

Gripper Type/Rotary Type

RCP2 RCS2



RCP2-GRSS



RCP2-GRLS



RCP2-GRS



RCP2-GRM



RCP2-GRST



RCP2-GR3LS



RCP2-GR3SS



RCS2-GR8



RCP2-RTBS/RTBSL



RCP2-RTB/RTBL



RCP2-RTBB/RTBBL



RCP2-RTCS/RTCSL



RTC/RTCL



RCP2-RTCB/RTCBL



RCS2-RT6



RCS2-RT6R



RCS2-RT7R

Gripper Type/Rotary Type

	2-Finger Gripper	Mini Slider Type	42mm Width	RCP2-GRSS	333
		Mini Lever Type	42mm Width	RCP2-GRLS	335
		Small Slider Type	69mm Width	RCP2-GRS	337
RCP2		Medium Slider Type	74mm Width	RCP2-GRM	339
series		Long Stroke Slider Type	130mm Width		
Pulse			\$ 190mm	RCP2-GRST	341
Motor Type	3-Finger Gripper	Lever Type	62mm Width	RCP2-GR3LS	343
.,,,,			80mm Width	RCP2-GR3LM	345
		Slider Type	62mm Width	RCP2-GR3SS	347
			80mm Width	RCP2-GR3SM	349
RCS2	2 Finger Gripper	Long Stroke Slider Type	104mm Width		
series			\$ 284mm	RCS2-GR8	351
200V Servo					
Motor Type					
Турс					
	Rotary	Small Vertical Type	45mm Width	RCP2-RTBS / RTBSL	353
RCP2		Small Flat Type	72mm Width	RCP2-RTCS / RTCSL	355
series		Medium Vertical Type	50mm Width	RCP2-RTB / RTBL	357
Pulse		Medium Flat Type	88mm Width	RCP2-RTC / RTCL	359
Motor Type		Large Vertical Type	76mm Width	RCP2-RTBB / RTBBL	361
1,700		Large Flat Type	124mm Width	RCP2-RTCB / RTCBL	363
DCCO	Rotary	Motor Straight Type	64mm Width	RCS2-RT6	365
RCS2	ĺ	Side-Mounted Motor Type	64mm Width	RCS2-RT6R	367
series		Side-Mounted Motor, Hollow Axis Type	68mm Width	RCS2-RT7R	369
200V Servo Motor					
Туре					

Slider Type

Mini

Controlle

Rod Type

Mini

Standard

Table/Arm /Flat Type

Mini

Gripper/

Linear Serv

Cleanroom Type

_

/AMEC /PSEP

ROBO NET

ERC2

ACON

SCON

PSEL

ASEL

XSEL

Pulse Moto

Servo Mot (24V)

Servo Mot (200V)

Servo Mo

③ Option List

Reversed-home

Flange bracket

Shaft bracket

Name

CP2-GRSS Configuration: RCP2 - GRSS -**20P** 30 8 npatible Cont Cable Lengt N : None P : 1m S : 3m I: Incremental * The Simple 20P : 20 □ size 30: 1/30 8: 8mm P1: PCON NM:Reversed-home RPCON Pulse motor deceleration (4mm per side) FB:Flange bracket absolute encoder PSEL SB:Shaft bracket is also considered type "I". PSEP * See page Pre-35 for an explanation of the naming convention.



(1) The maximum opening/closing speed indicates the operating speed on one side. The relative operating speed is twice this

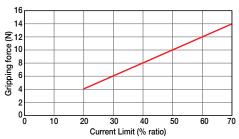
The maximum gripping force is the sum of the gripping forces of both fingers, at a gripping point where there is no offset or overhang distance. The work piece weight that can be actually moved depends on the friction coefficient between the gripper fingers and the work piece, as well as on the shape of the work piece. As a rough guide, a work piece's weight should not exceed 170 to 1720 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-GRSS-I-20P-30-8-①-②-③	30	14	8 (4 per side)

See Page

→ A-33

→ A-26 → A-36 Standard Price

■ Stroke and Maxi. Opening/Closing Speed Stroke 30 78 (Unit: mm/s)

Stroke List Stroke Standard Price (mm) 8

Option Code

NM

FB

SB

Legend: ① Compatible controllers ② Cable length ③ Options

② Cable List						
Туре	Cable Symbol	Standard Price				
Standard Type	P (1m)	_				
(Robot Cables)	S (3m)	-				
(Robot Cables)	M (5m)	-				
	X06 (6m) ~ X10 (10m)	-				
Special Lengths	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.

Actuator Specifica	1110113
Item	
Drive System	Worm gear + he
Positioning Repeatability	±0.01mm
Backlash	0.2mm or less per
Lost Motion	0.05mm or less

Description elical gear + helical rack r side (constantly pressed out by a spring) per side Guide Linear guide Ma: 0.5 N·m Mb: 0.5 N·m Mc: 1.5 N·m Allowable Static Load Moment 0.2kg Ambient Operating Temp./Humidity 0~40°C, 85% RH or less (non-condensing)

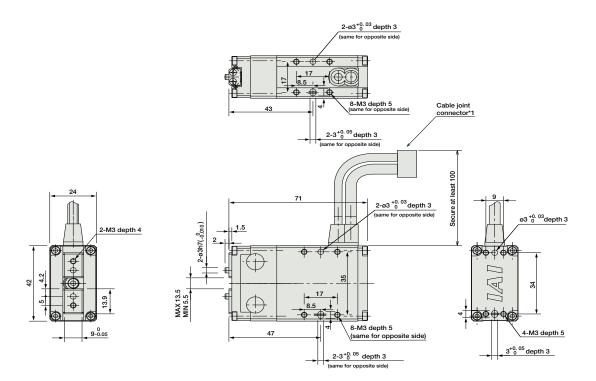
CAD drawings can be downloaded from IAI website. www.intelligentactuator.com

For Special Orders





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



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	1112	PMEC-C-20PI-NP-2-①	Easy-to-use controller, even for beginners		AC100V AC200V		-	→ P477	
Sciencia valve type		PSEP-C-20PI-NP-2-0	Operable with same signal as solenoid valve. Supports both single and double solenoid types.	3 points			-	→ P487	
Splash-Proof Solenoid Valve Type	1	PSEP-CW-20PI-NP-2-0	No homing necessary with simple absolute type.		510 points	-	-	→ P487	
Positioner Type	ŧ	PCON-C-20PI-NP-2-0	- Positioning is possible for up to 512 points 512 points			12 points			-
Safety-Compliant Positioner Type		PCON-CG-20PI-NP-2-0		O12 points	as possible to up to ore points				
Pulse Train Input Type (Differential Line Driver)	Ó	PCON-PL-20PI-NP-2-0	Pulse train input type with differential line driver support	(-)	DC24V	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	Í	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. * \oplus is a placeholder for the power supply voltage (1: 100V, 2: 100 \sim 240V).

RCP2-GRSS 334

${ t CP2 ext{-}GRLS}$ ROBO Cylinder 2-Finger Gripper Mini Lever Type 42mm Width Pulse Motor

RCP2- GRLS-■ Configuration: **20P** 30 180 Compatible Controll Cable Lengt

I: Incremental * The Simple 20P : 20 □ size 30: 1/30 Pulse motor deceleration absolute encoder is also considered type "I".

degrees

180: 180 (90 degrees per

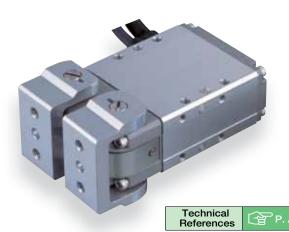
P1: PCON **RPCON** PSEL

PSEP

N : None P : 1m S : 3m

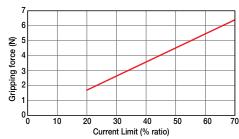
NM:Reversed-home FB:Flange bracket SB:Shaft bracket

■ 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 5 degrees/s.

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 170 to 1/20 of the gripping force. (See page A-77 for details.)

The rated acceleration while moving is 0.3G.

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

Actuator Specifications

■ Lead and Load Capacity			
Model	Deceleration Ratio	Max. Gripping Force (N)	Stroke (deg)
RCP2-GRLS-I-20P-30-180-①-②-③	30	6.4	180 (90 per side)

■ Stroke and Maxi. Opening/Closing Speed 180 30 600

(Unit: degrees/s)

Legend: ① Compatible controllers ② Cable length ③ Options

Stroke List	
Stroke (deg)	Standard Price
180	_

② Cable List					
Cable Symbol	Standard Price				
P (1m)	_				
S (3m)	-				
M (5m)	-				
X06 (6m) ~ X10 (10m)	-				
X11 (11m) ~ X15 (15m)	-				
X16 (16m) ~ X20 (20m)	_				
	Cable Symbol P (1m) \$ (3m) M (5m) X06 (6m) ~ X10 (10m) X11 (11m) ~ X15 (15m)				

* 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			
Positioning Repeatability	±0.01mm			
Backlash	1 degree or less per side (constantly pressed out by a spring)			
Lost Motion	1 degree or less			
Guide	-			
Allowable Static Load Moment	-			
Weight	0.2kg			
Ambient Operating Temp./Humidity	0~40°C, 85% RH or less (non-condensing)			

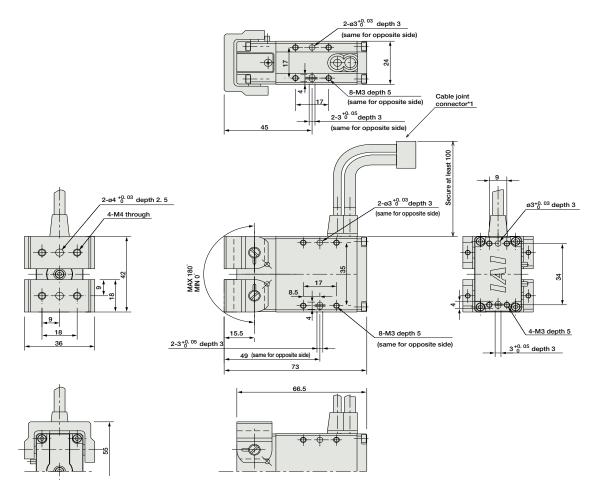
CAD drawings can be downloaded from IAI website. www.intelligentactuator.com

For Special Orders





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



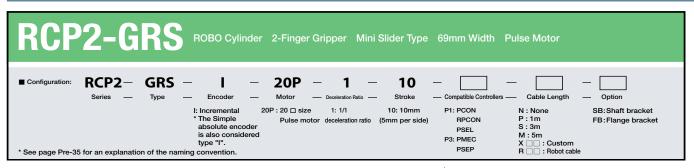
Weight (kg) 0.2

① Compatible Controllers

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		AC100V AC200V	See P481	-	→ P477		
Soleriold valve Type		PSEP-C-20PI-NP-2-0	Operable with same signal as solenoid valve. Supports both single and double solenoid types.	3 points				-	→ P487	
Splash-Proof Solenoid Valve Type	1	PSEP-CW-20PI-NP-2-0	No homing necessary with simple absolute type.						-	→ P407
Positioner Type	Í	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	Positioning is possible for up to 312 points	312 points			-			
Pulse Train Input Type (Differential Line Driver)	Ó	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	Í	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	<u> </u>	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).





(1) 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 170 to 1/20 of the gripping force.

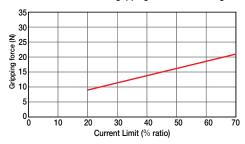
(See page A-74 for details.)

