	10 (5 per side)

Legend: ① Compatible controllers ② Cable length ③ Options

#### ■ Stroke and Maxi. Opening/Closing Speed

Deceleration Ratio	Stroke	10 (mm)
	1	33.3

(Unit: mm/s)

#### Stroke List

Stroke (mm)	Standard Price
10	—

#### ② Cable List

Type	Cable Symbol	Standard Price
Standard Type	P (1m)	—
	S (3m)	—
	M (5m)	—
Special Lengths	X06 (6m) ~ X10 (10m)	—
	X11 (11m) ~ X15 (15m)	—
	X16 (16m) ~ X20 (20m)	—
Robot Cable	R01 (1m) ~ R03 (3m)	—
	R04 (4m) ~ R05 (5m)	—
	R06 (6m) ~ R10 (10m)	—
	R11 (11m) ~ R15 (15m)	—
	R16 (16m) ~ R20 (20m)	—

\* See page A-39 for cables for maintenance.

#### ③ Option List

Name	Option Code	See Page	Standard Price
Flange bracket	FB	→ A-26	—
Shaft bracket	SB	→ A-36	—

#### Actuator Specifications

Item	Description
Drive System	Timing belt + trapezoidal screw (1.5 lead)
Positioning Repeatability	±0.01 mm
Backlash	0.15mm or less per side (constantly pressed out by a spring)
Lost Motion	0.1mm or less per side
Guide	Cross roller guide
Allowable Static Load Moment	Ma: 6.3 N·m Mb: 6.3 N·m Mc: 7.0 N·m
Weight	0.36kg
Ambient Operating Temp./Humidity	0~40°C, 85% RH or less (non-condensing)

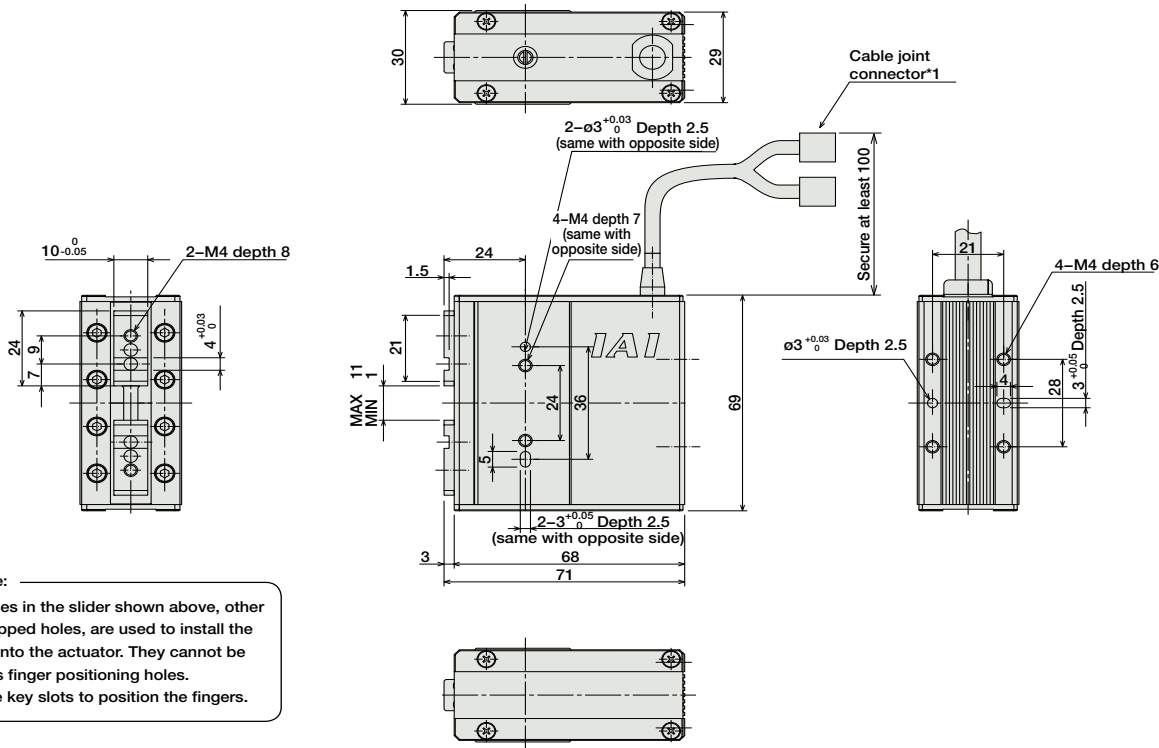
Dimensions

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

For Special Order P. A-9



- \* The opening side of the slider is the home position.
- \*1 The motor-encoder cable is connected here. See page A-39 for details on cables.



