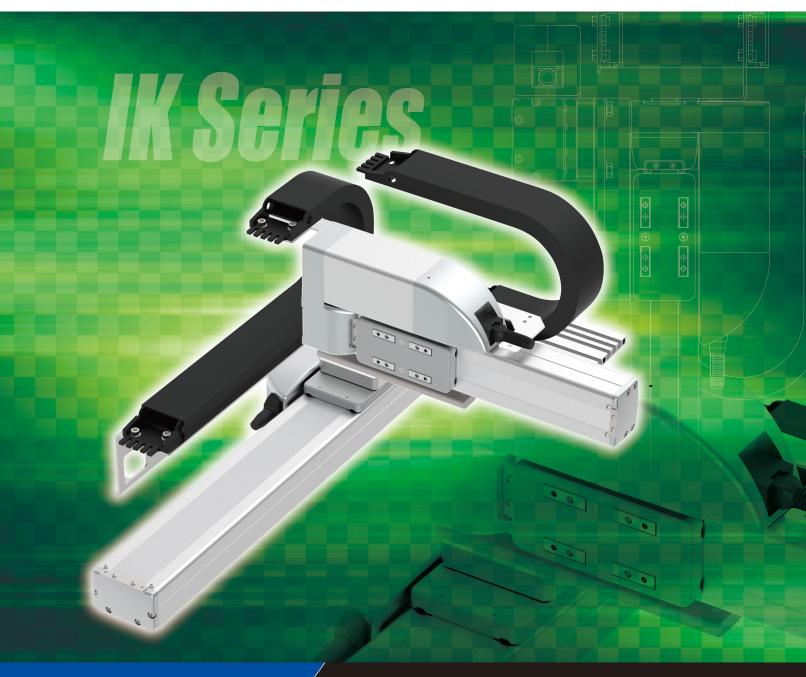


# ROBO Cylinder® Configurations **IK2-P6-Series 2-axis** Cartesian Robot





## Cartesian Robots have never been more affordable.

Low price & compact ROBO Cylinder® configuration

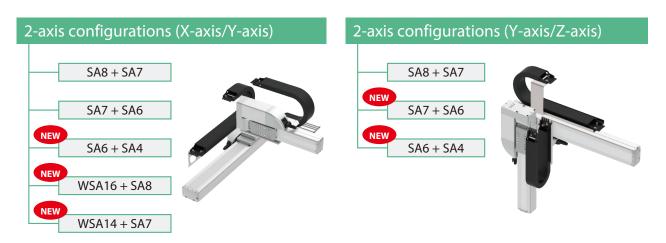
The ROBO Cylinder® equipped as standard with a Battery-less Absolute Encoder has been added to the "IK Series". It helps reduce the design and assembly steps.

The ROBO Cylinder® RCP6 Series has been adopted to achieve even higher speeds compared with conventional models.



# Diverse Configurations

The available configurations have been greatly expanded from the conventional models, allowing the ideal selection to suit your needs from 396 options. (7,056 options including the cable track selection) New configuration types using the RCP6 wide slider type (WSA) have been added.



# 2 Equipped with high resolution Battery-less Absolute Encoder as standard.

Equipped as standard with Battery-less Absolute Encoder for all configuration axes. No battery maintenance is required since there is no battery.

Homing operation is not required at startup or after emergency stop or malfunction. This reduces your operation time, resulting in reduced production costs.



#### The advantages of using an absolute encoder.

- (1) With an absolute encoder, home return is not required.
- (2) No external home sensor is required since home return is not necessary.
- (3) Removal of workpieces is not necessary, even after an emergency stop.
- (4) The troublesome creation of home-return programs is not necessary even when stopping inside of a complex machine.

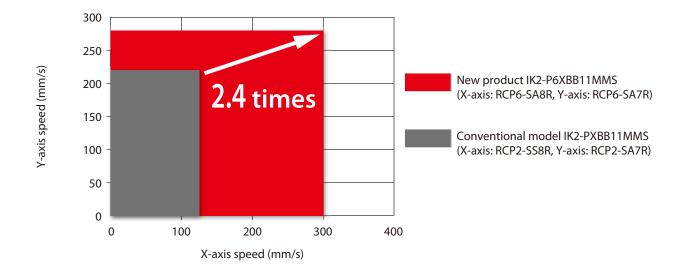
#### The advantages of battery-less.

- (1) No battery maintenance required.
- (2) No installation space for battery required.



# 3 Higher Speed

Compatible with PowerCON® which is equipped with a high-output driver. The maximum speed has been increased with the use of PowerCON®. This can reduce cycle time and help improve productivity.



## 2-axis configurations

## Robot Type Descriptions

Each configuration pattern is available with an extensive range of sizes from light load to heavy load and short stroke to long stroke. Select the optimal model for your application.

## XYB (Y-axis base mount) type



A basic configuration type in which the base of the Y-axis is fixed to the X-axis slider. It is operated by fixing equipment or a Z-axis on the Y-axis slider.

#### Point 1

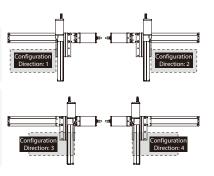
Select from 4 patterns of Y-axis configuration directions. (See the figure at right)

### Point 2

A cable track can be selected for Y-axis wiring. Select the cable track size from a maximum of 4 different sizes. You can also select a cable track for wiring by the user.

→ 2-axis configurations IK2-P6XB: p5~34

### **Configuration Direction**



## YZB (Z-axis base mount) type



For this type, the base of the Z-axis (vertical axis) is fixed to the Y-axis slider with the Y-axis side-mounted. The Z-axis slider moves vertically, allowing mounting of jigs or chucks for transport, raising, or lowering of workpieces.

#### Point <sup>-</sup>

Select from 2 patterns of Z-axis configuration directions. (See the figure at right)

## Point 2

A cable track can be selected for Z-axis wiring. Select the cable track size from a maximum of 4 different sizes. You can also select a cable track for wiring by the user.

 $\rightarrow$  2-axis configurations IK2-P6YB: p35~52

#### **Configuration Direction**



# **Cartesian Robot**

#### **ROBO Cylinder 2-axis Configurations** IK2-P6XBD1□□S 5 IK2-P6XBD2□□S 7 IK2-P6XBD3□□S 9 IK2-P6XBC1□□S 11 IK2-P6XBC2□□S 13 IK2-P6XBC3□□S 15 IK2-P6XBB1□□S **17** IK2-P6XBB2□□S 19 IK2-P6XBB3□□S 21 IK2-P6XBF1□□S 23 IK2-P6XBF2□□S 25 IK2-P6XBF3□□S **27** Stepper Motor IK2-P6XBE1□□S 29 IK2-P6XBE2□□S 31 IK2-P6XBE3□□S 33 IK2-P6YBD1□□S 35 IK2-P6YBD2□□S **37** IK2-P6YBD3□□S 39 IK2-P6YBC1□□S 41 IK2-P6YBC2□□S 43 IK2-P6YBC3□□S 45 IK2-P6YBB1□□S 47 IK2-P6YBB2□□S 49 IK2-P6YBB3□□S 51

Options 83



The photograph above shows the configuration direction "1" where both the first wiring and second wiring have cable tracks. Please refer to P3 for other configuration directions.

#### Payload by Acceleration

#### ■ SS type: X ultra high speed/Y ultra high speed

(Unit: kg)

,,	
Y-axis stroke (mm) Acceleration/ deceleration (G)	
0.1	3
0.3	3
0.5	2
0.7	1

\* When both X and Y axes have the same acceleration/deceleration.

When there is significant vibration, decrease the speed and acceleration/deceleration as required.

#### 100 150 Y-axis stroke (mm) 50 50 100 150 200 250 300 350 X-axis stroke 0 0 0 400 450 500 550 0 600 650

#### Applicable Controllers

Controllers are sold separately.
Please contact IAI for more information.