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 ■ Stroke and Maxi. Opening/Closing Speed							
Mandal		Deceleration	Max. Gripping	Stroke	Stroke	10		
	Model	Ratio	Force (N)	(mm)	Deceleration Ratio	(mm)		
	RCP2-GRS-I-20P-1-10-①-②-③	1	21	10 (5 per side)	1	33.3		
	Legend: ① Compatible controllers ② Cable length ③ Option	ns				(Unit: mm/s		

Stroke List	
Stroke (mm)	Standard Price
10	-

② Cable List						
Туре	Cable Symbol	Standard Price				
	P (1m)	_				
Standard Type	S (3m)	-				
	M (5m)	-				
	X06 (6m) ~ X10 (10m)	-				
Special Lengths	X11 (11m) ~ X15 (15m)	-				
	X16 (16m) ~ X20 (20m)	-				
	R01 (1m) ~ R03 (3m)	-				
	R04 (4m) ~ R05 (5m)	-				
Robot Cable	R06 (6m) ~ R10 (10m)	-				
	R11 (11m) ~ R15 (15m)	-				
	R16 (16m) ~ R20 (20m)	_				

(Unit: mm/s)

ion Code See F	Page Standard Price
FB → A	-26 –
SB → A	-36 –
	FB → A

Actuator Specifications						
Description						
Timing belt + trapezoidal screw (1.5 lead)						
±0.01mm						
0.15mm or less per side (constantly pressed out by a spring)						
0.1mm or less per side						
Cross roller guide						
Ma: 6.3 N·m Mb: 6.3 N·m Mc: 7.0 N·m						
0.36kg						
mbient Operating Temp./Humidity 0~40°C, 85% RH or less (non-condensing)						

^{*} See page A-39 for cables for maintenance.

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

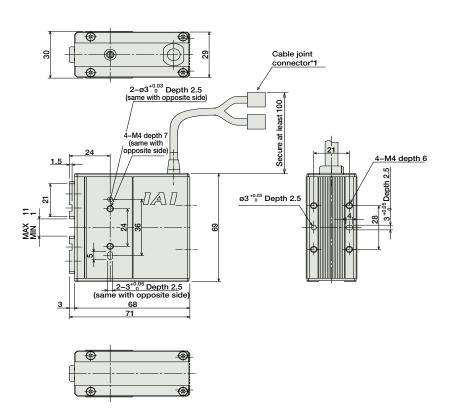
For Special Order







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



10-0.05 2-M4 depth 8 •

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

0	Control	
Com	Control	iers

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	ATT.	PMEC-C-20PI-NP-2-①	Easy-to-use controller, even for beginners		AC100V AC200V	See P481	-	→ P477
Solellold valve type	1	PSEP-C-20PI-NP-2-0	P-C-20PI-NP-2-0 Operable with same signal as solenoid valve. Supports both single and double solenoid types.				-	→ P 487
Splash-Proof Solenoid Valve Type	V	PSEP-CW-20PI-NP-2-0	No homing necessary with simple absolute type.				-	7 7 407
Positioner Type	Ĭ	PCON-C-20PI-NP-2-0	Positioning is possible for up to 512 points	512 points	DC24V		-	
Safety-Compliant Positioner Type	PCO	PCON-CG-20PI-NP-2-0	Total similar pecasists for up to 0.2 points				-	
Pulse Train Input Type (Differential Line Driver)		PCON-PL-20PI-NP-2-0	Pulse train input type with differential line driver support				-	→ P525
Pulse Train Input Type (Open Collector)	PC	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

IAI

RCP2-GRS 338

^{*} This is for the single-axis PSEL.

* ① is a placeholder for the power supply voltage (1: 100V, 2: 100~240V).

CP2-GRM ROBO Cylinder 2-Finger Gripper Medium Slider Type 74mm Width Pulse Motor ■ Configuration: RCP2 — GRM — **28P** 14 Stroke Compatible Contro Cable Length N : None P : 1m S : 3m I: Incremental * The Simple 28P: 28 🗌 size 14: 14mm P1: PCON SB: Shaft bracket FB : Flage bracket Pulse motor deceleration (7mm per side) **RPCON** absolute encoder PSEL ratio is also considered type "I".

* See page Pre-35 for explanation of each code that makes up the configuration name. M:5m
X : Custom
R : Robot cable P3: PMEC PSEP



Technical References



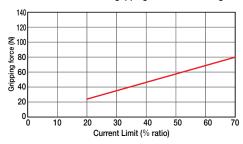
- (1) The maximum opening/closing speed indicates the operating speed on one side. The relative operating speed is twice this
- The maximum gripping force is the sum of the gripping forces of both fingers, at a gripping point where there is no offset or overhang distance. The work piece weight that can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

Deceleration Max. Gripping Stroke Model Ratio Force (N) RCP2-GRM-I-28P-1-14-1 - 2 - 3 1 80 14

■ Stroke and Maxi. Opening/Closing Speed 14 (mm) 36.7

Legend: ① Compatible controllers ② Cable length ③ Options

(Unit: mm/s)

Stroke List

Stroke (mm)	Standard Price
14	-

② Cable List

Туре	Cable Symbol	Standard Price
	P (1m)	_
Standard Type	S (3m)	-
	M (5m)	_
	X06 (6m) ~ X10 (10m)	-
Special Lengths	X11 (11m) ~ X15 (15m)	-
	X16 (16m) ~ X20 (20m)	-
	R01 (1m) ~ R03 (3m)	_
	R04 (4m) ~ R05 (5m)	-
Robot Cable	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** Standard Price See Page Flange bracket FΒ → A-26 Shaft bracket → 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)					

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

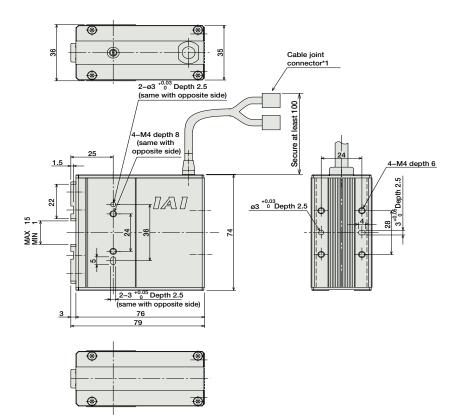
For Special Order







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



12-0.05 2-M5 depth 8

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

<u>(1)</u>	Compatil	ale C	ontrol	lers

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
Solellold valve Type	1	PSEP-C-28PI-NP-2-0	Operable with same signal as solenoid valve. Supports both single and double solenoid types.	orts both single and double solenoid 3 points	points DC24V 2A max. (-)	DC24V 2A max.	-	→ P487
Splash-Proof Solenoid Valve Type	I	PSEP-CW-28PI-NP-2-0	No homing necessary with simple absolute type.				-	77407
Positioner Type	¥ i	PCON-C-28PI-NP-2-0	- Positioning is possible for up to 512 points	512 points			-	
Safety-Compliant Positioner Type		PCON-CG-28PI-NP-2-0					-	
Pulse Train Input Type (Differential Line Driver)	ũ	PCON-PL-28PI-NP-2-0	Pulse train input type with differential line driver support	(-)			-	→ P525
Pulse Train Input Type (Open Collector)	PCON-PO-28PI-NP	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				-
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).

CP2-GRS

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

I: Incremental * The Simple

absolute encoder

is also considered

■ Configuration:

RCP2 - GRST -

Pulse motor

1: 1/1 deceleration

High-Speed Type 2: 1/2 deceleration

ratio Standard Type

ratio

20P : 20 □ size

40: 40mm

60: 60mm

80: 80mm

100: 100mm

mpatible Cont P1: PCON RPCON PSEL

PSEP

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

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

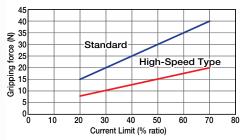
P. A-5

- 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.)
- (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-GRST-I-20P-1-①-②-③-④	1	20	40~100
RCP2-GRST-I-20P-2-①-②-③-④	2	40	(20mm increments)

■ Stroke and Maxi. Opening/Closing Speed

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

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

(Unit: mm/s)

① Stroke List

Stroke (mm)	Standard Price
40	-
60	-
80	-
100	_

Туре	Cable Symbol	Standard Price
Standard Type	P (1m)	-
(Robot Cables)	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.

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)			

^{*} See page A-39 for cables for maintenance.

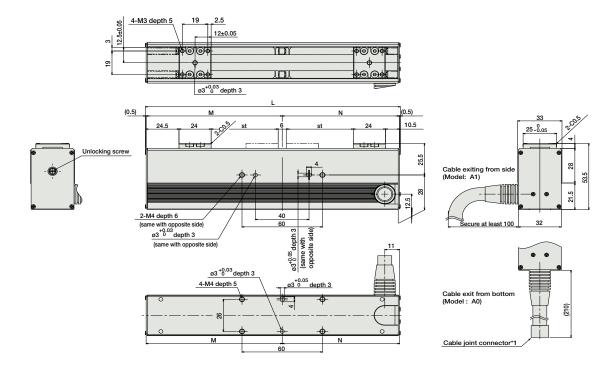
CAD drawings can be downloaded from IAI website. www.intelligentactuator.com

For Special Orders





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



Dimensions and Weight by Stroke

Stroke	40	60	80	100	
L	130	150	170	190	
М	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	110	PMEC-C-20PI-NP-2-①	Easy-to-use controller, even for beginners		AC100V AC200V		-	→ P477
Solenoid valve type	1	PSEP-C-20PI-NP-2-0	Operable with same signal as solenoid valve. Supports both single and double solenoid	3 points			-	→ P487
Splash-Proof Solenoid Valve Type	1	PSEP-CW-20PI-NP-2-0	types. No homing necessary with simple absolute type.				-	
Positioner Type	É	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)	Ö	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 768 points			-	
Field Network Type		RPCON-20P	Dedicated to field network		68 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. * \odot is a placeholder for the power supply voltage (1: 100V, 2: 100 \sim 240V).

IAI

RCP2-GRST 342

Mini

Standard

ntegrated

Roo Type

Mir

ontrollers Integrated

/Flat Type

Standard

Gripper Rotary Type

Тур

Cleanroon Typ

, piaon i rooi

DMEC

/ASEP

ERC2

ACON

PSEL

SSE

Pulse Motor

Servo Motoi (24V)

Servo Motor (200V)

> Linear ervo Motor

CP2-GR3L RCP2-GR3LS-■ Configuration: 28P **30** -19 Compatible Cont N : None P : 1m S : 3m I: Incremental * The Simple 28P: 28 □ size 30: 1/30 19: 19 degrees P1: PCON FB:Flange bracket Pulse motor deceleration RPCON SB:Shaft bracket absolute encoder PSEL ratio M:5m X : Custom R : Robot cable is also considered P3: PMEC type "I" PSEP * See page Pre-35 for an explanation of the naming convention



Technical References

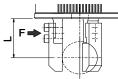


The maximum opening/closing speed indicates the operating speed on one side. The relative operating speed is twice this value.
 The maximum gripping force is the sum of the gripping forces of all fingers with gripping point distance of 10mm and no overhang distance. For the actual transportable work piece

weight, see explanation on the right, or page A-77.
(3) The rated acceleration while moving is 0.3G.

■ Gripping Force vs. Current Limit

Lever Type (GR3LS/GR3LM)



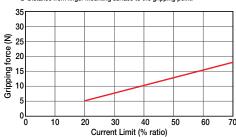
* Please note that, when gripping (pushing), the speed is fixed at 5 degrees/s.

* The values in the graph below are gripping forces at 10mm gripping point. The actual gripping force decreases inversely proportional to the distance from the opening/closing point. You can calculate the actual gripping force by the following equation.

You can calculate the actual gripping force by the following equation. Actual gripping force (type S)=P×24/(L+14) Actual gripping force (type M)=P×28.5/(L+18.5)

P=Gripping force on graph

L=Distance from finger mounting surface to the gripping point.



