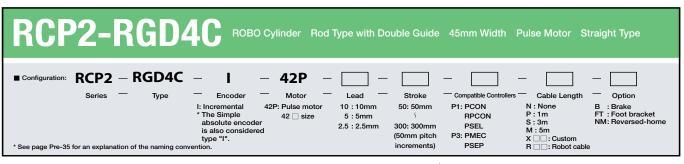
200 250 300





(1) When the stroke increases, the maximum speed will drop to prevent the ball screw from reaching the critical rotational speed. Use the actuator specification table below to check the maximum speed at the stroke you desire.

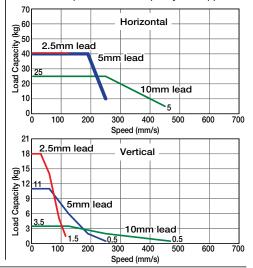
Since the RCP2 series use a pulse motor, the load capacity decreases at high speeds.

Check in the Speed vs. Load Capacity graph to see if your desired speed and load capacity are supported.

The load capacity is based on operation at an acceleration of 0.2G. 0.2G is the upper limit of the acceleration. In addition, the horizontal load capacity is based on the use of an external guide. See the technical resources (page A-83) for

# 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.



#### ■ Lead and Load Capacity (Note 1) Please note that the maximum load capacity decreases as the speed increases. Max. Load Capacity (Note 1) Maximum Push Stroke Horizontal (kg) Vertical (kg) orce (N)(Note RCP2-RGD4C-I-42P-10-10-20-30-40 ~ 25 $\sim 3.5$ 10 150 $50 \sim 300$ RCP2-RGD4C-I-42P-5-①-②-③-④ 5 $\sim 40$ $\sim$ 11 284 (50mm incre ments)

RCP2-RGD4C-I-42P-2.5-1 - 2 - 3 - 4 2.5 40  $\sim$  18 358 (Note 2) See page A-69 for the pushing force graphs. \* The values enclosed in < > apply for vertical usage. (Unit: mm/s) Legend: ① Stroke ② Compatible controller ③ Cable length ④ Options

■ Stroke and Maximum Speed							
Stroke Lead	$50\sim 200$ (50mm increments)	250 (mm)	300 (mm)				
10	458 458		350				
5	250	237	175				
2.5	125 <114>	118 <114>	87				

· · · · · · · · · · · · · · · · · · ·	
Stroke (mm)	Standard Price
50	-
100	-
150	=

the allowable weight using the supplied guide alone

Actuator Specifications

③ Cable List						
Туре	Cable Symbol	Standard Price				
	P (1m)	_				
Standard	<b>S</b> (3m)	-				
	<b>M</b> (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)	_				

<sup>\*</sup> See page A-39 for cables for maintenance.

4 Option List			
Name	Option Code	See Page	Standard Price
Brake	В	→ A-25	_
Foot bracket	FT	→ A-29	-
Reversed-home	NM	→ <b>A-33</b>	-

Actuator Specifications							
Description							
Ball screw ø8mm C10 grade							
±0.02mm							
0.1mm or less							
Double guide Guide rod diameter ø10mm Ball bush type							
ø22mm							
±0.05 deg							
0 ~ 40°C, 85% RH or less (non-condensing)							

### Dimensions

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

For Special Orders





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

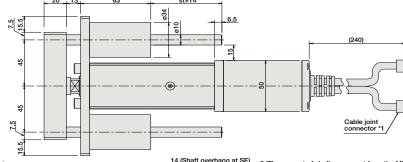
**3D** 

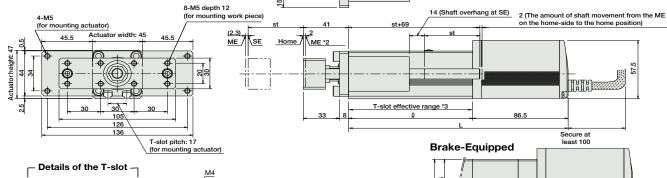
CAD

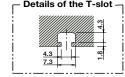
When homing, the rod moves to the M.E.; therefore, please watch for any interference with the surrounding objects. ME: Mechanical end

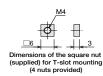
SE: Stroke end
The values enclosed in "( )" are reference dimensions.

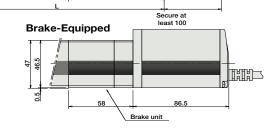
\*3. Please note that there is no T-slot on the bottom of the brake unit.











 $^{\star}$  Compared to the standard model, the brake-equipped model is longer by 58mm and heavier by 0.4kg.

# ■ Dimensions/Weight by Stroke

Stroke	50	100	150	200	250	300		
l	112.5	162.5	212.5	262.5	312.5	362.5		
L	199	249	299	349	399	449		
Weight (kg)	2.2	2.5	2.8	3.1	3.4	3.7		

# ② Compatible Controllers

The HCP2 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	115	PMEC-C-42PI-NP-2-①	Easy-to-use controller, even for beginners	AC100V AC200V		See P481	-	→ P477	
Colonida Valve Type		PSEP-C-42PI-NP-2-0	Operable with same signal as solenoid valve. Supports both single and double solenoid types.				-	→ P487	
Splash-Proof Solenoid Valve Type	1	PSEP-CW-42PI-NP-2-0	No homing necessary with simple absolute type.				-	11407	
Positioner Type	E	PCON-C-42PI-NP-2-0	Positioning is possible for up to 512 points		512 points			-	,
Safety-Compliant Positioner Type		PCON-CG-42PI-NP-2-0		orz politic			-		
Pulse Train Input Type (Differential Line Driver)		PCON-PL-42PI-NP-2-0	Pulse train input type with differential line driver support	(-)	(-)	DC24V	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				-	
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, or 2: 100~240V).