#### ☐ X-axis: SA6R, Y-axis: SA4R

Туре	Reference page in the General Catalog 2016
PCON-CB/CGB	See M-113
PCON-CYB/PLB/POB	See M-129
MCON-C/CG	See M-91
MCON-LC/LCG	3ee M-91
MSEL-PC/PG	See M-245

\* Operation is possible with the high output setting specification. When connecting to the MCON controller, "High-output setting specification" must be selected. Please contact IAI regarding use with the high-output setting disabled.

#### Cable Length

700 750 800

	Type	Cable code	Length
	Standard type	1L	1m
		3L	3m
		5L	5m
			Specified length (15m may)

Note 1. All-axis standard cable is used.

Note 2. The length of the second axis cable is from the exit of the cable track.

A separate cable is included for wiring inside the cable track.

Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified

in 1m increments up to 15m.

#### Cable Track

Туре	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)
Without cable track (cable only)	N		0	0
Cable track S size (inner width: 38mm)	CT		0	0
Cable track M size (inner width: 50mm)	CTM	See P.85	0	0
Cable track L size (inner width: 63mm)	CTL	See P.85	0	0
Cable track XL size (inner width: 80mm) *	CTXL		0	Cannot be selected *

Only the first wiring can be selected

## Specifications

Item	X-axis	Y-axis			
Axis model	RCP6-SA6R	RCP6-SA4R			
Stroke (Every 50mm)	50~800mm	50~150mm			
Max. speed *	640mm/s	560mm/s			
Motor size	42□ Stepper motor	35□ Stepper motor			
Ball screw lead	20mm	16mm			
Drive system	Ball screw φ10mm rolled C10	Ball screw φ8mm rolled C10			
Positioning repeatability	±0.01mm				
Base material	Aluminum				
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)				

<sup>\*</sup> The maximum speed may not be reached if the travel distance is short or acceleration is low. Maximum speed may change depending on the stroke. For details, refer to the Maximum Speed by Stroke table on P.86.

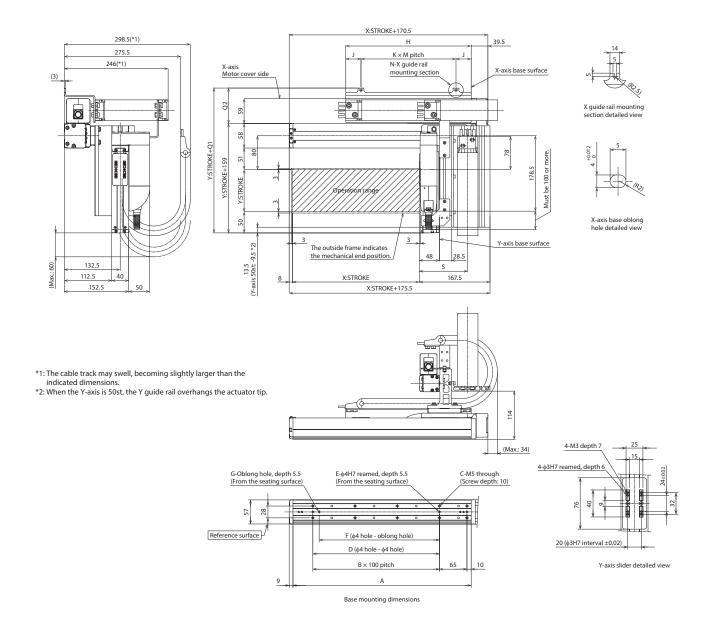
#### Options

Туре	Option code	Reference page	X-axis	Y-axis
Brake	В	See P.83	0	0
Non-motor end specification	NM	See P.84	0	0
Slider section roller specification	SR	See P.84	0	0

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



- 3D CAD
- Note 1. The configuration position in the figure is home.
- Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
- Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.



## (\*) Notes

The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer.

Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.85)

X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
A	172	222	272	322	372	422	472	522	572	622	672	722	772	822	872	922
В	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8
С	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20
D	0	100	100	200	200	300	300	400	400	500	500	600	600	700	700	800
E	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	0	85	85	185	185	285	285	385	385	485	485	585	585	685	685	785
G	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Н	172	197	222	247	272	297	322	347	372	397	422	447	472	497	522	547
J	23.5	36	23.5	36	23.5	36	61	23.5	36	48.5	26	23.5	36	48.5	61	48.5
K	1	1	1	1	1	1	1	3	3	2	2	2	2	2	2	3
M	125	125	175	175	225	225	200	100	100	150	185	200	200	200	200	150
N	2	2	2	2	2	2	2	4	4	3	3	3	3	3	3	4

Cable track size	CT	CTM	CTL	CTXL
Q1	243	256	269	286
Q2	84	97	110	127
ς	1145	121	1275	_

 $<sup>\</sup>ensuremath{^*}$  Dimensions Q1, Q2 and S change depending on the size of the cable track.



The photograph above shows the configuration direction "1" where both the first wiring and second wiring have cable tracks. Please refer to P.3 for other configuration directions.

#### Payload by Acceleration

#### ■ SS type: X ultra high speed/Y ultra high speed

(Unit: kg)

Y-axis stroke (mm) Acceleration/ deceleration (G)	
0.1	3
0.3	3
0.5	2
0.7	1

\* When both X and Y axes have the same acceleration/deceleration.

When there is significant vibration, decrease the speed and acceleration/deceleration as required.

## Y-axis stroke (mm)

Y-axis stroke (mm)		50	100	150
	50	0	0	0
	100	0	0	0
	150	0	0	0
	200	0	0	0
	250	0	0	0
Ê	300	0	0	0
stroke (mm)	350	0	0	0
8	400	0	0	0
15	450	0	0	0
X-axis	500	0	0	0
×	550	0	0	0
	600	0	0	0
	650	0	0	0
	700	0	0	0
	750	0	0	0
	800	0	0	0

#### Applicable Controllers

Controllers are sold separately.
Please contact IAI for more information.

#### ☐ X-axis: SA6C, Y-axis: SA4R

Type	Reference page in the General Catalog 2016
PCON-CB/CGB	See M-113
PCON-CYB/PLB/POB	See M-129
MCON-C/CG	See M-91
MCON-LC/LCG	3ee M-91
MSEL-PC/PG	See M-245

\* Operation is possible with the high output setting specification. When connecting to the MCON controller, "High-output setting specification" must be selected. Please contact IAI regarding use with the high-output setting disabled.

### Cable Length

Type	Cable code	Length
	1L	1m
Standard type	3L	3m
	5L	5m
	ΠL	Specified length (15m max )

Note 1. All-axis standard cable is used.

Note 2. The length of the second axis cable is from the exit of the cable track.

A separate cable is included for wiring inside the cable track.

Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

#### Cable Tracl

Туре	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)
Without cable track (cable only)	N		0	0
Cable track S size (inner width: 38mm)	СТ		0	0
Cable track M size (inner width: 50mm)	CTM	See P.85	0	0
Cable track L size (inner width: 63mm)	CTL	See P.85	0	0
Cable track XL size (inner width: 80mm) *	CTXL		0	Cannot be selected *

<sup>\*</sup> Only the first wiring can be selected

## Specifications

Item	X-axis	Y-axis		
Axis model	RCP6-SA6C	RCP6-SA4R		
Stroke (Every 50mm)	50~800mm	50~150mm		
Max. speed *	640mm/s	560mm/s		
Motor size	42□ Stepper motor	35□ Stepper motor		
Ball screw lead	20mm	16mm		
Drive system	Ball screw φ10mm rolled C10	Ball screw φ8mm rolled C10		
Positioning repeatability	±0.01mm			
Base material	Aluminum			
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)			

<sup>\*</sup>The maximum speed may not be reached if the travel distance is short or acceleration is low. Maximum speed may change depending on the stroke. For details, refer to the Maximum Speed by Stroke table on P.86.