Actuator Specifications

■ Lead and Load Capacity

= Lead and Load Capacity			
Model	Deceleration	Max. Gripping	Stroke
1110401	Ratio	Force (N)	(deg)
RCP2-GR3LS-I-28P-30-19-①-②-③	30	18	19

■ Stroke and Maxi. Opening/Closing Speed

- Choke and Makin opening, cleaning opeca					
Stroke	19				
Deceleration Ratio	(deg)				
30	200				

Legend: ① Compatible controllers ② Cable length ③ Options

(Unit: degrees/s)

Stroke List

Stroke (deg)	Standard Price
10	-

② Cable List

Actuator Specifications

Туре	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)	_

 $^{^{\}star}$ See page A-39 for cables for maintenance.

Item	Description
Drive System	Worm gear + worm wheel gear
Positioning Repeatability	±0.01 degrees
Backlash	1 degree or less per side (constantly pressed out by a spring)
Lost Motion	0.15 degrees or less per side
Weight	0.6kg

Ambient Operating Temp./Humidity 0~40°C, 85% RH or less (non-condensing)

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

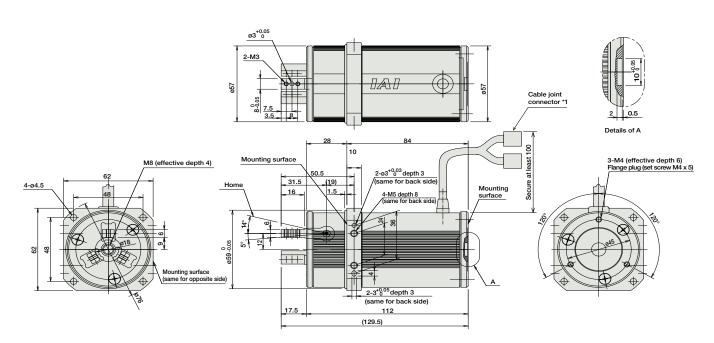
For Special Orders







- When homing, the actuator swings 1 degree past the home position before returning. Therefore, please watch for any interference with the surrounding objects.
 The motor-encoder cable is connected here. See page A-39 for details on



Weight (kg) 0.6

1	Compatible C	ontrollere
	Companie C	ontrollers

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	110	PMEC-C-28PI-NP-2-①	Easy-to-use controller, even for beginners		AC100V AC200V	See P481	-	→ P477		
Sciencia valve type		PSEP-C-28PI-NP-2-0	Operable with same signal as solenoid valve. Supports both single and double solenoid types.	3 points			-	→ P487		
Splash-Proof Solenoid Valve Type	I	PSEP-CW-28PI-NP-2-0	No homing necessary with simple absolute type.				-	7 1407		
Positioner Type	Í	PCON-C-28PI-NP-2-0	Positioning is possible for up to 512 points	512 points	512 points		-			
Safety-Compliant Positioner Type		PCON-CG-28PI-NP-2-0	r establing is possible for up to 612 points	312 points	312 points		-			
Pulse Train Input Type (Differential Line Driver)	Ó	PCON-PL-28PI-NP-2-0	ON-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	(-)	points	4 points	-			
Serial Communication Type		PCON-SE-28PI-N-0-0	Dedicated to serial communication	64 points			64 points 768 points		-	
Field Network Type		RPCON-28P	Dedicated to field network	768 points						-
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 \sim 240V).

CP2-GR3L

ROBO Cylinder 3-Finger Gripper Lever Type 80mm Width Pulse Motor

PSEL

PSEP

P3: PMEC

RCP2-GR3LM-■ Configuration: 42P 30 19 mpatible Contro

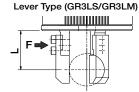
ratio

Cable Length N : None P : 1m S : 3m I: Incremental * The Simple 42P: 42 □ size 30: 1/30 19: 19 degrees P1: PCON FB:Flange bracket Pulse motor deceleration RPCON SB:Shaft bracket absolute encoder

is also considered type "I" * See page Pre-35 for an explanation of the naming convention

■ Gripping Force vs. Current Limit

M:5m
X : Custom
R : Robot cable



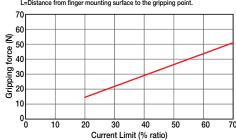
Please note that, when gripping (pushing), the speed is fixed at 5 degrees/s.

The values in the graph below are gripping forces at 10mm gripping point. The actual gripping force decreases inversely proportional to the distance from the opening/closing point.

You can calculate the actual gripping force by the following equation.

Actual gripping force (type S)=P×24/(L+14) Actual gripping force (type M)=P×28.5/(L+18.5)

P=Gripping force on graph L=Distance from finger mounting surface to the gripping point.



Technical References





- (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 all fingers with gripping point distance of 10mm and no overhang distance. For the actual transportable work piece weight, see explanation on the right, or page A-77.
- (3) The rated acceleration while moving is 0.3G.

Actuator Specifications

Lead and Load Capacity Deceleration Max. Gripping Stroke Model Ratio Force (N) RCP2-GR3LM-I-42P-30-19-10-20-3 30 51 19

■ Stroke and Maxi. Opening/Closing Speed celeration Ratio 30 200

(Unit: degrees/s) Legend: ① Compatible controllers ② Cable length ③ Options

Stroke List	
Stroke (deg)	Standard Price
10	-

② Cable List			
Туре	Cable Symbol Standard Pr		
	P (1m)	_	
Standard Type	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	Worm gear + worm wheel gear		
Positioning Repeatability	±0.01 degrees		
Backlash	1 degree or less per side (constantly pressed out by a spring)		
Lost Motion	0.15 degrees or less per side		
Weight	1.1kg		
Ambient Operating Temp./Humidity	0~40°C, 85% RH or less (non-condensing)		

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

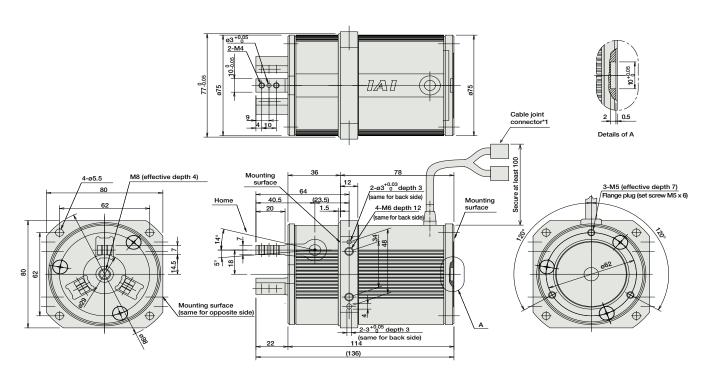
For Special Orders







- When homing, the actuator swings 1 degree past the home position before returning. Therefore, please watch for any interference with the surrounding objects.
 The motor-encoder cable is connected here. See page A-39 for details on



Weight (kg) 1.1

① Compatible Controllers

Name	External View	Model	Description	Max. Positioning Points	Input Voltage	Power Supply Capacity	Standard Price	See Page	
Solenoid Valve Type		PMEC-C-42PI-NP-2-①	Easy-to-use controller, even for beginners		AC100V AC200V	See P481	-	→ P477	
Solenoid valve Type	1	PSEP-C-42PI-NP-2-0	Operable with same signal as solenoid valve. Supports both single and double solenoid types.	3 points			-	→ P487	
Splash-Proof Solenoid Valve Type	1	PSEP-CW-42PI-NP-2-0	No homing necessary with simple absolute type.				-	→ P487	
Positioner Type	É	PCON-C-42PI-NP-2-0	Positioning is possible for up to 512 points	.512 points 512 points	512 points		-		
Safety-Compliant Positioner Type		PCON-CG-42PI-NP-2-0	rositioning is possible for up to 312 points			-			
Pulse Train Input Type Differential Line Driver)	Ó	PCON-PL-42PI-NP-2-0	Pulse train input type with differential line driver support	DC24V	r support DC24V 2A max (-) pe with	2A max.	-	→ P525	
Pulse Train Input Type (Open Collector)		PCON-PO-42PI-NP-2-0	Pulse train input type with open collector support				-		
Serial Communication Type		PCON-SE-42PI-N-0-0	Dedicated to serial communication	64 points		64 points 768 points		-	
Field Network Type		RPCON-42P	Dedicated to field network	768 points				-	→ P503
Program Control Type	<u> </u>	PSEL-C-1-42PI-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-GR3SS ROBO Cylinder 3-Finger Gripper Slider Type 62mm Width Pulse Motor

RCP2-GR3SS-■ Configuration:

I: Incremental * The Simple

absolute encoder

is also considered

28P 30

ratio

28P: 28 Size 30: 1/30

Pulse motor

10

10: 10mm

P1: PCON deceleration (5mm per side) RPCON PSEL

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

FB:Flange bracket SB:Shaft bracket

P3: PMEC Custom X□□: Custom R□□: Robot cable PSEP

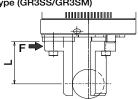
type "I" * See page Pre-35 for an explanation of the naming convention



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 all fingers with gripping point distance of 10mm and no overhang distance. For the actual transportable work piece weight, see explanation on the right or page A-74.
- (3) The rated acceleration while moving is 0.3G.

■ Gripping Force vs. Current Limit Slider Type (GR3SS/GR3SM)



gripping point at less than the following dimensions

GR3SS→50mm or less GR3SM→80mm or less

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

30 € 25 25 20 20 Gripping 10 10 20 30 40 60 Current Limit (% ratio)

Actuator Specifications

■ Lead and Load Capacity

Model	Deceleration	Max. Gripping	Stroke
	Ratio	Force (N)	(mm)
RCP2-GR3SS-I-28P-30-10-①-②-③	30	22	10

■ Stroke and Maxi. Opening/Closing Speed

Stroke Deceleration Ratio	10 (mm)
30	40
	(Unit: mm/s)

Legend: ① Compatible controllers ② Cable length ③ Options

troko I	ict			

Stroke List	
Stroke (mm)	Standard Price
40	

② Cable List

Туре	Cable Symbol	Standard Price
	P (1m)	_
Standard Type	S (3m)	-
	M (5m)	-
	X06 (6m) ~ X10 (10m)	-
Special Lengths	X11 (11m) ~ X15 (15m)	_
	X16 (16m) ~ X20 (20m)	-
	R01 (1m) ~ R03 (3m)	_
	R04 (4m) ~ R05 (5m)	-
Robot Cable	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 Standard Price See Page Flange bracket FΒ → A-26 Shaft bracket → A-36

Actuator Specification	ons					
Item	Description					
Drive System	Worm gear + worm wheel gear					
Positioning Repeatability	±0.01mm					
Backlash	0.3mm 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: 3.8 N·m Mb: 3.8 N·m Mc: 3.0 N·m					
Weight	0.6kg					
Ambient Operating Temp /Humidity	0~40°C, 85% RH or less (non-condensing)					

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

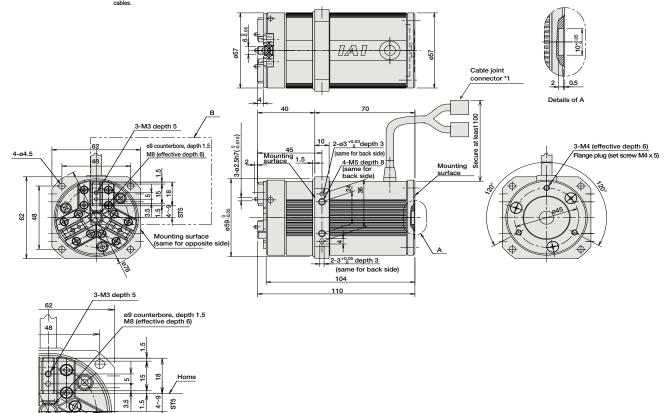
For Special Orders







- When homing, the actuator swings 0.5mm past the home position before returning. Therefore, please watch for any interference with the surrounding objects.
 The motor-encoder cable is connected here. See page A-39 for details on



