RCP2-GRM

ROBO Cylinder 2-Finger Gripper Medium Slider Type 74mm Width Pulse Motor

■ Configuration:

RCP2 — GRM — I — 28P — 1 — 14 — □ — □ — □

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

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

Motor
28P: 28 □ size Pulse motor

Deceleration Ratio
1 : 1/1 deceleration ratio

Stroke
14: 14mm (7mm per side)

Compatible Controllers
P1: PCON
RPCON
PSEL
P3: PMEC
PSEP

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

Option
SB : Shaft bracket
FB : Flage bracket

* See page Pre-35 for explanation of each code that makes up the configuration name.

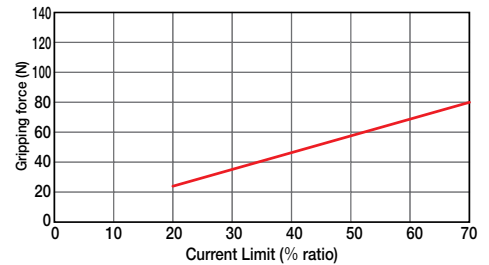Technical References 👉 P. A-5

POINT — Notes on Selection

(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 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.)
(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-GRM-I-28P-1-14-①-②-③	1	80	14

Legend: ① Compatible controllers ② Cable length ③ Options

■ Stroke and Maxi. Opening/Closing Speed

Stroke / Deceleration Ratio	14 (mm)
1	36.7

(Unit: mm/s)

Stroke List

Stroke (mm)	Standard Price
14	–

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

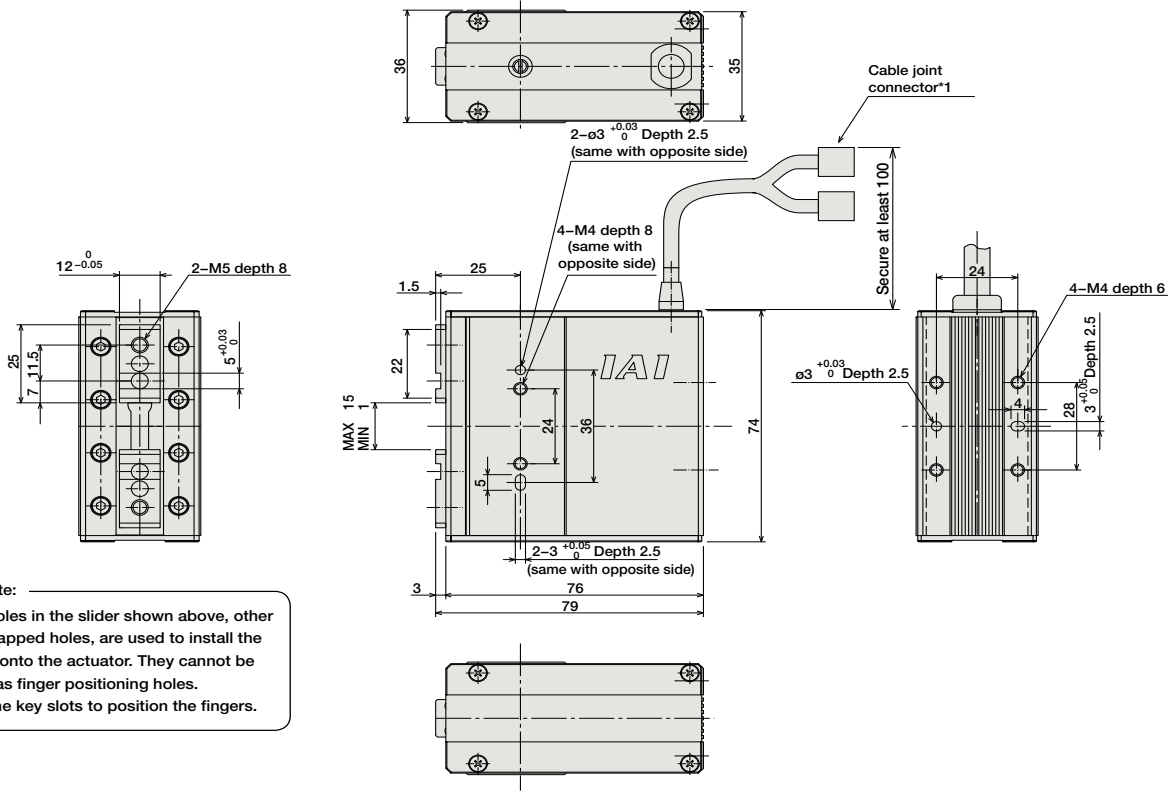| Item	Description
Drive System	Timing belt + trapezoidal screw (1.5 lead)
Positioning Repeatability	±0.01mm
Backlash	0.15mm or less per side (constantly pressed out by a spring)
Lost Motion	0.1mm or less per side
Guide	Cross roller guide
Allowable Static Load Moment	Ma: 6.3 N·m Mb: 6.3 N·m Mc: 8.3 N·m
Weight	0.5kg
Ambient Operating Temp./Humidity	0～40°C, 85% RH or less (non-condensing)

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

2D CAD   3D CAD

* 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.

Cable joint connector*1

2–ø3 +0.03/0 Depth 2.5 (same with opposite side)

4–M4 depth 8 (same with opposite side)

Secure at least 100

2–M5 depth 8

12 0/−0.05

5 +0.03/0

25   7 11.5

MAX 15 / MIN 1

22

24

36

74

25

1.5

5

2-3 +0.05/0 Depth 2.5 (same with opposite side)

3   76

79

24

4–M4 depth 6

ø3 +0.03/0 Depth 2.5

4

28   3 +0.05/0 Depth 2.5

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		AC100V AC200V	See P481	–	→ P477
		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.	3 points	DC24V	2A max.	–	→ P487
Splash–Proof Solenoid Valve Type		PSEP–CW–28PI–NP–2–0					–	
Positioner Type		PCON–C–28PI–NP–2–0	Positioning is possible for up to 512 points	512 points			–	→ P525
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	(–)			–	
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).