#### Options (1)

Туре	Option code	Reference page	X-axis	Y-axis
Brake	В	See P.83	0	0
Cable exit direction (Top)	CJT	See P.83	0	
Cable exit direction (Right)	CJR	See P.83	0	Cannot be
Cable exit direction (Left)	CJL	See P.83	0	selected
Cable exit direction (Bottom)	CJB	See P.83	0	
Non-motor end specification	NM	See P.84	0	0
Slider section roller specification	SR	See P.84	0	0

#### Options (2)

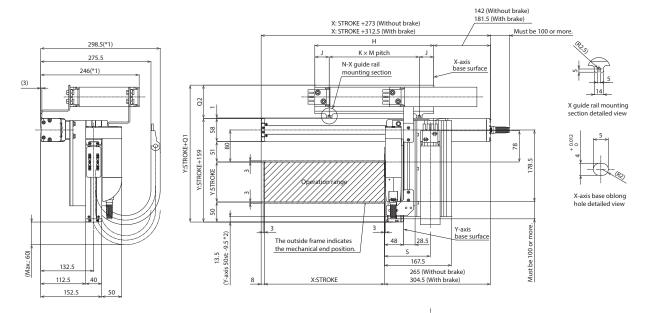
Туре	Option code	Reference page
Foot plate	FTP	See P.83

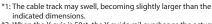
- IK2 Cartesian Robot

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

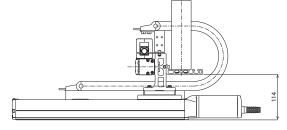


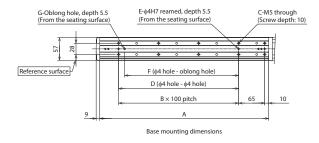
- Note 1. The configuration position in the figure is home.
- Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
- Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.

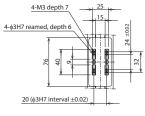




\*2: When the Y-axis is 50st, the Y guide rail overhangs the actuator tip.







Y-axis slider detailed view

## (\*) Notes

The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer.

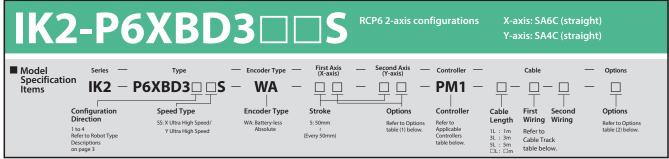
When the foot plate option is selected, the unit will be shipped fixed on the foot plate. (See P.83)

Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.85)

X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
A	172	222	272	322	372	422	472	522	572	622	672	722	772	822	872	922
В	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8
C	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20
D	0	100	100	200	200	300	300	400	400	500	500	600	600	700	700	800
E	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	0	85	85	185	185	285	285	385	385	485	485	585	585	685	685	785
G	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Н	172	197	222	247	272	297	322	347	372	397	422	447	472	497	522	547
J	23.5	36	23.5	36	23.5	36	61	23.5	36	48.5	26	23.5	36	48.5	61	48.5
K	1	1	1	1	1	1	1	3	3	2	2	2	2	2	2	3
M	125	125	175	175	225	225	200	100	100	150	185	200	200	200	200	150
N	2	2	2	2	2	2	2	4	4	3	3	3	3	3	3	4

Cable track size	CT	CTM	CTL	CTXL
Q1	242	255	268	285
Q2	83	96	109	126
S	114.5	121	127.5	-

<sup>\*</sup> Dimensions Q1, Q2 and S change depending on the size of the cable track.





The photograph above shows the configuration direction "1" where both the first wiring and second wiring have cable tracks. Please refer to P3 for other configuration directions.

#### Payload by Acceleration

#### ■ SS type: X ultra high speed/Y ultra high speed

(Unit: kg)

Y-axis stroke (mm) Acceleration/ deceleration (G)	50~150 (Every 50mm)
0.1	3
0.3	3
0.5	2
0.7	1

\* When both X and Y axes have the same acceleration/deceleration.

When there is significant vibration, decrease the speed and acceleration/deceleration as required.

# Stroke Y-axis stroke (mm) 50 100 50 0 0

Y	/-axis stroke (mm)	50	100	150
	50	0	0	0
	100	0	0	0
	150	0	0	0
	200	0	0	0
	250	0	0	0
Ê	300	0	0	0
E .	350	0	0	0
stroke (mm)	400	0	0	0
l st	450	0	0	0
X-axis	500	0	0	0
×	550	0	0	0
	600	0	0	0
	650	0	0	0
	700	0	0	0
	750	0	0	0
	800	0	0	0

#### Applicable Controllers

Controllers are sold separately.
Please contact IAI for more information.

#### ☐ X-axis: SA6C, Y-axis: SA4C

Туре	Reference page in the General Catalog 2016
PCON-CB/CGB	See M-113
PCON-CYB/PLB/POB	See M-129
MCON-C/CG	See M-91
MCON-LC/LCG	3ee M-91
MSEL-PC/PG	See M-245

\* Operation is possible with the high output setting specification. When connecting to the MCON controller, "High-output setting specification" must be selected. Please contact IAI regarding use with the high-output setting disabled.

#### Cable Length

Type	Cable code	Length
	1L	1m
Standard type	3L	3m
	5L	5m
		Specified length (15m max )

Note 1. All-axis standard cable is used.

Note 2. The length of the second axis cable is from the exit of the cable track.

A separate cable is included for wiring inside the cable track.

Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

### Cable Track

Туре	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)
Without cable track (cable only)	N		0	0
Cable track S size (inner width: 38mm)	CT		0	0
Cable track M size (inner width: 50mm)	CTM	See P.85	0	0
Cable track L size (inner width: 63mm)	CTL	3ee F.63	0	0
Cable track XL size (inner width: 80mm) *	CTXL		0	Cannot be selected *

<sup>\*</sup> Only the first wiring can be selected

## Specifications

	· ·				
ltem	X-axis	Y-axis			
Axis model	RCP6-SA6C	RCP6-SA4C			
Stroke (Every 50mm)	50~800mm	50~150mm			
Max. speed *	640mm/s	560mm/s			
Motor size	42□ Stepper motor	35□ Stepper motor			
Ball screw lead	20mm	16mm			
Drive system	Ball screw $\phi$ 10mm rolled C10	Ball screw φ8mm rolled C10			
Positioning repeatability	±0.01mm				
Base material	Aluminum				
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)				

<sup>\*</sup> The maximum speed may not be reached if the travel distance is short or acceleration is low. Maximum speed may change depending on the stroke. For details, refer to the Maximum Speed by Stroke table on P.86.

#### Options (1)

Туре	Option code	Reference page	X-axis	Y-axis
Brake	В	See P.83	0	0
Cable exit direction (Top)	CJT	See P.83	0	
Cable exit direction (Right)	CJR	See P.83	0	Cannot be
Cable exit direction (Left)	CJL	See P.83	0	selected
Cable exit direction (Bottom)	CJB	See P.83	0	
Non-motor end specification	NM	See P.84	0	0
Slider section roller specification	SR	See P.84	0	0

#### Options (2)

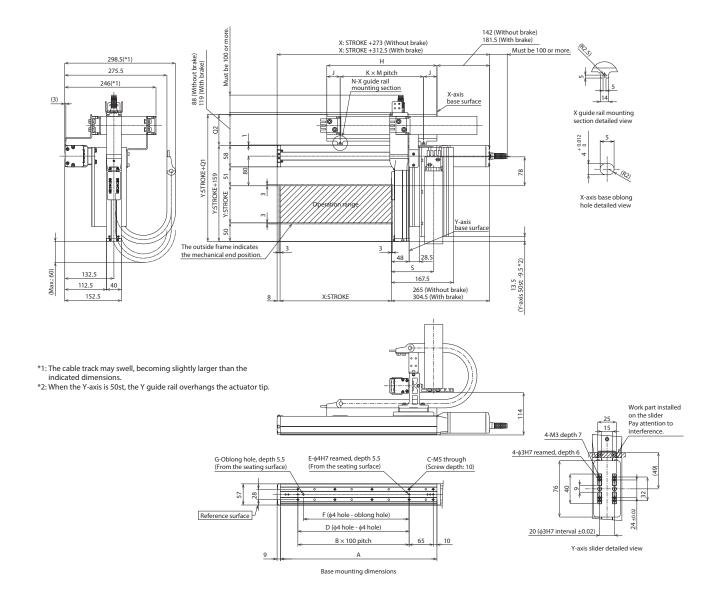
Туре	Option code	Reference page
Foot plate	FTP	See P.83



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



- Note 1. The configuration position in the figure is home.
- Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
- Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.