Weight (kg) 0.6

① Compatible Controllers

Details of section B

The RCP2 serie	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	110	PMEC-C-28PI-NP-2-①	Easy-to-use controller, even for beginners		AC100V AC200V	See P481	-	→ P477	
Colonold valve Type	1	PSEP-C-28PI-NP-2-0	Operable with same signal as solenoid valve. Supports both single and double solenoid types.	3 points			-	→ P487	
Splash-Proof Solenoid Valve Type	1	PSEP-CW-28PI-NP-2-0	No homing necessary with simple absolute type.				-	→ P487	
Positioner Type	Ĭ.	PCON-C-28PI-NP-2-0	Positioning is possible for up to 512 points	512 points	512 points			-	
Safety-Compliant Positioner Type		PCON-CG-28PI-NP-2-0	1 ostaoning is possible for up to 012 points		DC24V	2A max.	-		
Pulse Train Input Type (Differential Line Driver)		PCON-PL-28PI-NP-2-0	Pulse train input type with differential line driver support	(4)			-	→ P525	
Pulse Train Input Type (Open Collector)		PCON-PO-28PI-NP-2-0	Pulse train input type with open collector support				-		
Serial Communication Type	1	PCON-SE-28PI-N-0-0	Dedicated to serial communication	al 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-GR3SM

PSEP

RCP2-GR3SM-■ Configuration: 42P 30 14

N:None
P:1m
S:3m
M:5m
X:: Custom
R:: Robot cable I: Incremental * The Simple 42P: 42 □ size 30: 1/30 14: 14mm P1: PCON FB:Flange bracket Pulse motor deceleration (7mm per side) RPCON SB:Shaft bracket absolute encoder PSEL ratio is also considered type "I". P3: PMEC

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

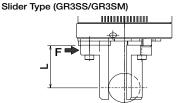


Technical References



- (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 all fingers with gripping point distance of 10mm and no overhang distance. For the actual transportable work piece weight, see explanation on the right or page A-74.
- (3) The rated acceleration while moving is 0.3G.

■ Gripping Force vs. Current Limit



gripping point at less than the following dimensions.

GR3SS→50mm or less Please note that, when GR3SM→80mm or less gripping (pushing), the speed is fixed at 5mm/s.

100 Gripping force 80 60 40 20 10 30 40 60 Current Limit (% ratio)

Actuator Specifications

■ Lead and Load Capacity Deceleration Max. Gripping Stroke Model Force (N) RCP2-GR3SM-I-42P-30-14-1 - 2 - 3 30 102 14

■ Stroke and Maxi. Opening/Closing Speed

Stroke	14
Deceleration Ratio	(mm)
30	50
	(Unit: mm/s)

Legend: ① Compatible controllers ② Cable length ③ Options

Stroke List	
Stroke (mm)	Standard Price

② Cable List

Туре	Cable Symbol	Standard Price
	P (1m)	-
Standard Type	S (3m)	-
	M (5m)	_
	X06 (6m) ~ X10 (10m)	-
Special Lengths	X11 (11m) ~ X15 (15m)	_
	X16 (16m) ~ X20 (20m)	-
	R01 (1m) ~ R03 (3m)	_
	R04 (4m) ~ R05 (5m)	-
Robot Cable	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 opecifications						
Item	Description					
Drive System	Worm gear + worm wheel gear					
Positioning Repeatability	±0.01mm					
Backlash	0.3mm 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: 5.7 N·m					
Weight	1.2kg					
Ambient Operating Temp./Humidity	0~40°C, 85% RH or less (non-condensing)					

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

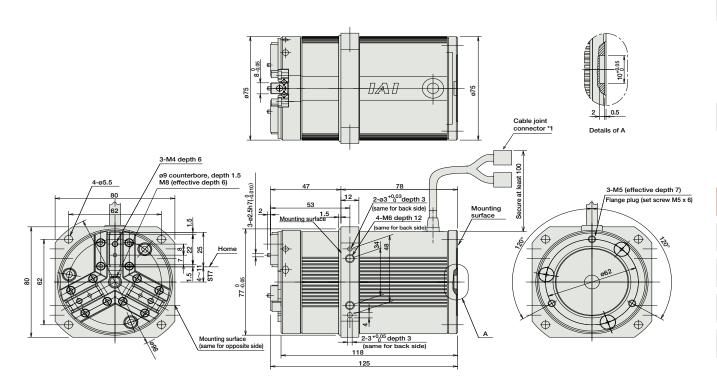
For Special Orders







- When homing, the actuator swings 0.5mm past the home position before returning. Therefore, please watch for any interference with the surrounding objects.
 The motor-encoder cable is connected here. See page A-39 for
- details on cables.



Weight (kg) 1.2

① Compatible Controllers

Name	External View	Model	Description	Max. Positioning Points	Input Voltage	Power Supply Capacity	Standard Price	See Page
Solenoid Valve Type		PMEC-C-42PI-NP-2-①	Easy-to-use controller, even for beginners		AC100V AC200V	See P481	-	→ P477
Solenoid valve Type	1	PSEP-C-42PI-NP-2-0	Operable with same signal as solenoid valve. Supports both single and double solenoid types.	3 points		2A max.	-	
Splash-Proof Solenoid Valve Type	1	PSEP-CW-42PI-NP-2-0	No homing necessary with simple absolute type.				-	→ P487
Positioner Type	Í	PCON-C-42PI-NP-2-0	Positioning is possible for up to 512 points	512 points	510 points		-	
Safety-Compliant Positioner Type		PCON-CG-42PI-NP-2-0	Positioning is possible for up to 312 points		DC24V		-	
Pulse Train Input Type (Differential Line Driver)	Ó	PCON-PL-42PI-NP-2-0	Pulse train input type with differential line driver support	()			-	→ P525
Pulse Train Input Type (Open Collector)		PCON-PO-42PI-NP-2-0	Pulse train input type with open collector support				-	
Serial Communication Type		PCON-SE-42PI-N-0-0	Dedicated to serial communication	64 points			-	
Field Network Type		RPCON-42P	Dedicated to field network	768 points			-	→ P503
Program Control Type		PSEL-C-1-42PI-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

Standard

ontrollers Integrated

> Ro Typ

IVIII

Controllers Integrated

/Flat Type

Mini

Gripper Rotary Type

inear Servo. Type

Cleanroom Type

piasn-Proc

PSEP /ASEP

ERC2

.

SCON

=

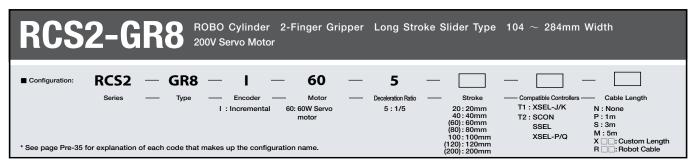
SSEL

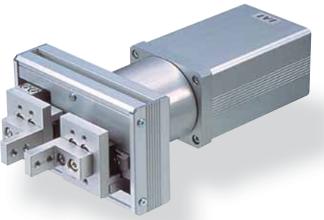
Pulse Moto

Servo Moto (24V

Servo Motor (200V)

Linear ervo Motor





* Please note that, when gripping (pressing), the speed is fixed at 10mm/s.

Technical References



Notes on Selection

(1) Stroke values enclosed in "()" are (60, 80, 120, 200) are semi-standard models.
(2) The maximum gripping force is the sum of both fingers.

Actuator Specifications							
■ Lead and Load Capacity							
Model	Motor Output (W)	Deceleration Ratio	Max. Gripping Force (N)	Stroke (mm)			
RCS2-GR8-I-60-5-①-②-③	60	1/5	45.1	20, 40, (60), (80), 100, (120), (200)			
Legend: ①Stroke ②Compatible controller ③Cable length							

① Stroke List			
Stroke (mm)	Standard Price		
20	-		
40	-		
(60)	-		
(80)	-		
100	_		
(120)	-		
(200)	-		

③ Cable List				
Туре	② Cable Symbol	Standard Price		
	P (1m)	_		
Standard Type	S (3m)	-		
	M (5m)	_		
	X06 (6m) ~ X10 (10m)	_		
Special Lengths	X11 (11m) \sim X15 (15m)	-		
	X16 (16m) ~ X20 (20m)	_		
	R01 (1m) ~ R03 (3m)	_		
	R04 (4m) ~ R05 (5m)	-		
Robot Cable	R06 (6m) ~ R10 (10m)	_		
	R11 (11m) ~ R15 (15m)	_		
	R16 (16m) ~ R20 (20m)	_		

^{*} See page A-39 for cables for maintenance.

Actuator Specifications	3
Item	Description
Drive System	Rack and pinion
Positioning Repeatability	±0.04mm
Lost Motion	0.7mm or less
Base	Material: Aluminum (white alumite treated)
Allowable Static Load Moment	Ma: 5.1 N·m Mb: 5.1 N·m Mc: 10.4 N·m
Ambient Operating Temp./Humidity	$0\sim40^{\circ}\text{C}$, 85% RH or less (non-condensing)

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

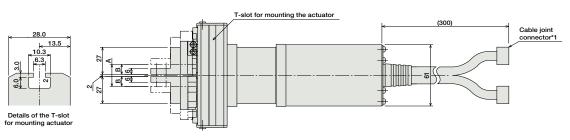
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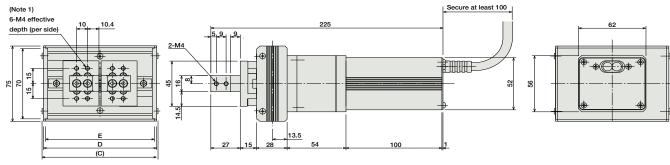






* The opening side of the slider is the home position.





*1 The motor cable and encoder cable are connected here. (Note 1) The number of tapped holes on the finger mounting plate is for one side. See page A-39 for details on cables. In addition, by default, each finger is secured using 2 tapped holes.

■ Dimensions and Weight by Stroke

Stroke	20	40	(60)	(80)	100	(120)	(200)
Α	22	42	62	82	102	122	202
В	10	20	30	40	50	60	100
С	106.4	126.4	146.4	166.4	186.4	206.4	286.4
D	104	124	144	164	184	204	284
E 100 120 140 160 180 200 280							
Weight (kg)	1.8	1.9	1.9	2.0	2.0	2.1	2.3
*1 The strakes enclosed in "/ \" are semi-standard configurations, and will require longer delivery time							

② Compatible controller

The HCS2 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
Positioner Mode			Positioning is possible for up to 512 points	512 points				
Solenoid Valve Mode		SCON-C-60-NP-2-①	Operable with the same controls as the solenoid valve	ntrols as the solenoid 7 points	Single-phase AC100V 360VA max.			→ P 547
Serial Communication Type			Dedicated to serial communication	64 points		-	→ P 547	
Pulse Train Input Control Type			Dedicated to pulse train input	(-)	Three-phase AC200V (XSEL-P/Q only)	* When operating a 150W single-axis model		
Program Control 1 - 2 Axes Type		SSEL-C-1-60-NP-2-①	Programmed operation is possible Operation is possible on up to 2 axes	1500 points			-	→ P577
Program Control 1-6 Axis Type	Pilita	XSEL-(2)-1-60-N1-EEE-2-(3)	Programmed operation is possible Operation is possible on up to 6 axes	20000 points			-	→ P587

* For SSEL and XSEL, only applicable to the single-axis model.

*① is a placeholder for the power supply voltage (1: 100V, or 2: single-phase 200V).

*② is a placeholder for the type name of XSEL ("J", "K", "P", "Q"),

*③ is a placeholder for the type of power supply voltage (1: 100V, 2: single-phase 200V, or 3: 3-phase 200V).