**Note:**  
The holes in the slider shown above, other than tapped holes, are used to install the slider onto the actuator. They cannot be used as finger positioning holes. Use the key slots to position the fingers.

Weight (kg) 0.36

① Compatible Controllers

The RCP2 series actuators can operate with the controllers below. Select the controller according to your usage.

Name	External View	Model	Description	Max. Positioning Points	Input Voltage	Power Supply Capacity	Standard Price	See Page
Solenoid Valve Type		PMEC-C-20PI-NP-2-①	Easy-to-use controller, even for beginners	3 points	AC100V AC200V	See P481	-	→ P477
	Splash-Proof Solenoid Valve Type		PSEP-C-20PI-NP-2-0				Operable with same signal as solenoid valve. Supports both single and double solenoid types. No homing necessary with simple absolute type.	-
Positioner Type			PCON-C-20PI-NP-2-0	Positioning is possible for up to 512 points	512 points	-		-
Safety-Compliant Positioner Type		PCON-CG-20PI-NP-2-0	-			-		
Pulse Train Input Type (Differential Line Driver)		PCON-PL-20PI-NP-2-0	Pulse train input type with differential line driver support	(-)	DC24V	2A max.	-	→ P525
Pulse Train Input Type (Open Collector)		PCON-PO-20PI-NP-2-0	Pulse train input type with open collector support				-	-
Serial Communication Type		PCON-SE-20PI-N-0-0	Dedicated to serial communication	64 points	-	-	-	
Field Network Type		RPCON-20P	Dedicated to field network	788 points	-	-	-	→ P503
Program Control Type		PSEL-C-1-20PI-NP-2-0	Programmed operation is possible. Operation is possible on up to 2 axes	1500 points	-	-	-	→ P557

\* This is for the single-axis PSEL.  
\* ① is a placeholder for the power supply voltage (1: 100V, 2: 100~240V).

- Slider Type
- Mini
- Standard
- Controllers Integrated
- Rod Type
- Mini
- Standard
- Controllers Integrated
- Table/Arm/Flat Type
- Mini
- Standard
- Gripper/Rotary Type
- Linear Servo Type
- Cleanroom Type
- Splash-Proof
- Controllers
- PMEC/AMEC
- PSEP/ASEP
- ROBO NET
- ERC2
- PCON
- ACON
- SCON
- PSEL
- ASEL
- SSEL
- XSEL
- Pulse Motor
- Servo Motor (24V)
- Servo Motor (200V)
- Linear Servo Motor