## (\*) Notes

The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer.

When the foot plate option is selected, the unit will be shipped fixed on the foot plate. (See P.83)

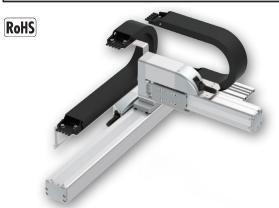
Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.85)

X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
A	172	222	272	322	372	422	472	522	572	622	672	722	772	822	872	922
В	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8
С	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20
D	0	100	100	200	200	300	300	400	400	500	500	600	600	700	700	800
E	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	0	85	85	185	185	285	285	385	385	485	485	585	585	685	685	785
G	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Н	172	197	222	247	272	297	322	347	372	397	422	447	472	497	522	547
J	23.5	36	23.5	36	23.5	36	61	23.5	36	48.5	26	23.5	36	48.5	61	48.5
K	1	1	1	1	1	1	1	3	3	2	2	2	2	2	2	3
M	125	125	175	175	225	225	200	100	100	150	185	200	200	200	200	150
N	2	2	2	2	2	2	2	4	4	3	3	3	3	3	3	4

Cable track size	CT	CTM	CTL	CTXL
Q1	242	255	268	285
Q2	83	96	109	126
S	114.5	121	127.5	-

<sup>\*</sup> Dimensions Q1, Q2 and S change depending on the size of the cable track.

#### **RCP6 2-axis configurations** X-axis: SA7R (side-mounted) Y-axis: SA6R (side-mounted) First Axis (X-axis) Second Axis (Y-axis) Cable Model Specification Items IK2 - P6XBC1□□S - 🗆 Configuration Direction Speed Type **Encoder Type** Stroke Options Controller Cable First Direction MM: X Medium Speed/Y Medium Speed 1 to 4 HH: X High Speed/Y High Speed Refer to Robot Type SS: X Ultra High Speed/Y Ultra High Speed Wiring Wiring Refer to Applicable Controllers table below Length 5: 50mm Refer to 1L : 1m 3L : 3m (Every 50mm) Cable Track table below



The photograph above shows the configuration direction "1" where both the first wiring and second wiring have cable tracks. Please refer to P.3 for other configuration directions.

## Payload by Acceleration

#### ■ MM type: X medium speed/Y medium speed

(Unit: kg)

, , , , , , , , , , , , , , , , , , ,			-
Y-axis stroke Acceleration/ (mm) deceleration (G)	50~100 (Every 50mm)	150	200
0.1	9	8	6
0.3	9	8	6
0.5	7		6
0.7		6	
1		4	

## ■ HH type: X high speed/Y high speed ■ SS type: X ultra high speed/Y ultra high speed

71	
Y-axis stroke Acceleration/ (mm) deceleration (G)	50~200 (Every 50mm)
0.1	5
0.3	5
0.5	4
0.7	2

<sup>\*</sup> When both X and Y axes have the same acceleration/ deceleration. When there is significant vibration, decrease the speed and acceleration/deceleration as required.

= 55 type. X aitia iligii speca/ i aitia iligii speca					
Y-axis stroke Acceleration/ (mm) deceleration (G)	50	100~200 (Every 50mm)			
0.1		4			
0.3		4			
0.5	3	2.5			
0.7	2	1.5			
1		1			

Y-	-axis stroke (mm)	50	100	150	200
	50	0	0	0	0
	100	0	0	0	0
	150	0	0	0	0
	200	0	0	0	0
	250	0	0	0	0
Ê	300	0	0	0	0
stroke (mm)	350	0	0	0	0
oke.	400	0	0	0	0
str	450	0	0	0	0
X-axis	500	0	0	0	0
×	550	0	0	0	0
	600	0	0	0	0
	650	0	0	0	0
	700	0	0	0	0
	750	0	0	0	0
	800	0	0	0	0

#### Applicable Controllers

Controllers are sold separately. Please contact IAI for more information.

#### ☐ X-axis: SA7R, Y-axis: SA6R

Type	Reference page in the General Catalog 2016
PCON-CB/CGB	See M-113
PCON-CYB/PLB/POB	See M-129
MCON-C/CG	See M-91
MCON-LC/LCG	3ee W-91
MSEL-PC/PG	See M-245

<sup>\*</sup> Operation is possible with the high output setting specification. When connecting to the MCON controller, "High-output setting specification" must be selected. Please contact IAI regarding use with the high-output setting disabled.

#### Cable Length

Type	Cable code	Length
Standard type	1L	1m
	3L	3m
	5L	5m
		Specified length (15m may)

Note 1. All-axis standard cable is used.

Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.

Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

#### Cable Track

Options

Brake

Туре	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)
Without cable track (cable only)	N		0	0
Cable track S size (inner width: 38mm)	CT		0	0
Cable track M size (inner width: 50mm)	CTM	See	0	0
Cable track L size (inner width: 63mm)	CTL	P.85	0	0
Cable track XL size (inner width: 80mm) *	CTXL		0	Cannot be selected *

Option code

В

NM

SR

Reference

page

See P.83

See P.84

See P.84

X-axis

0

0

Y-axis

0

0

Type

Non-motor end specification

Slider section roller specification

#### Specifications

Item		X-axis	Y-axis	
Axis model		RCP6-SA7R	RCP6-SA6R	
Stroke (Every 50mm)		50~800mm	50~200mm	
	MM	280mm/s	400mm/s	
Max. speed *	HH	560mm/s	680mm/s	
	SS	640mm/s	800mm/s	
Motor size		56□ Stepper motor	42□ Stepper motor	
MM		8mm	6mm	
Ball screw lead	HH	16mm	12mm	
leau	SS	24mm	20mm	
Drive system		Ball screw \phi12mm rolled C10	Ball screw φ10mm rolled C10	
Positioning repeatability		±0.01mm		
Base material		Aluminum		
Ambient operating temperature, humidity		0~40°C, 85% RH or less (non-condensing)		

<sup>\*</sup> The maximum speed may not be reached if the travel distance is short or

# acceleration is low. Maximum speed may change depending on the stroke. For details, refer to the Maximum Speed by Stroke table on P.86.

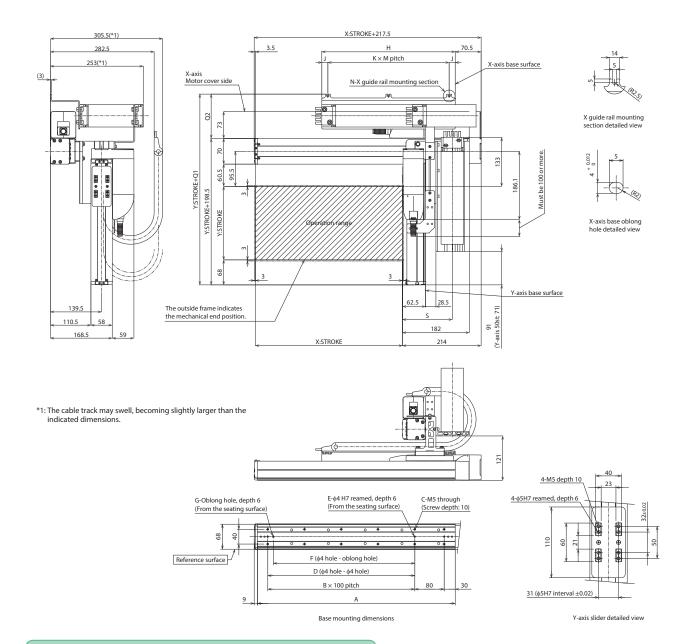
<sup>\*</sup> Only the first wiring can be selected

- IK2 Cartesian Robot

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



- Note 1. The configuration position in the figure is home.
- Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
- Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.



## (\*) Notes

The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer.

Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.85)

•																
X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
A	188	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938
В	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8
С	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20
D	0	0	100	200	200	300	300	400	400	500	500	600	600	700	700	800
E	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	0	85	85	185	185	285	285	385	385	485	485	585	585	685	685	785
G	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Н	188	213	238	263	288	313	338	363	388	413	438	463	488	513	538	563
J	16.5	16.5	14	16.5	16.5	16.5	14	16.5	14	16	15	66.5	44	56.5	69	16
K	1	1	1	2	2	2	2	2	2	3	3	3	2	2	2	3
M	155	180	210	115	127.5	140	155	165	180	127	136	110	200	200	200	177
N	2	2	2	3	3	3	3	3	3	4	4	4	3	3	3	4

Cable track size	CT	CTM	CTL	CTXL
Q1	306	319	332	349
Q2	107.5	120.5	133.5	150.5
S	129	135.5	142	_

<sup>\*</sup> Dimensions Q1, Q2 and S change depending on the size of the cable track.

#### 2-P6XB0 **RCP6 2-axis configurations** X-axis: SA7C (straight) Y-axis: SA6R (side-mounted) First Axis (X-axis) Second Axis (Y-axis) Cable Options Model Specification Items - P6XBC2□□S IK2 Configuration Direction Speed Type **Encoder Type** Stroke Options Controller Cable First Options Direction MM: X Medium Speed/Y Medium Speed 1 to 4 HH: X High Speed/Y High Speed Refer to Robot Type SS: X Ultra High Speed/Y Ultra High Speed Wiring Wiring Length Refer to Applicable Controllers table below Refer to Options table (2) below. Refer to (Every 50mm) Cable Track table below



The photograph above shows the configuration direction "1" where both the first wiring and second wiring have cable tracks. Please refer to P.3 for other configuration directions.

#### Payload by Acceleration

#### ■ MM type: X medium speed/Y medium speed

(Unit: kg)

7.			
Y-axis stroke Acceleration/ (mm) deceleration (G)	50~100 (Every 50mm)	150	200
0.1	9	8	6
0.3	9	8	6
0.5	7		6
0.7	6		
1	4		

## ■ HH type: X high speed/Y high speed ■ SS type: X ultra high speed/Y ultra high speed

Y-axis stroke Acceleration/ (mm) deceleration (G)	50~200 (Every 50mm)
0.1	5
0.3	5
0.5	4
0.7	2

<sup>\*</sup> When both X and Y axes have the same acceleration/ deceleration. When there is significant vibration, decrease the speed and acceleration/deceleration as required.

= 33 type. A ultia liigii sp	Jeeu/ i uitia	iligii speeu
Y-axis stroke Acceleration/ (mm) deceleration (G)	50	100~200 (Every 50mm)
0.1	4	4
0.3	4	4
0.5	3	2.5
0.7	2	1.5
1		1

#### Stroke

Y	-axis stroke (mm)	50	100	150	200
	50	0	0	0	0
	100	0	0	0	0
	150	0	0	0	0
	200	0	0	0	0
	250	0	0	0	0
Ê	300	0	0	0	0
stroke (mm)	350	0	0	0	0
8	400	0	0	0	0
ts.	450	0	0	0	0
X-axis	500	0	0	0	0
×	550	0	0	0	0
	600	0	0	0	0
	650	0	0	0	0
	700	0	0	0	0
	750	0	0	0	0
		_	_		

#### Applicable Controllers

Controllers are sold separately. Please contact IAI for more information.

#### ☐ X-axis: SA7C, Y-axis: SA6R

Type	Reference page in the General Catalog 2016		
PCON-CB/CGB	See M-113		
PCON-CYB/PLB/POB	See M-129		
MCON-C/CG	See M-91		
MCON-LC/LCG	266 M-31		
MSEL-PC/PG	See M-245		

<sup>\*</sup> Operation is possible with the high output setting specification. When connecting to the MCON controller, "High-output setting specification" must be selected. Please contact IAI regarding use with the high-output setting disabled.

#### Cable Length

Type	Cable code	Length	
Standard type	1L	1m	
	3L	3m	
	5L	5m	
	□L	Specified length (15m max.)	

Note 1. All-axis standard cable is used.

Note 2. The length of the second axis cable is from the exit of the cable track.

A separate cable is included for wiring inside the cable track.

Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

#### Cable Track

Туре	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)
Without cable track (cable only)	N		0	0
Cable track S size (inner width: 38mm)	CT		0	0
Cable track M size (inner width: 50mm)	CTM	See	0	0
Cable track L size (inner width: 63mm)	CTL	P.85	0	0
Cable track XL size (inner width: 80mm) *	CTXL		0	Cannot be selected *

<sup>\*</sup> Only the first wiring can be selected

#### Specifications

Item		X-axis	Y-axis		
Axis model		RCP6-SA7C	RCP6-SA6R		
Stroke (Every 50	mm)	50~800mm	50~200mm		
	MM	280mm/s	400mm/s		
Max. speed *	HH	560mm/s	680mm/s		
	SS	640mm/s	800mm/s		
Motor size		56□ Stepper motor	42□ Stepper motor		
Ball screw	MM	8mm	6mm		
lead	HH	16mm	12mm		
leau	SS	24mm	20mm		
Drive system		Ball screw \( \phi 12mm \) rolled C10	Ball screw \phi10mm rolled C10		
Positioning repeatability		±0.01mm			
Base material		Aluminum			
Ambient operating temperature, humidity		0~40°C, 85% RH or less (non-condensing)			

#### \* The maximum speed may not be reached if the travel distance is short or acceleration is low. Maximum speed may change depending on the stroke. For details, refer to the Maximum Speed by Stroke table on P.86.

## Options (1)

Туре	Option code	Reference page	X-axis	Y-axis
Brake	В	See P.83	0	0
Cable exit direction (Top)	CJT	See P.83	0	
Cable exit direction (Right)	CJR	See P.83	0	Cannot be
Cable exit direction (Left)	CJL	See P.83	0	selected
Cable exit direction (Bottom)	CJB	See P.83	0	
Non-motor end specification	NM	See P.84	0	0
Slider section roller specification	SR	See P.84	0	0

#### Options (2)

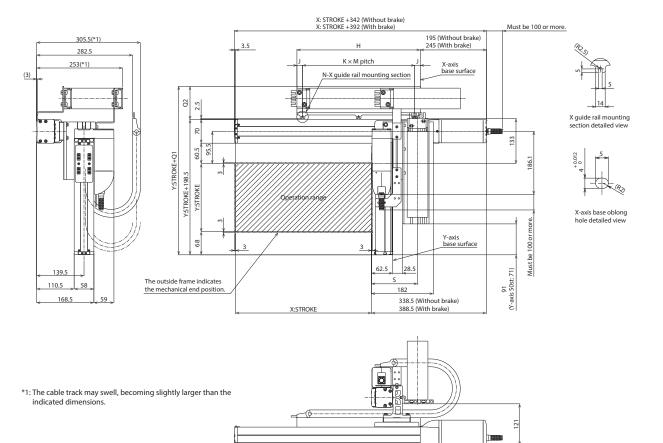
	Туре	Option code	Reference page
ĺ	Foot plate	FTP	See P.83

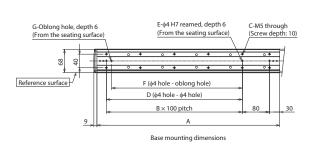


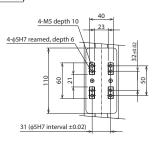
CAD drawings can be downloaded from our website. www.intelligentactuator.com



- Note 1. The configuration position in the figure is home.
- Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
- Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.







Y-axis slider detailed view

### (\*) Notes

The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer.

When the foot plate option is selected, the unit will be shipped fixed on the foot plate. (See P.83)

Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.85)

Dilliciisions by	Juon	_														
X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
А	188	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938
В	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8
С	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20
D	0	0	100	200	200	300	300	400	400	500	500	600	600	700	700	800
E	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	0	85	85	185	185	285	285	385	385	485	485	585	585	685	685	785
G	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Н	188	213	238	263	288	313	338	363	388	413	438	463	488	513	538	563
J	16.5	16.5	14	16.5	16.5	16.5	14	16.5	14	16	15	66.5	44	56.5	69	16
K	1	1	1	2	2	2	2	2	2	3	3	3	2	2	2	3
M	155	180	210	115	127.5	140	155	165	180	127	136	110	200	200	200	177
N	2	2	2	3	3	3	3	3	3	4	4	4	3	3	3	4

Cable track size	CT	CTM	CTL	CTXL
Q1	283	296	309	326
Q2	84.5	97.5	110.5	127.5
S	129	135.5	142	-

<sup>\*</sup> Dimensions Q1, Q2 and S change depending on the size of the cable track.