RCP2-RTBS/RTBSL

ROBO Cylinder Rotary Small Vertical Type 45mm Width Pulse Motor

■ Configuration: RCP2-20P -Туре N : None P : 1m S : 3m I: Incremental * The Simple RTBS: 330-degree 20P: 20 □ size 30: 1/30 330: 330degrees P1: PCON NM:Reversed-rotation r dece ratio 45: 1/45 rotation Pulse motor (RTBS only) **RPCON** SA: Shaft adapter absolute encoder RTBSL: Multiple PSEL 360: 360degrees TA: Table adapter M:5m
X : Custom
R : Robot cable is also considered (RTBSL rotation type "I" ratio PSEP * See page Pre-35 for an explanation of the naming convention.

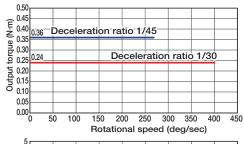


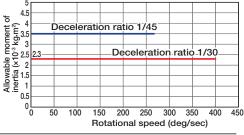
- The output torque decreases as the rotational speed increases. Check the output torque graph on the right to see whether the speed required for your desired motion is supported.
- The allowable moment of inertia of the rotated work piece varies with the rotational speed.

 Check the Allowable Moment of Inertia graph on the right to see if the moment of inertia required for your desired motion is within the allowable range.
- (3) The rated acceleration while moving is 0.2G.

■ Speed vs. Load Capacity

Due to the characteristics of the Pulse Motor, the RCP2 series' load capacity decreases at high speeds. In the table below, check if your desired speed and load capacity are supported.





Actuator Specifications

■ Lead and Load Capacity

Model	Deceleration Ratio	Max. Torque (N·m)	Allowable Moment of Inertia (kg·m²)	Oscillation Angle (deg)
RCP2-RTBS-I-20P-30-330-①-②-③	1/30	0.24	0.0023	330
RCP2-RTBS-I-20P-45-330-①-②-③	1/45	0.36	0.0035	330
RCP2-RTBSL-I-20P-30-360-① -② -③	1/30	0.24	0.0023	360
RCP2-RTBSL-I-20P-45-360-①-②-③	1/45	0.36	0.0035	360

■ Deceleration Ratio and Max. Speed

Stroke Deceleration Ratio	330/360 (deg)
1/30	400
1/45	266
	(Linite de auces (a)

Legend: ① Compatible controller ② Cable length ③ Options

Stroke List

Туре	Oscillation Angle (deg)	Standard Price
RTBS	330	1
RTBSL	360	_

② Cable List

	Туре	Cable Symbol	Standard Price
Γ	Standard Type	P (1m)	_
1	(Robot Cables)	S (3m)	-
-		M (5m)	-
Γ		X06 (6m) ~ X10 (10m)	-
1	Special Lengths	X11 (11m) ~ X15 (15m)	-
L		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-rotation (*)	NM	→ A-33	-
Shaft adapter	SA	→ A-35	-
Table adapter	TA	→ A-37	-

* Reversed-rotation option can be selected on the multi-rotational model only.

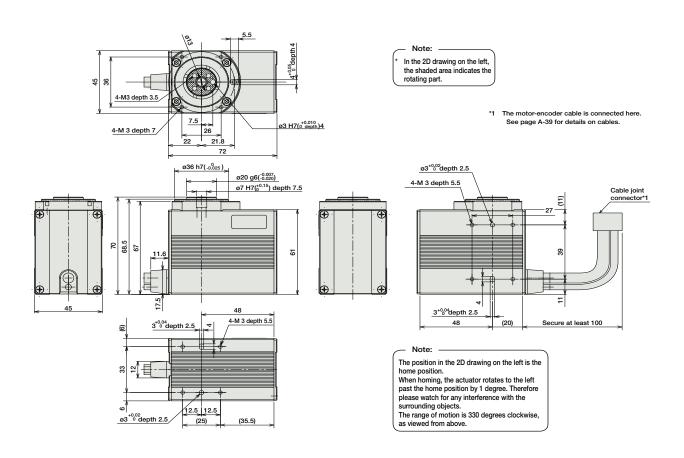
Actuator Specifications				
Item	Description			
Drive System	Hypoid gear			
Positioning Repeatability	±0.05 degrees			
Homing Accuracy	±0.05 degrees			
Lost Motion	±0.1 degrees			
Allowable Thrust Load	30N			
Allowable Load Moment	3.6N·m			
Weight	0.52kg			
Ambient Operating Temp./Humidity	0 ~ 40°C, 85% RH or less (non-condensing)			

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

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Weight (kg) 0.52

(1)	Compatible	Controller	s

Name	External View	Model	Description	Max. Positioning Points	Input Voltage	Power Supply Capacity	Standard Price	See Page	
Solenoid Valve Type	115	PMEC-C-20PI-NP-2-①	Easy-to-use controller, even for beginners		AC100V AC200V	See P481	-	→ P477	
Solenoid valve Type		PSEP-C-20PI-NP-2-0	Operable with same signal as solenoid valve. Supports both single and double solenoid types.	3 points			-	→ P487	
Splash-Proof Solenoid Valve Type	T T	PSEP-CW-20PI-NP-2-0	No homing necessary with simple absolute type.		DC24V 2A max.	-	→ P487		
Positioner Type	Í	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	Positioning is possible for up to 312 points	312 points		2A max. –	-		
Pulse Train Input Type (Differential Line Driver)	Ó	PCON-PL-20PI-NP-2-0	Pulse train input type with differential line driver support	()			-	→ 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	<u> </u>	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).

Standard ontrollers ategrated

Ro Typ

Standard Controllers Integrated

> Table/Arm /Flat Type

Standard

inear Servo Type

Cleanroom Type

PMEC

/ASEP

PCON

SCO

SSEL

Pulse Motoi

Servo Motor (24V)

(200V)

Linear ervo Motor RCP2-RTCS/RTCSL ROBO Cylinder Rotary Small Flat Type 72mm Width Pulse Motor ■ Configuration: RCP2-**20P** Туре Cable Length N : None P : 1m S : 3m RTCS: 330 degree I: Incremental rotation * The Simple 28P: 28 🗆 size 30: 1/30 330: 330degrees P1: PCON NM:Reversed-rotation deceleration ratio 45: 1/45 deceleration Pulse motor (RTCS only) RPCON SA: Shaft adapter absolute encoder is RTCSL : Multi-360: 360degrees PSEL TA: Table adapter M:5m
X : Custom
R : Robot cable also considered rotational type "I". (RTCSL only) ratio PSEP * See page Pre-35 for an explanation of the naming convention.



The output torque decreases as the rotational speed increases.

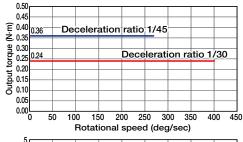
Check the output torque graph on the right to see whether the speed required for your desired motion is

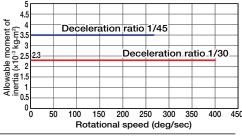
2) The allowable moment of inertia of the rotated work piece varies with the rotational speed. Check the Allowable Moment of Inertia graph on the right to see if the moment of inertia required for your desired motion is within the allowable range.

(3) The rated acceleration while moving is 0.2G.

■ Speed vs. Load Capacity

Due to the characteristics of the Pulse motor, the RCP2 series' load capacity decreases at high speeds. In the table below, check if your desired speed and load capacity are supported.





Actuator Specifications

supported.

■ Lead and Load Capacity

Model	Deceleration Ratio	Max. Torque (N·m)	Allowable Moment of Inertia (kg·m²)	Oscillation Angle (deg)
RCP2-RTCS-I-20P-30-330-1 -2 -3	1/30	0.24	0.0023	330
RCP2-RTCS-I-20P-45-330-①-②-③	1/45	0.36	0.0035	330
RCP2-RTCSL-I-20P-30-360-1 -2 -3	1/30	0.24	0.0023	360
RCP2-RTCSL-I-20P-45-360-①-②-③	1/45	0.36	0.0035	360

■ Deceleration Ratio and Max. Speed

Stroke Deceleration Ratio	330/360 (deg)
1/30	400
1/45	266
	(Unit: degrees/s)

Legend: ① Compatible controller ② Cable length ③ Options

Stroke List

Туре	Oscillation Angle (deg)	Standard Price
RTCS	330	_
RTCSL	360	-

② Cable List

Туре	Cable Symbol	Standard Price
Standard Type	P (1m)	-
	S (3m)	_
(Robot Cables)	M (5m)	-
	X06 (6m) ~ X10 (10m)	1
Special Lengths	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-rotation (*)	NM	→ A-33	_
Shaft adapter	SA	→ A-35	-
Table adapter	TA	→ A-37	ı
	-		

* Reversed-rotation option can be selected on the multi-rotational model only.

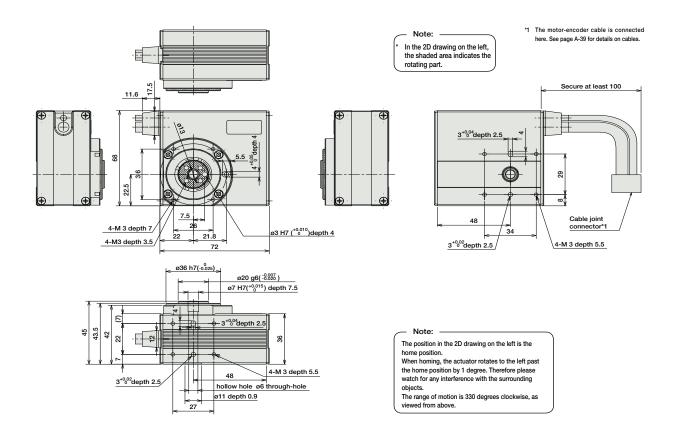
Actuator Specifications					
Item	Description				
Drive System	Hypoid gear				
Positioning Repeatability	±0.05 degrees				
Homing Accuracy	±0.05 degrees				
Lost Motion	±0.1 degrees				
Allowable Thrust Load	30N				
Allowable Load Moment	3.6N·m				
Weight	0.52kg				
Ambient Operating Temp./Humidity	$0\sim$ 40°C, 85% RH or less (non-condensing)				

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

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Weight (kg) 0.48

1 Compatible Controllers	
(1) Compatible Controllers	

		·	ntrollers below. Select the controller ac	<u> </u>						
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		AC100V AC200V	See P481	-	→ P477		
Colonial valve Type		PSEP-C-20PI-NP-2-0	Operable with same signal as solenoid valve. Supports both single and double solenoid types.	3 points			-	→ P487		
Splash-Proof Solenoid Valve Type		PSEP-CW-20PI-NP-2-0	No homing necessary with simple absolute type.						-	→ P407
Positioner Type	¥ i	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	Positioning is possible for up to 312 points	312 points		2A max. –	-			
Pulse Train Input Type (Differential Line Driver)	Ē.	PCON-PL-20PI-NP-2-0	Pulse train input type with differential line driver support	()	DC24V		-	→ 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).

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

RCP2-RTB/RTBL ROBO Cylinder Rotary Medium Vertical Type 50mm Width Pulse Motor ■ Configuration: RCP2-28P I: Incremental
* The Simple RTB: 330-degree 28P: 28 □ size 20: 1/20 330: 330degrees P1: PCON NM:Reversed-rotation dece ratio 30: 1/30 rotation Pulse motor (RTB only) RPCON SA: Shaft adapter RTBL: Multi-rotational absolute encoder is also considered PSEL 360: 360degrees TA: Table adapter (RTBL only) type "I". deceleration ratio PSEP

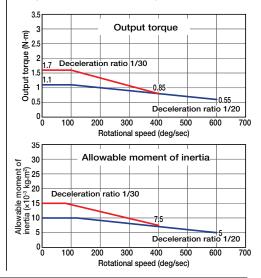


The output torque decreases as the rotational speed increases. Check the output torque graph on the right to see whether the speed required for your desired motion is supported.

- The allowable moment of inertia of the rotated work piece varies with the rotational speed. Check the Allowable Moment of Inertia graph on the right to see if the moment of inertia required for your desired motion is within the allowable range.
- (3) The rated acceleration while moving is 0.3G.

