

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

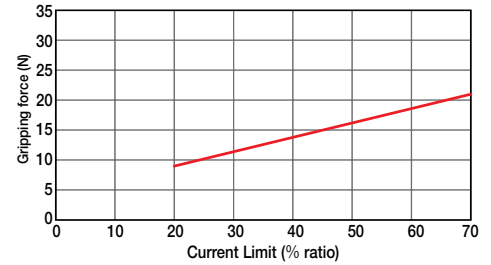


- (1) The maximum opening/closing speed indicates the operating speed on one side. The relative operating speed is twice this value.
- (2) The maximum gripping force is the sum of the gripping forces of both fingers, at a gripping point where there is no offset or overhang distance. The work piece weight 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)

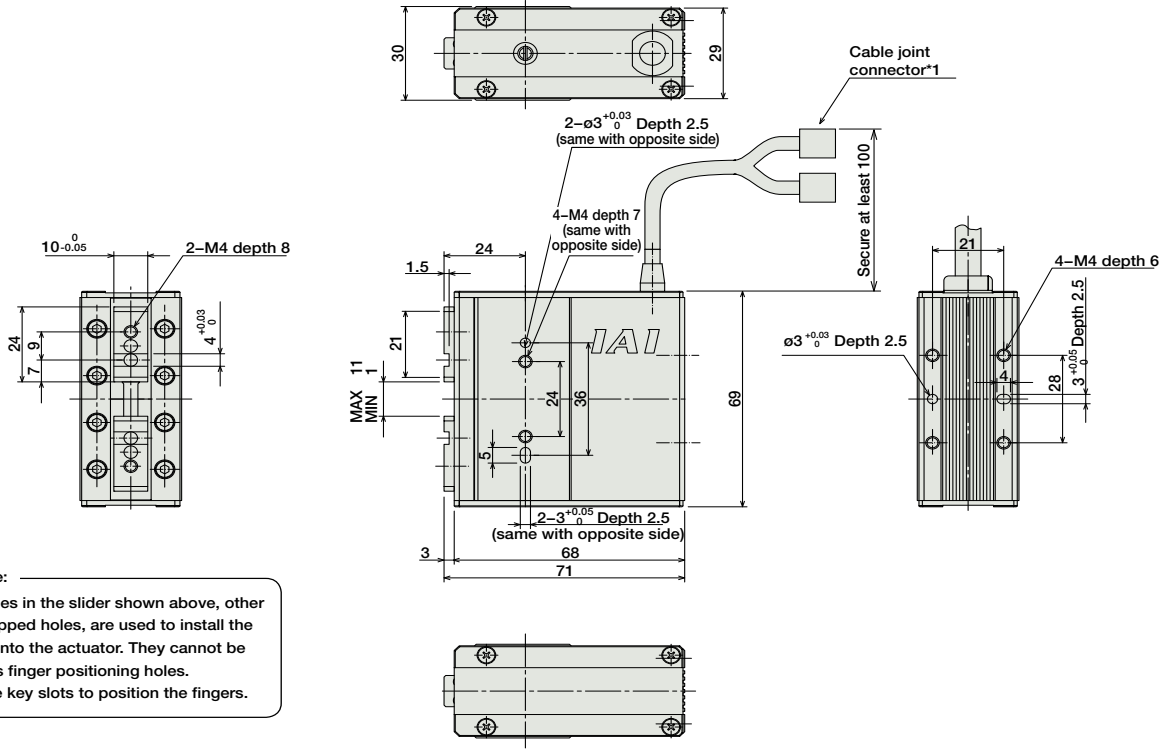
Dimensions

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

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					
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