Dimensions

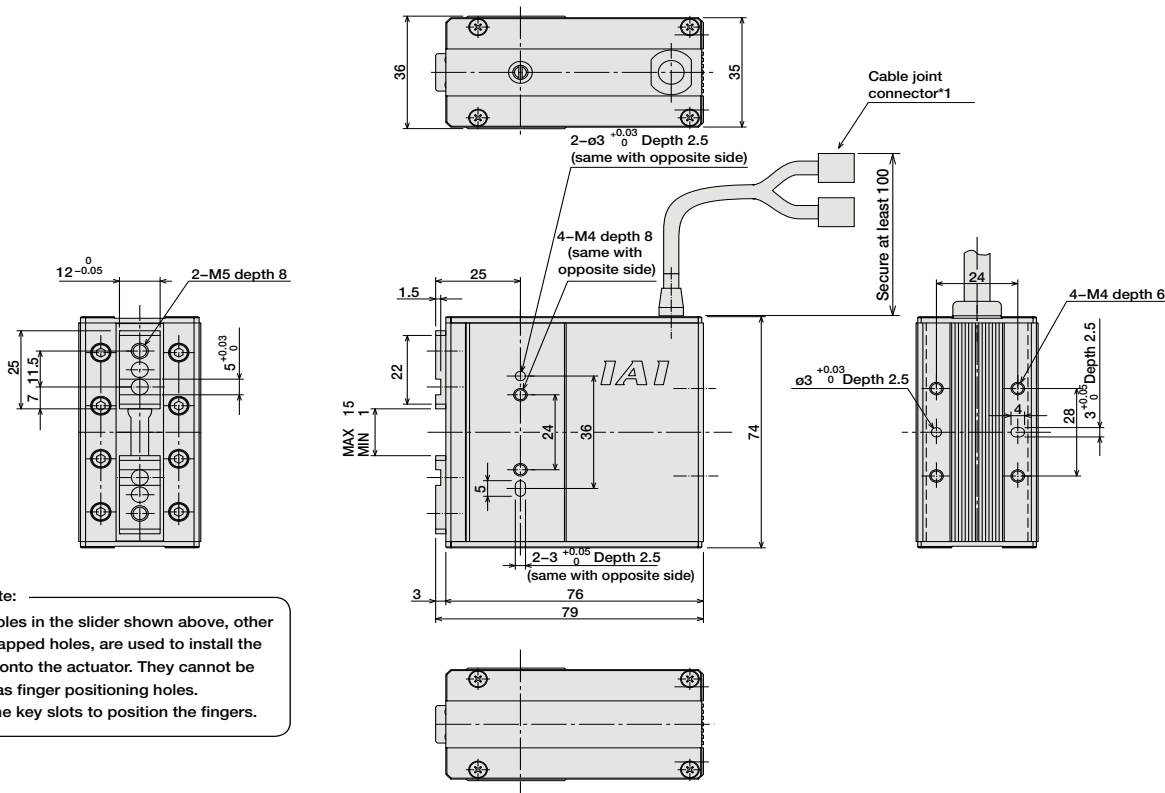
CAD drawings can be downloaded from IAI website. [www.intelligentactuator.com](http://www.intelligentactuator.com)

For Special Order

P. A-9



- \* The opening side of the slider is the home position.
- \*1 The motor-encoder cable is connected here. See page A-39 for details on cables.



**Note:**  
The holes in the slider shown above, other than tapped holes, are used to install the slider onto the actuator. They cannot be used as finger positioning holes. Use the key slots to position the fingers.

Weight (kg) 0.5

① Compatible Controllers

The RCP2 series actuators can operate with the controllers below. Select the controller according to your usage.

Name	External View	Model	Description	Max. Positioning Points	Input Voltage	Power Supply Capacity	Standard Price	See Page
Solenoid Valve Type		PMEC-C-28PI-NP-2-①	Easy-to-use controller, even for beginners	3 points	AC100V AC200V	See P481	-	→ P477
Splash-Proof Solenoid Valve Type		PSEP-C-28PI-NP-2-0	Operable with same signal as solenoid valve. Supports both single and double solenoid types. No homing necessary with simple absolute type.				-	→ P487
Positioner Type		PCON-C-28PI-NP-2-0	Positioning is possible for up to 512 points	512 points	DC24V	2A max.	-	
Safety-Compliant Positioner Type		PCON-CG-28PI-NP-2-0					-	
Pulse Train Input Type (Differential Line Driver)		PCON-PL-28PI-NP-2-0	Pulse train input type with differential line driver support	(-)	DC24V	2A max.	-	→ P525
Pulse Train Input Type (Open Collector)		PCON-PO-28PI-NP-2-0	Pulse train input type with open collector support				-	
Serial Communication Type		PCON-SE-28PI-N-0-0	Dedicated to serial communication	64 points			-	
Field Network Type		RPCON-28P	Dedicated to field network	768 points			-	→ P503
Program Control Type		PSEL-C-1-28PI-NP-2-0	Programmed operation is possible. Operation is possible on up to 2 axes	1500 points			-	→ P557

\* This is for the single-axis PSEL.  
\* ① is a placeholder for the power supply voltage (1: 100V, 2: 100~240V).