Speed vs. Load Capacity

Due to the characteristics of the Pulse motor, the RCP2 series' load capacity decreases at high speeds. In the table below, check if your desired speed and load capacity are supported.



Actuator Specifications

■ Lead and Load Capacity

Model	Deceleration Ratio	Max. Torque (N·m)	Allowable Moment of Inertia (kg·m²)	Oscillation Angle (deg)
RCP2-RTB-I-28P-20-330-1 -2 -3	1/20	1.1	0.01	330
RCP2-RTB-I-28P-30-330-①-②-③	1/30	1.7	0.015	330
RCP2-RTBL-I-28P-20-360-①-②-③	1/20	1.1	0.01	360
RCP2-RTBL-I-28P-30-360-①-②-③	1/30	1.7	0.015	360

■ Deceleration Ratio and Max. Speed

Stroke Deceleration Ratio	330/360 (deg)
1/20	600
1/30	400
	(Unit: dograco(s)

Legend: ① Compatible controller ② Cable length ③ Options

Stroke List

Type	Oscillation Angle (deg)	Standard Price
RTB	330	-
RTBL	360	-

② Cable List

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

^{*} See page A-39 for cables for maintenance.

③ Option List See Page Name Option Code Standard Price Reversed-rotation (*) MM → A-33 Shaft adapter SA → A-35 Table adapter TA → A-37

Actuator Specifications					
Item	Description				
Drive System	Hypoid gear				
Positioning Repeatability	±0.01 degrees				
Homing Accuracy	±0.01 degrees				
Lost Motion	±0.1 degrees				
Allowable Thrust Load	50N				
Allowable Load Moment	3.9 N·m				
Weight	0.86kg				
Ambient Operating Temp./Humidity	0 ~ 40°C, 85% RH or less (non-condensing)				

^{*} Reversed-rotation option can be selected on the multi-rotational model only.

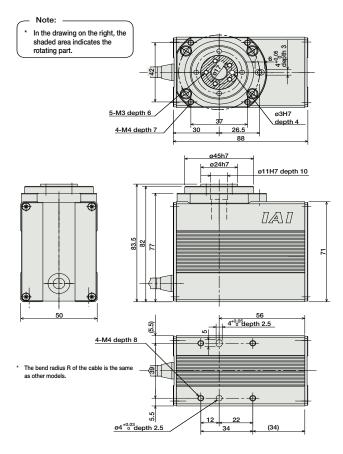
CAD drawings can be downloaded from IAI website. www.intelligentactuator.com

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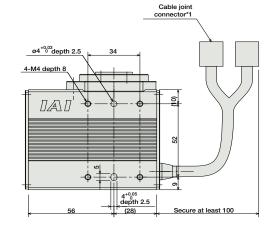
Note:

The position in the drawing on the left is the home position.

When homing, the actuator rotates to the left

past the home position by 1 degree. Therefore please watch for any interference with the surrounding objects.
The range of motion is 330 degrees clockwise,

as viewed from above.



*1 The motor-encoder cable is connected here. See page A-39 for details on cables.

Weight (kg) 0.86

① Compatible Controllers

Name	External View	Model	lers below. Select the controller according Description	Max. Positioning Points	Input Voltage	Power Supply Capacity	Standard Price	See Page
	110	PMEC-C-28PI-NP-2-①	Easy-to-use controller, even for beginners		AC100V AC200V	See P481	-	→ P477
Solenoid Valve Type	1	PSEP-C-28PI-NP-2-0	Operable with same signal as solenoid valve. Supports both single and double solenoid types.	3 points			-	→ P487
Splash-Proof Solenoid Valve Type	1	PSEP-CW-28PI-NP-2-0	No homing necessary with simple absolute type.				-	→ P487
Positioner Type	F	PCON-C-28PI-NP-2-0	Positioning is possible for up to 512 points	512 points			- 1	
Safety-Compliant Positioner Type		PCON-CG-28PI-NP-2-0	1 ostaoning is possible for up to 012 points	512 points			1	
Pulse Train Input Type (Differential Line Driver)	εï	PCON-PL-28PI-NP-2-0	Pulse train input type with differential line driver support	(-)	DC24V	2A max.	ı	→ P525
Pulse Train Input Type (Open Collector)		PCON-PO-28PI-NP-2-0	Pulse train input type with open collector support	(-)			ı	
Serial Communication Type		PCON-SE-28PI-N-0-0	Dedicated to serial communication	64 points			ı	
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-RTC/RTCL ROBO Cylinder Rotary Medium Flat Type 88mm Width Pulse Motor ■ Configuration: RCP2 28P Motor Compatible Contro 28P : 28 🗆 size 20: 1/20
Pulse deceleration ratio
30: 1/30
deceleration 330: 330degrees (RTC only) 360: 360degrees (RTCL only) N : None P : 1m S : 3m I: Incremental * The Simple RTC: 330-degree P1: PCON NM:Reversed-rotation rotation **RPCON** SA: Shaft adapter absolute encoder is also considered PSEL RTCL: Multi-rotational TA: Table adapter M:5m
X : Custom
R : Robot cable P3: PMEC type "I". ratio PSEP * See page Pre-35 for an explanation of the naming convention.



P. A-5

The output torque decreases as the rotational speed increases. Check the output torque graph on the right to see whether the speed required for your desired motion is supported.

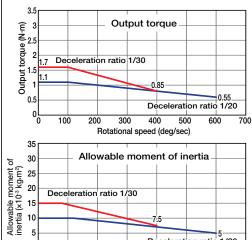
The allowable moment of inertia of the rotated work piece varies with the rotational speed.

Check the Allowable Moment of Inertia graph on the right to see if the moment of inertia required for your desired motion is within the allowable range.

(3) The rated acceleration while moving is 0.3G.

Speed vs. Load Capacity

Due to the characteristics of the Pulse motor, the RCP2 series' load capacity decreases at high speeds. In the table below, check if your desired speed and load capacity are supported.



Deceleration ratio 1/20 100 300 400 500 200 600 Rotational speed (deg/sec)

Actuator Specifications

■ Lead and Load Capacity

Model	Deceleration Ratio	Max. Torque (N·m)	Allowable Moment of Inertia (kg·m²)	Oscillation Angle (deg)
RCP2-RTC-I-28P-20-330-①-②-③	1/20	1.1	0.01	330
RCP2-RTC-I-28P-30-330-①-②-③	1/30	1.7	0.015	330
RCP2-RTCL-I-28P-20-360-①-②-③	1/20	1.1	0.01	360
RCP2-RTCL-I-28P-30-360-①-②-③	1/30	1.7	0.015	300

■ Deceleration Ratio and Max. Speed

Stroke Deceleration Ratio	330/360 (deg)
1/20	600
1/30	400
	(I luit, de eucee (e)

Legend: ① Compatible controller ② Cable length ③ Options

Stroke List

Туре	Oscillation Angle (deg)	Standard Price
RTC	330	-
RTCL	360	-

② Cable List

Туре	Cable Symbol	Standard Price
	P (1m)	_
Standard Type	S (3m)	-
	M (5m)	-
	X06 (6m) ~ X10 (10m)	-
Special Lengths	X11 (11m) ~ X15 (15m)	_
	X16 (16m) ~ X20 (20m)	-
	R01 (1m) ~ R03 (3m)	-
	R04 (4m) ~ R05 (5m)	-
Robot Cable	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
Reversed-rotation (*)	NM	→ A-33	-
Shaft adapter	SA	→ A-35	-
Table adapter	TA	→ A-37	_

^{*} Reversed-rotation option can be selected on the multi-rotational model only.

Actuator Specifications					
Item	Description				
Drive System	Hypoid gear				
Positioning Repeatability	±0.01 degrees				
Homing Accuracy	±0.01 degrees				
Lost Motion	±0.1 degrees				
Allowable Thrust Load	50N				
Allowable Load Moment	3.9 N·m				
Weight	0.92kg				
Ambient Operating Temp./Humidity	0 ~ 40°C, 85% RH or less (non-condensing)				

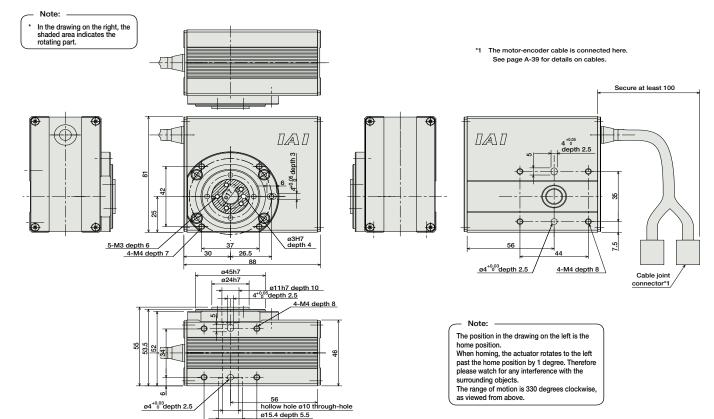
CAD drawings can be downloaded from IAI website. www.intelligentactuator.com

For Special Orders









* The bend radius R of the cable is the same as other models.

Weight (kg) 0.92

1	Compatib	la Control	loro
	Companie	ie Control	iers

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
Soleliola valve Type		PSEP-C-28PI-NP-2-0	Operable with same signal as solenoid valve. Supports both single and double solenoid types.	3 points			-	D497
Splash-Proof Solenoid Valve Type	1	PSEP-CW-28PI-NP-2-0	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			-	
Safety-Compliant Positioner Type		PCON-CG-28PI-NP-2-0	Positioning is possible for up to 512 points	512 points			-	
Pulse Train Input Type (Differential Line Driver)	Ó	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)	2	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-

■ Configuration:

RCP2-RTBB/RTBBL ROBO Cylinder Rotary Large Vertical Type 76mm Width

35P

RTBB : 330-degree I: Incremental rotation * The Simple RTBBL : Multiabsolute encoder is also considered rotational

35P: 35 □ size 20: 1/20 Pulse motor type "I". * See page Pre-35 for an explanation of the naming convention.

ratio 30: 1/30 deceleration ratio

330: 330degrees (RTBB only) 360: 360degrees (RTBBL only) P3: PMEC

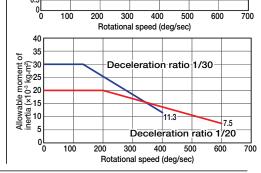
npatible Contr P1: PCON **RPCON** PSEL PSEP

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

NM:Reversed-rotation SA: Shaft adapter TA: Table adapter

M:5m
X : Custom
R : Robot cable

■ Speed vs. Load Capacity Due to the characteristics of the Pulse Motor, the RCP2 series' load capacity decreases at high speeds. In the table below, check if your desired speed and load capacity are supported. 4.5 4.6 £ 4.0 £ 3.5 Deceleration ratio 1/30 Ontbut tordue (1.73-Deceleration ratio 1/20 0.5



Technical P. A-5

(1) The output torque decreases as the rotational speed increases. Check the output torque graph on the right to see whether the speed required for your desired motion is supported.

References

- The allowable moment of inertia of the rotated work piece varies with the rotational speed.

 Check the Allowable Moment of Inertia graph on the right to see if the moment of inertia required for your desired motion is within the allowable range.
- (3) The rated acceleration while moving is 0.3G.

Actuator Specifications

■ Lead and Load Capacity Deceleration Max. Torque Allowable Moment of Oscillation Model Ratio RCP2-RTBB-I-35P-20-330-1 - 2 - 3 0.02 1/20 3.0 330 RCP2-RTBB-I-35P-30-330- 1 - 2 - 3 1/30 4.6 0.03 RCP2-RTBBL-I-35P-20-360-1 -2 -3 1/20 3.0 0.02 360 RCP2-RTBBL-I-35P-30-360- 1 - 2 - 3 1/30 4.6 0.03

■ Deceleration Ratio and Max. Speed

Stroke Deceleration Ratio	330/360 (deg)
1/20	600
1/30	400
	(Linite de auces (a)

Legend: ① Compatible controller ② Cable length ③ Options

Stroke List

Туре	Oscillation Angle (deg)	Standard Price
RTBB	330	-
RTBBL	360	-

② Cable List

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

^{*} See page A-39 for cables for maintenance.