#### **2-P6XBC3 RCP6 2-axis configurations** X-axis: SA7C (straight) Y-axis: SA6C (straight) First Axis (X-axis) Second Axis (Y-axis) Options Model Specification Items — P6XBC3□□S IK2 Configuration Direction Speed Type **Encoder Type** Stroke Options Controller Cable First Options Direction 1 to 4 Refer to Robot Type Pecripitions MM: X Medium Speed/Y Medium Speed HH: X High Speed/Y High Speed SS: X Ultra High Speed/Y Ultra High Speed Wiring Wiring Length Refer to Applicable Controllers table below Refer to Options table (2) below. Refer to (Every 50mm) Cable Track table below



The photograph above shows the configuration direction "1" where both the first wiring and second wiring have cable tracks. Please refer to P.3 for other configuration directions.

#### Payload by Acceleration

#### ■ MM type: X medium speed/Y medium speed

(Unit: kg)

Y-axis stroke Acceleration/ (mm) deceleration (G)	50~100 (Every 50mm)	150	200
0.1	9	8	6
0.3	9	8	6
0.5	-	7	6
0.7		6	
1			

## ■ HH type: X high speed/Y high speed ■ SS type: X ultra high speed/Y ultra high speed

,, , ,	<b>J</b> .
Y-axis stroke Acceleration/ (mm) deceleration (G)	50~200 (Every 50mm)
0.1	5
0.3	5
0.5	4
0.7	2

<sup>\*</sup> When both X and Y axes have the same acceleration/ deceleration. When there is significant vibration, decrease the speed and acceleration/deceleration as required.

■ 55 type: ∧ uitra nign speed/ r uitra nign speed						
Y-axis stroke Acceleration/ (mm) deceleration (G)	50	100~200 (Every 50mm)				
0.1	4					
0.3		4				
0.5	3	2.5				
0.7	2	1.5				
1		1				

Y-	-axis stroke (mm)	50	100	150	200
	50	0	0	0	0
	100	0	0	0	0
	150	0	0	0	0
	200	0	0	0	0
	250	0	0	0	0
Ē	300	0	0	0	0
stroke (mm)	350	0	0	0	0
8	400	0	0	0	0
str	450	0	0	0	0
X-axis	500	0	0	0	0
×	550	0	0	0	0
	600	0	0	0	0
	650	0	0	0	0
	700	0	0	0	0
	750	0	0	0	0
	900	0	0	0	0

### Applicable Controllers

Controllers are sold separately. Please contact IAI for more information.

#### ☐ X-axis: SA7C, Y-axis: SA6C

Type	Reference page in the General Catalog 2016	
PCON-CB/CGB	See M-113	
PCON-CYB/PLB/POB	See M-129	
MCON-C/CG	See M-91	
MCON-LC/LCG		
MSEL-PC/PG	See M-245	

<sup>\*</sup> Operation is possible with the high output setting specification. When connecting to the MCON controller, "High-output setting specification" must be selected. Please contact IAI regarding use with the high-output setting disabled.

#### Cable Length

Type	Cable code	Length	
Standard type	1L	1m	
	3L	3m	
	5L	5m	
	□L	Specified length (15m max.)	

Note 1. All-axis standard cable is used.

Note 2. The length of the second axis cable is from the exit of the cable track.

A separate cable is included for wiring inside the cable track.

Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Туре	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)
Without cable track (cable only)	N		0	0
Cable track S size (inner width: 38mm)	CT		0	0
Cable track M size (inner width: 50mm)	CTM	See P.85	0	0
Cable track L size (inner width: 63mm)	CTL	3ee F.03	0	0
Cable track XL size (inner width: 80mm) *	CTXL		0	Cannot be selected *

<sup>\*</sup> Only the first wiring can be selected

### Specifications

Item		X-axis	Y-axis		
Axis model		RCP6-SA7C	RCP6-SA6C		
Stroke (Every 50	mm)	50~800mm	50~200mm		
Max. speed * HH		280mm/s	400mm/s		
		560mm/s	680mm/s		
		640mm/s	800mm/s		
Motor size		56□ Stepper motor	42□ Stepper motor		
Ball screw	MM	8mm	6mm		
lead	HH	16mm	12mm		
leau	SS	24mm	20mm		
Drive system		Ball screw φ12mm rolled C10	Ball screw \phi10mm rolled C10		
Positioning repeatability		±0.01mm			
Base material		Aluminum			
Ambient operat	_	0~40°C, 85% RH or less (non-condensing)			

## The maximum speed may not be reached if the travel distance is short or acceleration is low. Maximum speed may change depending on the stroke. For details, refer to the Maximum Speed by Stroke table on P.86.

### Options (1)

Туре	Option code	Reference page	X-axis	Y-axis
Brake	В	See P.83	0	0
Cable exit direction (Top)	CJT	See P.83	0	
Cable exit direction (Right)	CJR	See P.83	0	Cannot be
Cable exit direction (Left)	CJL	See P.83	0	selected
Cable exit direction (Bottom)	CJB	See P.83	0	
Non-motor end specification	NM	See P.84	0	0
Slider section roller specification	SR	See P.84	0	0

## Options (2)

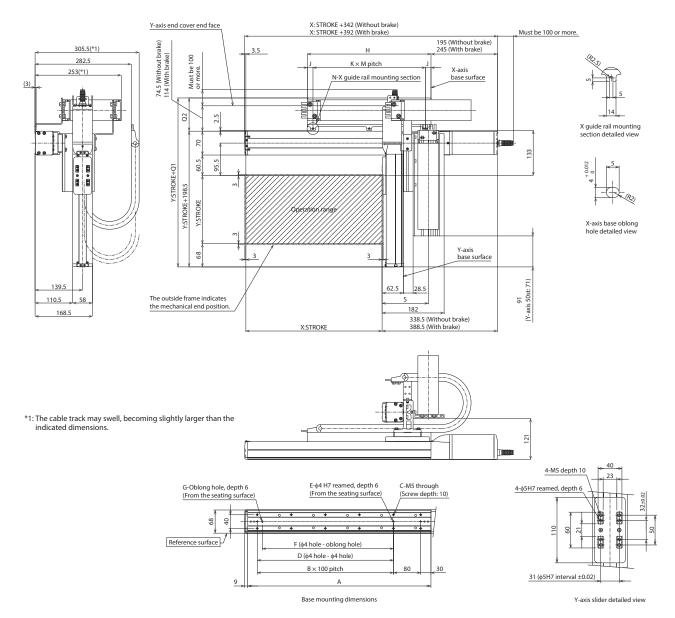
Туре	Option code	Reference page
Foot plate	FTP	See P.83



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



- Note 1. The configuration position in the figure is home.
- Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
- Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.



### (\*) Notes

The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer.

When the foot plate option is selected, the unit will be shipped fixed on the foot plate. (See P.83)

Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.85)

X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
А	188	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938
В	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8
С	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20
D	0	0	100	200	200	300	300	400	400	500	500	600	600	700	700	800
E	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	0	85	85	185	185	285	285	385	385	485	485	585	585	685	685	785
G	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Н	188	213	238	263	288	313	338	363	388	413	438	463	488	513	538	563
J	16.5	16.5	14	16.5	16.5	16.5	14	16.5	14	16	15	66.5	44	56.5	69	16
K	1	1	1	2	2	2	2	2	2	3	3	3	2	2	2	3
M	155	180	210	115	127.5	140	155	165	180	127	136	110	200	200	200	177
N	2	2	2	3	3	3	3	3	3	4	4	4	3	3	3	4

Cable track size	CT	CTM	CTL	CTXL
Q1	283	296	309	326
Q2	84.5	97.5	110.5	127.5
S	129	135.5	142	-

<sup>\*</sup> Dimensions Q1, Q2 and S change depending on the size of the cable track.