# RCP2-GRST ROBO Cylinder 2-Finger Gripper Long Stroke Slide Type 130~190mm Width Pulse Motor

**Configuration:** RCP2 — GRST — I — 20P —  —  —  —  —

Series — Type — Encoder — Motor — Deceleration Ratio — Stroke — Compatible Controllers — Cable Length — Option

I: Incremental  
 \* The Simple absolute encoder is also considered type "I".

20P: 20  size Pulse motor

1: 1/1 deceleration ratio  
 High-Speed Type  
 2: 1/2 deceleration ratio  
 Standard Type

40: 40mm  
 60: 60mm  
 80: 80mm  
 100: 100mm

P1: PCON  
 RPCON  
 PSEL  
 P3: PMEC  
 PSEP

N: None  
 P: 1m  
 S: 3m  
 M: 5m  
 X : Custom

See Options below  
 \* Be sure to specify the side from which you want the cable to exit (A0 or A1).

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



Technical References P. A-5

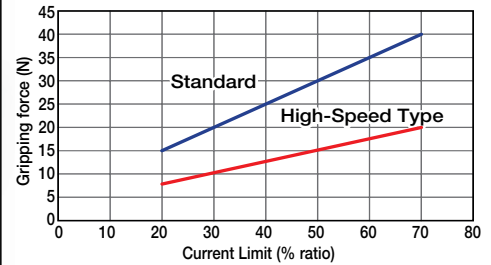


- The maximum opening/closing speed indicates the operating speed on one side. The relative operating speed is twice this value.
- The maximum gripping force is the sum of the gripping forces of both fingers, at a gripping point where there is no offset or overhang distance. The work piece weight that can be actually moved depends on the friction coefficient between the gripper fingers and the work piece, as well as on the shape of the work pieces. As a rough guide, a work piece's weight should not exceed 1/10 to 1/20 of the gripping force. (See page A-74 for details.)
- The rated acceleration while moving is 0.3G.

### Gripping Force Adjustment

The gripping (pushing) force can be adjusted freely within the range of current limits of 20% to 70%.

\* The gripping forces in the following diagrams indicate the sums of gripping forces of both fingers.



\* Please note that, when gripping (pushing), the speed is fixed at 5mm/s.

### Actuator Specifications

#### Lead and Load Capacity

Model	Deceleration Ratio	Max. Gripping Force (N)	Stroke (mm)
RCP2-GRST-I-20P-1-①-②-③-④	1	20	40~100 (20mm increments)
RCP2-GRST-I-20P-2-①-②-③-④	2	40	

Legend: ① Stroke ② Compatible controller ③ Cable length ④ Options

#### Stroke and Maxi. Opening/Closing Speed

Deceleration Ratio	Stroke	40~100 (mm)
	1	75
2	34	

(Unit: mm/s)

#### ① Stroke List

Stroke (mm)	Standard Price
40	—
60	—
80	—
100	—

#### ③ Cable List

Type	Cable Symbol	Standard Price
Standard Type (Robot Cables)	P (1m)	—
	S (3m)	—
	M (5m)	—
Special Lengths	X06 (6m) ~ X10 (10m)	—
	X11 (11m) ~ X15 (15m)	—
	X16 (16m) ~ X20 (20m)	—
		—

\* The standard cable is the motor-encoder integrated robot cable.

\* See page A-39 for cables for maintenance.

#### ④ Option List

Name	Option Code	See Page	Standard Price
Reversed-home	NM	→ A-33	—
Cable exiting from bottom	A0	→ A-25	—
Cable exiting from the side	A1	→ A-25	—

\*Be sure to specify the side from which you want the cable to exit (A0 or A1).