③ Option List See Page Name Option Code Standard Price Reversed-rotation (*) NM \rightarrow A-33 Shaft adapter SA → A-35 Table adapter → A-37

* Reversed-rotation op	otion can be selected or	n the multi-rotational model only
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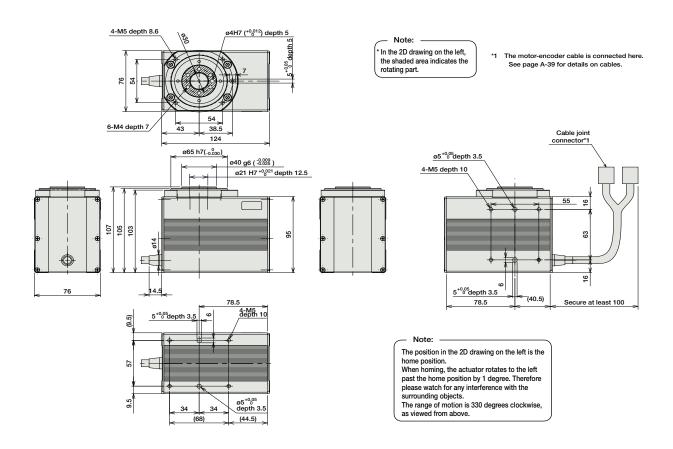
Actuator Specifications					
Item	Description				
Drive System	Hypoid gear				
Positioning Repeatability	±0.01 degrees				
Homing Accuracy	±0.01 degrees				
Lost Motion	±0.1 degrees				
Allowable Thrust Load	200N				
Allowable Load Moment	17.7N·m				
Weight	2.3kg				
Ambient Operating Temp./Humidity	$0\sim40^{\circ}\text{C}$, 85% RH or less (non-condensing)				

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

For Special Orders







Weight (kg) 2.3

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	110	PMEC-C-35PI-NP-2-①	Easy-to-use controller, even for beginners		AC100V AC200V	See P481	-	→ P477
Colenoid valve type	1	PSEP-C-35PI-NP-2-0	Operable with same signal as solenoid valve. Supports both single and double solenoid types.	3 points			-	→ P487
Splash-Proof Solenoid Valve Type	1	PSEP-CW-35PI-NP-2-0	No homing necessary with simple absolute type.				-	→ P407
Positioner Type	Í	PCON-C-35PI-NP-2-0	Positioning is possible for up to 512 points	E10 mainta			-	
Safety-Compliant Positioner Type		PCON-CG-35PI-NP-2-0	Positioning is possible for up to 512 points	512 points			-	
Pulse Train Input Type (Differential Line Driver)	Ó	PCON-PL-35PI-NP-2-0	Pulse train input type with differential line driver support	(-)	DC24V	2A max.	-	→ P525
Pulse Train Input Type (Open Collector)		PCON-PO-35PI-NP-2-0	Pulse train input type with open collector support	(-)			-	
Serial Communication Type	Í	PCON-SE-35PI-N-0-0	Dedicated to serial communication	64 points			-	
Field Network Type	ERRED	RPCON-35P	Dedicated to field network	768 points			-	→ P503
Program Control Type		PSEL-C-1-35PI-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-RTCB/RTCBL ROBO Cylinder Rotary Large Flat Type 124mm Width Pulse Motor

■ Configuration: RCP2-35P N : None P : 1m S : 3m I: Incremental * The Simple RTCB: 330-degree 35P: 35 ☐ size 20: 1/20 deceleration 330: 330 degrees P1: PCON

rotation RTCBL : Multi-rotational absolute encoder is also considered type "I". * See page Pre-35 for an explanation of the naming convention.

Pulse motor ratio ratio (H1B only)
30: 1/30 deceleration 360: 360degrees (RTBL only)

P3: PMEC PSEP

RPCON PSEL

NM:Reversed-rotation SA: Shaft adapter TA: Table adapter

M:5m
X : Custom
R : Robot cable



P. A-5

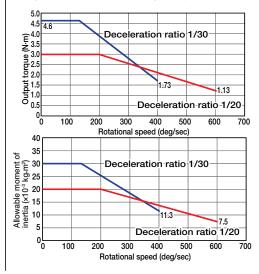
The output torque decreases as the rotational speed increases. Check the output torque graph on the right to see whether the speed required for your desired motion is supported.

The allowable moment of inertia of the rotated work piece varies with the rotational speed. Check the Allowable Moment of Inertia graph on the right to see if the moment of inertia required for your desired motion is within the allowable range.

(3) The rated acceleration while moving is 0.3G.

Speed vs. Load Capacity

Due to the characteristics of the Pulse motor, the RCP2 series' load capacity decreases at high speeds. In the table below, check if your desired speed and load capacity are supported.



Actuator Specifications

■ Lead and Load Capacity

Model	Deceleration Ratio	Max. Torque (N·m)	Allowable Moment of Inertia (kg·m²)	Oscillation Angle (deg)
RCP2-RTCB-I-35P-20-330-①-②-③	1/20	3.0	0.02	330
RCP2-RTCB-I-35P-30-330-10-2-3	1/30	4.6	0.03	330
RCP2-RTCBL-I-35P-20-360-①-②-③	1/20	3.0	0.02	360
RCP2-RTCBL-I-35P-30-360-①-②-③	1/30	4.6	0.03	360

■ Deceleration Ratio and Max. Speed

Stroke Deceleration Ratio	330/360 (deg)
1/20	600
1/30	400
	(Unit: degrees/s)

Legend: ① Compatible controller ② Cable length ③ Options

Stroke List

Туре	Oscillation Angle (deg)	Standard Price
RTCB	330	-
RTCBL	360	=

② Cable List

Actuator Specifications

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

^{*} See page A-39 for cables for maintenance.

③ Option List See Page Name Option Code Standard Price Reversed-rotation (*) NM → A-33 Shaft adapter SA → A-35 Table adapter TA \rightarrow A-37

Actuator opcomodicino					
Item	Description				
Drive System	Hypoid gear				
Positioning Repeatability	±0.01 degrees				
Homing Accuracy	±0.01 degrees				
Lost Motion	±0.1 degrees				
Allowable Thrust Load	200N				
Allowable Load Moment	17.7N·m				
Weight	2.2kg				
Ambient Operating Temp./Humidity	0 ~ 40°C, 85% RH or less (non-condensing)				

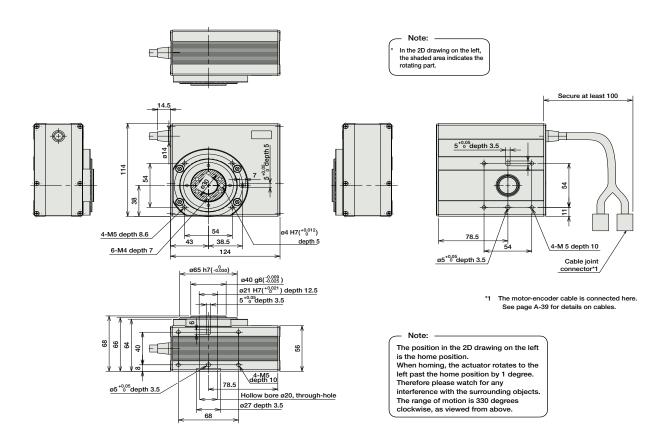
^{*} Reversed-rotation option can be selected on the multi-rotational model only.

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

For Special Orders







Weight (kg) 2.2

① Compatible Controllers

Name	External View	Model	Description	Max. Positioning Points	Input Voltage	Power Supply Capacity	Standard Price	See Page	
Solenoid Valve Type	410	PMEC-C-35PI-NP-2-①	Easy-to-use controller, even for beginners		AC100V AC200V	See P481	i	→ P477	
Solellold valve Type	1	PSEP-C-35PI-NP-2-0	Operable with same signal as solenoid valve. Supports both single and double solenoid types.	3 points			-	→ P487	
Splash-Proof Solenoid Valve Type	1	PSEP-CW-35PI-NP-2-0	No homing necessary with simple absolute type.				i	→ P487	
Positioner Type	E	PCON-C-35PI-NP-2-0	Positioning is possible for up to 512 points	512 points		2A max.	-		
Safety-Compliant Positioner Type		PCON-CG-35PI-NP-2-0		512 points			-		
Pulse Train Input Type (Differential Line Driver)	Ó	PCON-PL-35PI-NP-2-0	Pulse train input type with differential line driver support	(-)	DC24V		-	→ P525	
Pulse Train Input Type (Open Collector)		PCON-PO-35PI-NP-2-0	Pulse train input type with open collector support	(-)			-		
Serial Communication Type		PCON-SE-35PI-N-0-0	Dedicated to serial communication	64 points			-		
Field Network Type		RPCON-35P	Dedicated to field network	768 points			-	→ P503	
Program Control Type	Ñ	PSEL-C-1-35PI-NP-2-0	Programmed operation is possible Operation is possible on up to 2 axes	1500 points			-	→ P55	

* This is for the single-axis PSEL.

* ① is a placeholder for the power supply voltage (1: 100V, 2: 100~240V).

Mini

Standard

integrated

Roc Type

MIII

ontrollers Integrated

> Table/Arm /Flat Type

Gripper Rotary Type

inear Servo Type

> Cleanroom Type

plash-Prod

PSEP /ASEP

ERC2

1001

SCON

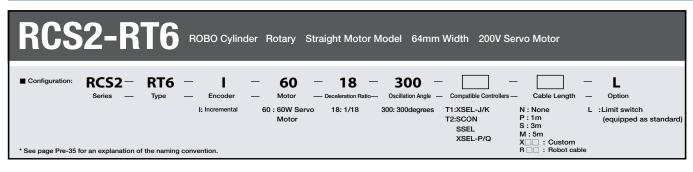
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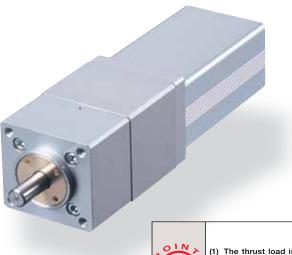
Pulse Motor

Servo Moto (24**V**

Servo Motor (200V)

Lineaı ervo Motoı





Technical References

P. A-**5**

(1) The thrust load is the mechanical strength of the output axis at rest. When selecting, take into account the load moment and the load inertia.

(2) The rated acceleration while moving is 0.3G.

Actuator Specifications					
■ Lead and Load Capacity					
Model	Motor Output (W)	Deceleration Ratio	Rated torque (N·m)	Allowable Moment of Inertia (kg·m²)	Oscillation Angle (deg)
RCS2-RT6-I-60-18-300-①-②-L	60	1/18	2.4	2.5×10 ⁻² or less	300
Legend: ① Compatible controller ② Cable length					

■ Stroke and Maximum Speed					
Oscillation Angle	300				
Deceleration Ratio	(deg)				
1/18	500				
.,					

(Unit: degrees/s)

Stroke List	
Oscillation Angle (deg)	Standard Price
300	-

(2) Gable List				
Туре	Cable Symbol	Standard Price		
	P (1m)	-		
Standard Type	S (3m)	-		
	M (5m)	-		
	X06 (6m) ~ X10 (10m)	-		
Special Lengths	X11 (11m) ~ X15 (15m)	-		
	X16 (16m) ~ X20 (20m)	-		
	R01 (1m) ~ R03 (3m)	_		
	R04 (4m) ~ R05 (5m)	-		
Robot Cable	R06 (6m) ~ R10 (10m)	_		
	R11 (11m) ~ R15 (15m)	-		
	R16 (16m) ~ R20 (20m)	_		
* C A 20 forbloo forinter				

^{*} See page A-39 for cables for maintenance.