#### RCP6 2-axis configurations X-axis: SA8R (side-mounted) Y-axis: SA7R (side-mounted) First Axis (X-axis) Second Axis (Y-axis) Cable Model Specification Items - P6XBB1□ □S IK2 Configuration Direction Speed Type **Encoder Type** Stroke Options Controller Cable First Direction MM: X Medium Speed/Y Medium Speed 1 to 4 HH: X High Speed/Y High Speed Refer to Robot Type SS: X Ultra High Speed/Y Ultra High Speed Wiring Wiring Refer to Applicable Controllers table below Length Refer to (Every 50mm) Cable Track table below



The photograph above shows the configuration direction "1" where both the first wiring and second wiring have cable tracks. Please refer to P.3 for other configuration directions.

#### Payload by Acceleration

#### ■ MM type: X medium speed/Y medium speed

(Unit: kg)

, · ·						
Y-axis stroke Acceleration/ (mm) deceleration (G)	50~100 (Every 50mm)	150	200	250		
0.1	16	15	12.5	9		
0.3	16	15	12.5	9		
0.5		10		9		
0.7	(	5	5.5			
1	6	5	5.	.5		

#### ■ HH type: X high speed/Y high speed

#### SS type: X ultra high speed/Y ultra high speed

71 - 5 -1			
Y-axis stroke Acceleration/ (mm) deceleration (G)	50~150 (Every 50mm)	200	250
0.1	11	10.5	9
0.3	8		
0.5	5		
0.7	4		

Y-axis stroke Acceleration/ (mm) deceleration (G)	50~250 (Every 50mm)
0.1	3
0.3	1.5

<sup>\*</sup>When both X and Y axes have the same acceleration/deceleration. When there is significant vibration, decrease the speed and acceleration/deceleration as required.

Y-axi	s stroke (mm)	50	100	150	200	250
	50	0	0	0	0	0
	100	0	0	0	0	0
	150	0	0	0	0	0
	200	0	0	0	0	0
	250	0	0	0	0	0
	300	0	0	0	0	0
	350	0	0	0	0	0
	400	0	0	0	0	0
stroke (mm)	450	0	0	0	0	0
e -	500	0	0	0	0	0
l &	550	0	0	0	0	0
st	600	0	0	0	0	0
X-axis	650	0	0	0	0	0
(-a	700	0	0	0	0	0
^	750	0	0	0	0	0
	800	0	0	0	0	0
	850	0	0	0	0	0
	900	0	0	0	0	0
	950	0	0	0	0	0
	1000	0	0	0	0	0
	1050	0	0	0	0	0
	1100	0	0	0	0	0

#### Applicable Controllers

Controllers are sold separately. Please contact IAI for more information.

#### ☐ X-axis: SA8R

Туре	Reference page in the General Catalog 2016
PCON-CFB/CGFB	See M-113

#### ☐ Y-axis: SA7R

Туре	Reference page in the General Catalog 2016
PCON-CB/CGB	See M-113
PCON-CYB/PLB/POB	See M-129
MCON-C/CG	See M-91
MCON-LC/LCG	266 M-A1
MSEL-PC/PG	See M-245

<sup>\*</sup> Operation is possible with the high output setting specification. When connecting to the MCON controller, "High-output setting specification" must be selected. Please contact IAI regarding use with the high-output setting disabled.

Type	Cable code	Length
Standard type	1L	1m
	3L	3m
	5L	5m
	ΠL	Specified length (15m max )

Note 1. All-axis standard cable is used.

Note 2. The length of the second axis cable is from the exit of the cable track.

A separate cable is included for wiring inside the cable track.

Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Options

Brake

Туре	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)		
Without cable track (cable only)	N		-	-		
Cable track S size (inner width: 38mm)	CT		-	-		
Cable track M size (inner width: 50mm)	CTM	See P.85	-	-		
Cable track L size (inner width: 63mm)	CTL	See P.85	-	-		
Cable track XL size (inner width: 80mm) *	CTXL		-	Cannot be selected *		

Option code

В

NM

SR

Reference

page

See P.83

See P.84

See P.84

X-axis

Y-axis

Type

Non-motor end specification

Slider section roller specification

## Specifications

Item		X-axis	Y-axis				
Axis model		RCP6-SA8R	RCP6-SA7R				
Stroke (Every 50)	mm)	50~1100mm	50~250mm				
	MM	300mm/s	280mm/s				
Max. speed *	HH	400mm/s	560mm/s				
	SS	650mm/s	640mm/s				
Motor size		56□ High thrust stepper motor	56□ Stepper motor				
Ball screw	MM	10mm	8mm				
lead	HH	20mm	16mm				
lead	SS	30mm	24mm				
Drive system		Ball screw \phi16mm rolled C10	Ball screw \( \phi 12mm \) rolled C10				
Positioning repe	atability	±0.01mm					
Base material		Aluminum					
Ambient operating temperature, humidity		0~40°C, 85% RH or less (non-condensing)					

<sup>\*</sup>The maximum speed may not be reached if the travel distance is short or acceleration is low. Maximum speed may change depending on the stroke. For

Only the first wiring can be selected

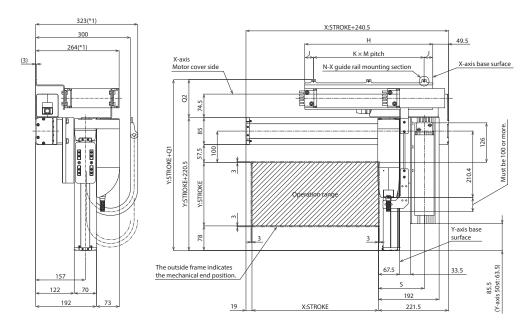
details, refer to the Maximum Speed by Stroke table on P.86.



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

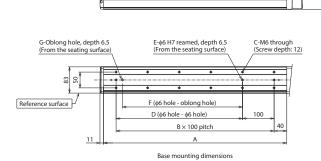


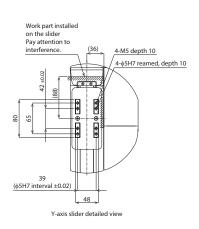
- Note 1. The configuration position in the figure is home.
- Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
- Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.





\*1: The cable track may swell, becoming slightly larger than the indicated dimensions.





### (\*) Notes

The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer.

Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.85)

X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
A	230	280	330	380	430	480	530	580	630	680	730	780	830	880	930	980	1030	1080	1130	1180	1230	1280
В	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12
C	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26
D	0	100	100	200	200	300	300	400	400	500	500	600	600	700	700	800	800	900	900	1000	1000	1100
E	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	0	0	80	180	180	280	280	380	380	480	480	580	580	680	680	780	780	880	880	980	980	1080
G	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Н	230	255	280	305	330	355	380	405	430	455	480	505	530	555	580	605	630	655	680	705	730	755
J	30	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	22.5	27.5	77.5	52.5	65	77.5	52.5	27.5	77.5	22.5	55	27.5
K	1	1	1	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	4	4	4
M	170	200	225	125	137.5	150	162.5	175	187.5	200	145	150	125	150	150	150	175	200	175	165	155	175
N	2	2	2	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5	5	5

Cable track size	CT	CTM	CTL	CTXL
Q1	328	341	354	371
Q2	107.5	120.5	133.5	150.5
S	139	145.5	152	-

<sup>\*</sup> Dimensions Q1, Q2 and S change depending on the size of the cable track.

#### 2-P6XBB2 RCP6 2-axis configurations X-axis: SA8C (straight) Y-axis: SA7R (side-mounted) First Axis (X-axis) Second Axis (Y-axis) Options Model Specification Items P6XBB2□ □S IK2 Configuration Direction Speed Type **Encoder Type** Stroke Options Controller Cable First Options Direction MM: X Medium Speed/Y Medium Speed 1 to 4 HH: X High Speed/Y High Speed Refer to Robot Type SS: X Ultra High Speed/Y Ultra High Speed Wiring Wiring Length Refer to Applicable Controllers table below Refer to Options table (2) below. Refer to (Every 50mm) Cable Track table below



The photograph above shows the configuration direction "1" where both the first wiring and second wiring have cable tracks. Please refer to P.3 for other configuration directions.