#### Actuator Specifications

Item	Description
Drive System	Timing belt + worm/rack gear
Positioning Repeatability	±0.01mm
Backlash	0.2mm or less per side
Lost Motion	—
Guide	Linear guide
Allowable Static Load Moment	Ma: 2.93 N·m Mb: 2.93 N·m Mc: 5.0 N·m
Weight	0.51kg(40-stroke) ~ 0.66kg (100-stroke)
Ambient Operating Temp./Humidity	0~40°C, 85% RH or less (non-condensing)

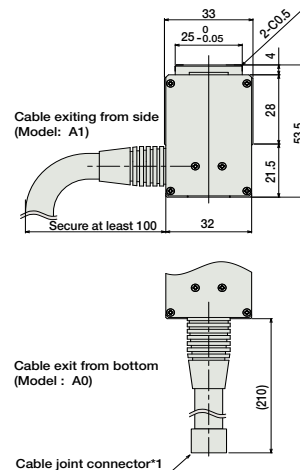
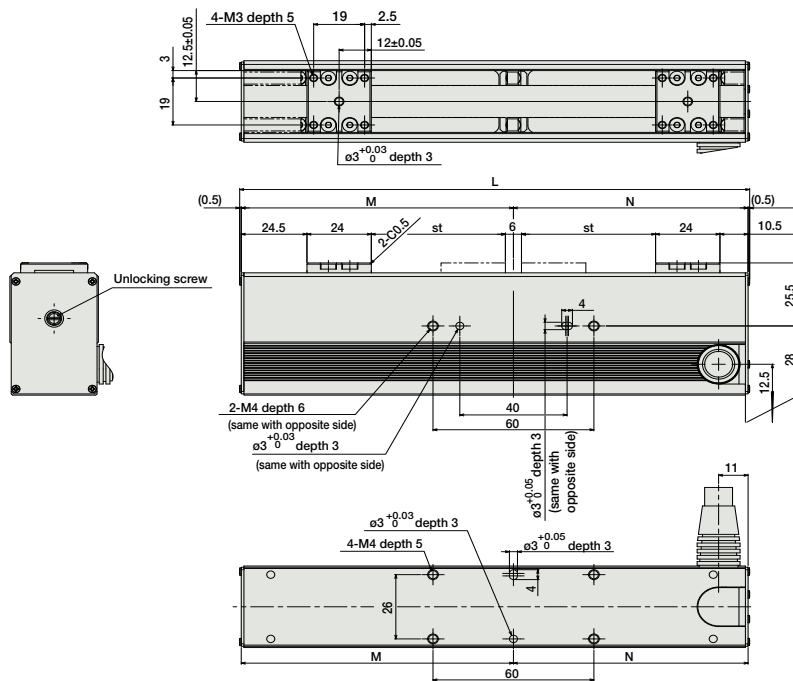
Dimensions

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



- \* The opening side of the slider is the home position.
- \*1 The motor-encoder cable is connected here. See page A-39 for details on cables.

For Special Orders P. A-9



■ Dimensions and Weight by Stroke

Stroke	40	60	80	100
L	130	150	170	190
M	71.5	81.5	91.5	101.5
N	57.5	67.5	77.5	87.5
Weight (kg)	0.51	0.56	0.61	0.66

② Compatible controller

The RCP2 series actuators can operate with the controllers below. Select the controller according to your usage.

Name	External View	Model	Description	Max. Positioning Points	Input Voltage	Power Supply Capacity	Standard Price	See Page
Solenoid Valve Type		PMEC-C-20PI-NP-2-①	Easy-to-use controller, even for beginners	3 points	AC100V AC200V	See P481	-	→ P477
		PSEP-C-20PI-NP-2-0	Operable with same signal as solenoid valve. Supports both single and double solenoid types. No homing necessary with simple absolute type.				-	→ P487
Splash-Proof Solenoid Valve Type		PSEP-CW-20PI-NP-2-0					-	
Positioner Type		PCON-C-20PI-NP-2-0	Positioning is possible for up to 512 points	512 points	DC24V	2A max.	-	
Safety-Compliant Positioner Type		PCON-CG-20PI-NP-2-0					-	
Pulse Train Input Type (Differential Line Driver)		PCON-PL-20PI-NP-2-0	Pulse train input type with differential line driver support	(-)	DC24V	2A max.	-	→ P525
Pulse Train Input Type (Open Collector)		PCON-PO-20PI-NP-2-0	Pulse train input type with open collector support				-	
Serial Communication Type		PCON-SE-20PI-N-0-0	Dedicated to serial communication	64 points			-	
Field Network Type		RPCON-20P	Dedicated to field network	768 points			-	→ P503
Program Control Type		PSEL-C-1-20PI-NP-2-0	Programmed operation is possible Operation is possible on up to 2 axes	1500 points			-	→ P557

\* This is for the single-axis PSEL.  
\* ① is a placeholder for the power supply voltage (1: 100V, 2: 100~240V).