Actuator Specifications					
Item Description					
Drive System	Ball speed reducer				
Positioning Repeatability	±0.02 degrees				
Lost Motion	0.1 degrees or less				
Base	Material: Aluminum (white alumite treated)				
Allowable Load Moment	6.8N·m or less				
Thrust load	100N or less				
Ambient Operating Temp./Humidity	$0\sim40^{\circ}\text{C}$, 85% RH or less (non-condensing)				

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

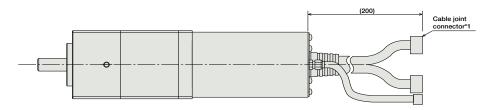
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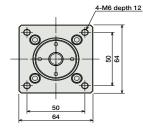


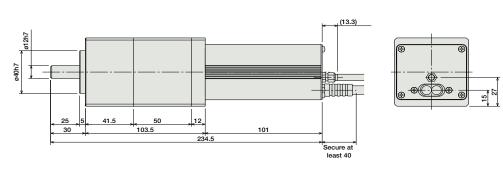




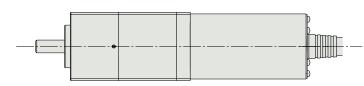
* For more information on homing, see page A-79.







*1 The motor cable, encoder cable, and limit switch cable are connected here.
See page A-39 for details on cables.



Weight (kg) 1.9

① Compatible Controllers

The RCS2 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
Positioner Mode			Positioning is possible for up to 512 points	512 points	Single-phase AC100V 360VA max. Single-phase AC200V			
Solenoid Valve Mode		SCON-C-60-NP-2-①	Operable with the same controls as the solenoid valve	7 points				→ P547
Serial Communication Type			Dedicated to serial communication	64 points		-	→ P347	
Pulse Train Input Control Type			Dedicated to pulse train input	(-)	Three-phase AC200V (XSEL-P/Q only)	* When operating a 150W single-axis model		
Program Control 1-2 Axes Type		SSEL-C-1-60-NP-2-①	Programmed operation is possible Operation is possible on up to 2 axes	20000 points			-	→ P577
Program Control 1-6 Axes Type	Pilled	XSEL-2-1-60-N1-EEE-2-3	Programmed operation is possible Operation is possible on up to 6 axes	20000 points			-	→ P587

- * For SSEL and XSEL, only applicable to the single-axis model.

- *① is a placeholder for the power supply voltage (1: 100V, or 2: single-phase 200V).
 *② is a placeholder for the type name of XSEL ("J", "K", "P", "Q"),
 *③ is a placeholder for the type of power supply voltage (1: 100V, 2: single-phase 200V, or 3: 3-phase 200V).

RCS2-RT6 **366**

RCS2-RT6R ROBO Cylinder Rotary Side-Mounted Motor 64mm Width 200V Servo Motor ■ Configuration: RCS2- RT6R-60 18 300 N : None P : 1m S : 3m T1:XSEL-J/K I: Incremental 60:60W Servo 18: 1/18 300: 300degrees L :Limit switch (equipped as standard) Motor T2:SCON SSEL M:5m X : Custom R : Robot cable * See page Pre-35 for an explanation of the naming convention.

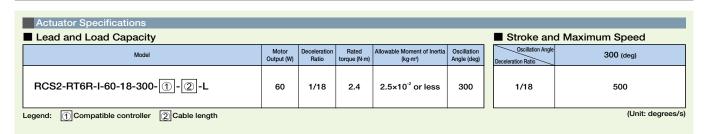


Technical References



Notes on Selection (2)

- The thrust load is the mechanical strength of the output axis at rest.
 When selecting, take into account the load moment and the load inertia.
- (2) The rated acceleration while moving is 0.3G.



Stroke List					
Oscillation Angle (deg)	Standard Price				
300	-				

(2) Gable List					
Туре	Cable Symbol	Standard Price			
	P (1m)	-			
Standard Type	S (3m)	-			
	M (5m)	-			
	X06 (6m) ~ X10 (10m)	_			
Special Lengths	X11 (11m) ~ X15 (15m)	-			
	X16 (16m) ~ X20 (20m)	-			
	R01 (1m) ~ R03 (3m)	-			
	R04 (4m) ~ R05 (5m)	-			
Robot Cable	R06 (6m) ~ R10 (10m)	-			
	R11 (11m) ~ R15 (15m)	-			
	R16 (16m) ~ R20 (20m)	_			
* See page A-39 for cables for maintenance					

^{*} See page A-39 for cables for maintenance.

Actuator Specifications				
Item	Description			
Drive System	Ball speed reducer + timing belt			
Positioning Repeatability	±0.02 degrees			
Lost Motion	0.1 degrees or less			
Base	Material: Aluminum (white alumite treated)			
Allowable Load Moment	6.8N⋅m or less			
Thrust load	100N or less			
Ambient Operating Temp./Humidity	$0\sim$ 40°C, 85% RH or less (non-condensing)			

ontrollers ntegrated

> Ro Typ

Standar

Controllers Integrated

/Flat Type

Gripper Rotary Type

inear Servo Type

> Cleanroom Type

plash-Proo

Controller

PSEP

/ASEP

ERC2

PCON

PSEL

XSE

Pulse Moto

Servo Moto (24V

Servo Motor (200V)

> Linear ervo Motor

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

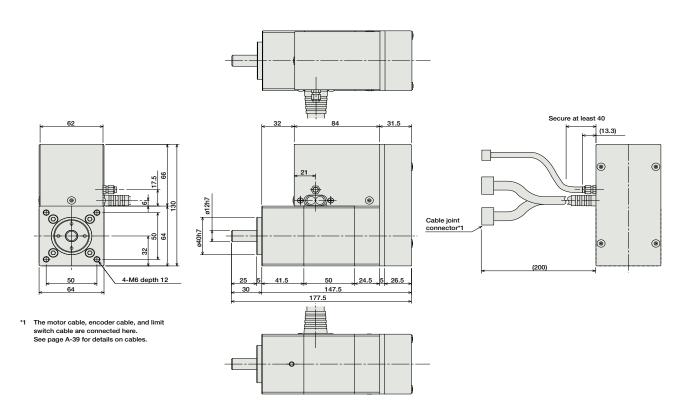
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* For more information on homing, see page A-79.



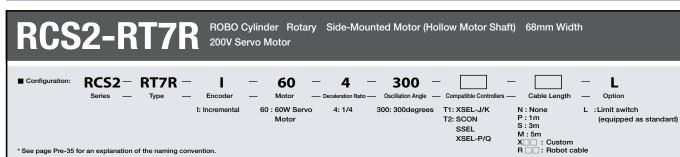
Weight (kg) 2.8

① Compatible Controllers

The RCS2 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
Positioner Mode			Positioning is possible for up to 512 points	512 points	Single-phase AC100V 360VA max. Single-phase AC200V			
Solenoid Valve Mode		SCON-C-60-NP-2-①	Operable with the same controls as the solenoid valve	7 points				→ P547
Serial Communication Type			Dedicated to serial communication	64 points		-	→ P347	
Pulse Train Input Control Type			Dedicated to pulse train input	(-)	Three-phase AC200V (XSEL-P/Q only)	* When operating a 150W single-axis model		
Program Control 1-2 Axes Type		SSEL-C-1-60-NP-2-①	Programmed operation is possible Operation is possible on up to 2 axes	20000 points			-	→ P577
Program Control 1-6 Axes Type	Pilled	XSEL-2-1-60-N1-EEE-2-3	Programmed operation is possible Operation is possible on up to 6 axes	20000 points			-	→ P587

- * For SSEL and XSEL, only applicable to the single-axis model.

- *① is a placeholder for the power supply voltage (1:100V, or 2: single-phase 200V).
 *② is a placeholder for the type name of XSEL ("J", "K", "P", "Q"),
 *③ is a placeholder for the type of power supply voltage (1:100V, 2: single-phase 200V, or 3: 3-phase 200V).



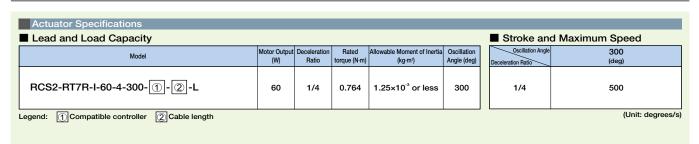


Technical References





- (1) The thrust load is the mechanical strength of the output axis at rest. When selecting, take into account the load moment and the load inertia.
- (2) The rated acceleration while moving is 0.3G.



Stroke List	
Oscillation Angle (deg)	Standard Price
300	_

2 Cable List					
Туре	Cable Symbol	Standard Price			
	P (1m)	_			
Standard Type	S (3m)	-			
	M (5m)	_			
	X06 (6m) ~ X10 (10m)	-			
Special Lengths	X11 (11m) ~ X15 (15m)	-			
	X16 (16m) ~ X20 (20m)	-			
	R01 (1m) ~ R03 (3m)	_			
	R04 (4m) ~ R05 (5m)	-			
Robot Cable	R06 (6m) ~ R10 (10m)	_			
	R11 (11m) ~ R15 (15m)	_			
	R16 (16m) ~ R20 (20m)	_			
* See nage A-30 for cables for maintenance					

^{*} See page A-39 for cables for maintenance.

Actuator Specifications				
Item	Description			
Drive System	Timing Belt			
Positioning Repeatability	±0.1 degrees			
Lost Motion	0.5 degrees or less			
Base	Material: Aluminum (white alumite treated)			
Allowable Load Moment	8.9N⋅m or less			
Thrust load	100N or less			
Ambient Operating Temp./Humidity	$0\sim$ 40°C, 85% RH or less (non-condensing)			

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

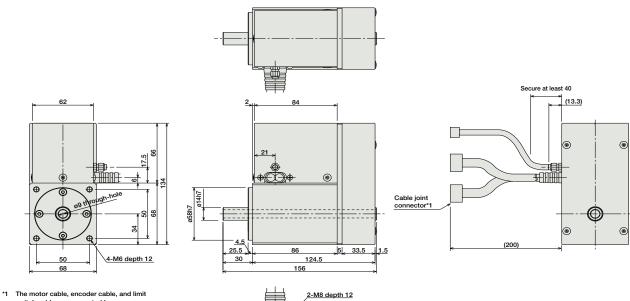
For Special Orders



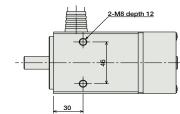




* For more information on homing, see page A-79.



switch cable are connected here.
See page A-39 for details on cables.



Weight (kg) 2.6

① Compatible Controllers

The RCS2 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
Positioner Mode	ĺ	SCON-C-60-NP-2-①	Positioning is possible for up to 512 points	512 points	Single-phase AC100V Single-phase AC200V Three-phase AC200V (XSEL-P/Q only)	360VA max.	-	→ P 547
Solenoid Valve Mode			Operable with the same controls as the solenoid valve	7 points				
Serial Communication Type			Dedicated to serial communication					
Pulse Train Input Control Type			Dedicated to pulse train input	(-)				
Program Control 1-2 Axes Type		SSEL-C-1-60-NP-2-①	Programmed operation is possible Operation is possible on up to 2 axes	20000 points			-	→ P577
Program Control 1-6 Axes Type	Mira	XSEL-2-1-60-N1-EEE-2-3	Programmed operation is possible Operation is possible on up to 6 axes	20000 points			-	→ P587

* For SSEL and XSEL, only applicable to the single-axis model.

*① is a placeholder for the power supply voltage (1:100V, or 2: single-phase 200V).
*② is a placeholder for the type name of XSEL ("J", "K", "P", "Q"),
*③ is a placeholder for the type of power supply voltage (1:100V, 2: single-phase 200V, or 3: 3-phase 200V).