- Slider Type
- Mini
- Standard
- Controllers Integrated
- Rod Type
- Mini
- Standard
- Controllers Integrated
- Table/Arm/Flat Type
- Mini
- Standard
- Gripper/Rotary Type
- Linear Servo Type
- Cleanroom Type
- Splash-Proof
- Controllers
- PMEC/AMEC
- PSEP/ASEP
- ROBO NET
- ERC2
- PCON
- ACON
- SCON
- PSEL
- ASEL
- SSEL
- XSEL
- Pulse Motor
- Servo Motor (24V)
- Servo Motor (200V)
- Linear Servo Motor

## Model Specification Items

<b>RCP2</b> - <input type="text"/>	<b>I</b> - <input type="text"/>	<b>2</b> - <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	
Series	Type	Encoder type	Motor type	Gear ratio	Opening/closing stroke	Applicable controller	Cable length	Options
	GRHM: Medium high-force type GRHB: Large high-force type	I: Incremental specification	35P: Pulse motor, size 35□ 42P: Pulse motor, size 42□	2: Feed screw, lead 2	32: 32 mm (16 mm per side) 40: 40 mm (20 mm per side)	P1:PCON RPCON PSEL P3:PMEC PSEP	N: None P: 1 m S: 3 m M: 5 m X□□: Specified length	CJT: Optional cable exit direction (top) CJR: Optional cable exit direction (right) CJL: Optional cable exit direction (left) CJB: Optional cable exit direction (bottom) FB: Flange bracket SB: Shaft bracket

### Actuatos

Model number	
RCP2-GRHM-I-35P-2-32-□	
RCP2-GRHB-I-42P-2-40-□	

### Options

Name	Option code	
Optional cable exit direction (top)	CJT	
Optional cable exit direction (right)	CJR	
Optional cable exit direction (left)	CJL	
Optional cable exit direction (bottom)	CJB	
Flange bracket	FB	
Shaft bracket	SB	

### Cables

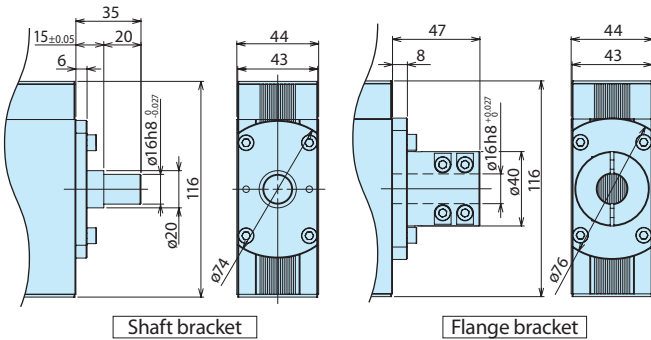
Type	Cable Symbol	
Standard type (robot cable)	P (1m)	
	S (3m)	
	M (5m)	
Special length	X06 (6m) ~ X10 (10m)	
	X11 (11m) ~ X15 (15m)	
	X16 (16) ~ X20 (20m)	

### Applicable Controllers

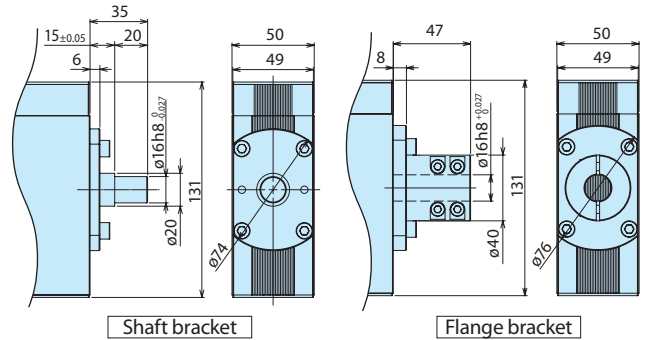
Name	Model number	
Solenoid type (100-V specification)	PMEC-C-□-NP-2-1	
Solenoid type (24-V specification)	PSEP-C-□-NP-2-0	
Splash-proof solenoid type (24-V specification)	PSEP-CW-□-NP-2-0	
Positioner type	PCON-C-□-NP-2-0	
Field network type	RPCON-□	
Program type	PSEL-C-1-□-NP-2-0	

### External Dimensions – Mounting Bracket

#### • RCP2-GRHM



#### • RCP2-GRHB

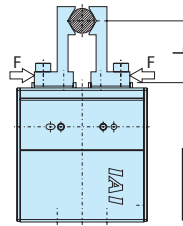


### Selection Guideline

The maximum work part mass that can be transported varies depending on the coefficient of friction determined by the materials of the robot's finger and work part as well as on the shape of the work part.

As a guide, the maximum work part mass should not be more than one-tenth to one-twentieth of the normal gripping force.

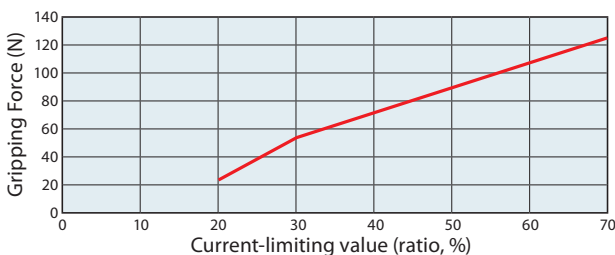
Also, when a large acceleration/deceleration or impact is applied while the work part is transported, an allowance (one-thirtieth to one-fiftieth) must also be considered. The distance from the finger installation surface to the gripping point (L) shall conform to the applicable dimension shown to the right.



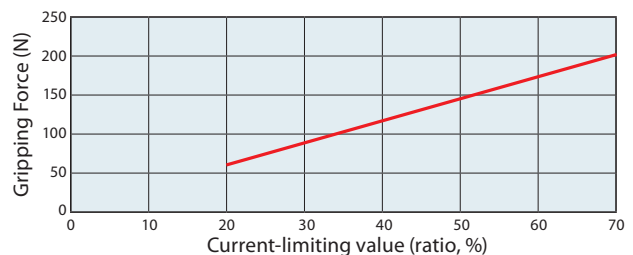
RCP2-GRHM ⇨ □ 90 mm max.  
RCP2-GRHB ⇨ □ 90 mm max.

In push-motion operation, the gripping force (push force) can be adjusted within a range of 20 to 70% in current-limiting values of the controller.

#### • RCP2-GRHM



#### • RCP2-GRHB



**Caution**

- Accuracy of the relationship between the push force (gripping force) and current-limiting value is not assured. The above graphs should only be used as a reference.
- Take note that if the push force is too small, the push force may vary or malfunction may result due to the slide resistance, etc. The current-limiting value should be at least 20%.



**Note**

- The finger should be as small and light as possible. If the finger is long, large or heavy, performance may drop or the guide may be negatively affected.

**Specification Table**

Type / Model number	Medium size high-force type GRHM	Large size high-force type GRHB
Opening/closing stroke	32 mm (16 mm per side)	40 mm (20 mm per side)
Maximum grip force (N)	125	200
Maximum opening/closing speed	100 mm/s (per side)	100mm/s (per side)
Positioning repeatability	±0.01mm	±0.01mm
Allowable static load moment (N·m)	Ma: 11.7 Mb: 16.7 Mc: 46.5	Ma: 15.7 Mb: 26.4 Mc: 59.8
Position detection method	Magnetic Encoder (incremental)	
Use environment	Temperature 0 to 40°C, humidity 20 to 85% RH or less (non-condensing)	
External dimensions (mm)	44 (D) × 116 (W) × 105 (L)	50 (D) × 131 (W) × 118 (H)
Mass (kg)	1.14	1.5

**External Dimensions**