#### Payload by Acceleration

#### ■ MM type: X medium speed/Y medium speed

(Unit: kg)

Y-axis stroke Acceleration/ (mm) deceleration (G)	50~100 (Every 50mm)	150	200	250
0.1	16	15	12.5	9
0.3	16	15	12.5	9
0.5		10		9
0.7	6		5.5	
1	6		5.	.5

#### ■ HH type: X high speed/Y high speed

#### SS type: X ultra high speed/Y ultra high speed

Y-axis stroke Acceleration/ (mm) deceleration (G)	50~150 (Every 50mm)	200	250			
0.1	11	10.5	9			
0.3	8					
0.5	5					
0.7	4					

Y-axis stroke Acceleration/ (mm) deceleration (G)	50~250 (Every 50mm)
0.1	3
0.3	1.5

<sup>\*</sup>When both X and Y axes have the same acceleration/deceleration. When there is significant vibration, decrease the speed and acceleration/deceleration as required.

## Stroke

Y-axi	s stroke (mm)	50	100	150	200	250	
	50	0	0	0	0	0	
	100	0	0	0	0	0	
	150	0	0	0	0	0	
	200	0	0	0	0	0	
	250	0	0	0	0	0	
	300	0	0	0	0	0	
	350	0	0	0	0	0	
_	400	0	0	0	0	0	
X-axis stroke (mm)	450	0	0	0	0	0	
e .	500	0	0	0	0	0	
l &	550	0	0	0	0	0	
str	600	0	0	0	0	0	
-is	650	0	0	0	0	0	
a	700	0	0	0	0	0	
^	750	0	0	0	0	0	
	800	0	0	0	0	0	
	850	0	0	0	0	0	
	900	0	0	0	0	0	
	950	0	0	0	0	0	
	1000	0	0	0	0	0	
	1050	0	0	0	0	0	
	1100	0	0	0	0	0	

#### Applicable Controllers

Controllers are sold separately.
Please contact IAI for more information.

#### ☐ X-axis: SA8C

Туре	Reference page in the General Catalog 2016		
PCON-CFB/CGFB	See M-113		

#### ☐ Y-axis: SA7R

Туре	Reference page in the General Catalog 2016
PCON-CB/CGB	See M-113
PCON-CYB/PLB/POB	See M-129
MCON-C/CG	See M-91
MCON-LC/LCG	3ee M-91
MSEL-PC/PG	See M-245

<sup>\*</sup> Operation is possible with the high output setting specification. When connecting to the MCON controller, "High-output setting specification" must be selected. Please contact IAI regarding use with the high-output setting disabled.

#### Cable Length

Type	Cable code	Length
Standard type	1L	1m
	3L	3m
	5L	5m
	ΠL	Specified length (15m max )

Note 1. All-axis standard cable is used.

Note 2. The length of the second axis cable is from the exit of the cable track.

A separate cable is included for wiring inside the cable track.

A separate cable is included for wiring inside the cable track.

Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

#### Cable Trac

Туре	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)
Without cable track (cable only)	N		0	0
Cable track S size (inner width: 38mm)	CT		0	0
Cable track M size (inner width: 50mm)	CTM	See P.85	0	0
Cable track L size (inner width: 63mm)	CTL	See P.85	0	0
Cable track XL size (inner width: 80mm) *	CTXL		0	Cannot be selected *

Only the first wiring can be selected

## Specifications

Item		X-axis	Y-axis	
Axis model		RCP6-SA8C	RCP6-SA7R	
Stroke (Every 50r	nm)	50~1100mm	50~250mm	
	MM	300mm/s	280mm/s	
Max. speed *	HH	400mm/s	560mm/s	
	SS	650mm/s	640mm/s	
Motor size		56□ High thrust stepper motor	56□ Stepper motor	
Ball screw	MM	10mm	8mm	
lead	HH	20mm	16mm	
	SS	30mm	24mm	
Drive system		Ball screw φ16mm rolled C10	Ball screw φ12mm rolled C10	
Positioning repeatability		±0.01mm		
Base material Ambient operating temperature, humidity		Aluminum		
		0~40°C, 85% RH or less (non-condensing)		

# \*The maximum speed may not be reached if the travel distance is short or acceleration is low. Maximum speed may change depending on the stroke. For details, refer to the Maximum Speed by Stroke table on P.86.

#### Options (1)

Туре	Option code	Reference page	X-axis	Y-axis
Brake	В	See P.83	0	0
Cable exit direction (Top)	CJT	See P.83	0	
Cable exit direction (Right)	CJR	See P.83	0	Cannot be
Cable exit direction (Left)	CJL	See P.83	0	selected
Cable exit direction (Bottom)	CJB	See P.83	0	
Non-motor end specification	NM	See P.84	0	0
Slider section roller specification	SR	See P.84	0	0

#### Options (2)

Туре	Option code	Reference page
Foot plate	FTP	See P.83

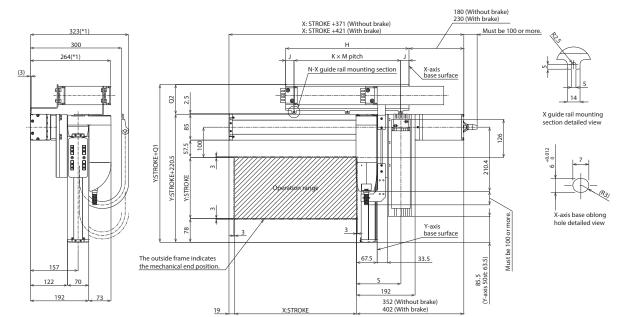
- IK2 Cartesian Robot

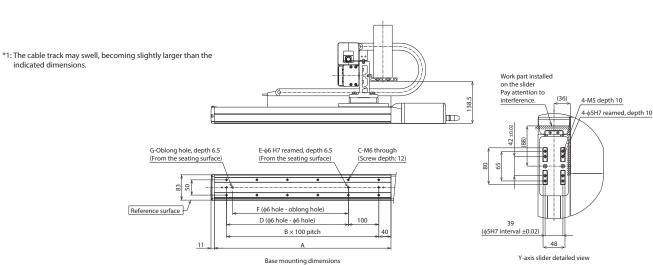
CAD drawings can be downloaded from our website. www.intelligentactuator.com



- 3D Note 1.
- Note 1. The configuration position in the figure is home.

  Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
  - Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.





## (\*) Notes

The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer.

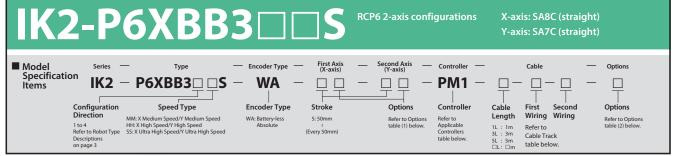
When the foot plate option is selected, the unit will be shipped fixed on the foot plate. (See P.83)

Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.85)

X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
A	230	280	330	380	430	480	530	580	630	680	730	780	830	880	930	980	1030	1080	1130	1180	1230	1280
В	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12
C	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26
D	0	100	100	200	200	300	300	400	400	500	500	600	600	700	700	800	800	900	900	1000	1000	1100
E	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	0	0	80	180	180	280	280	380	380	480	480	580	580	680	680	780	780	880	880	980	980	1080
G	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Н	230	255	280	305	330	355	380	405	430	455	480	505	530	555	580	605	630	655	680	705	730	755
J	30	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	22.5	27.5	77.5	52.5	65	77.5	52.5	27.5	77.5	22.5	55	27.5
K	1	1	1	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	4	4	4
M	170	200	225	125	137.5	150	162.5	175	187.5	200	145	150	125	150	150	150	175	200	175	165	155	175
N	2	2	2	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5	5	5

Cable track size	CT	CTM	CTL	CTXL
Q1	305	318	331	348
Q2	84.5	97.5	110.5	127.5
S	139	145.5	152	-

<sup>\*</sup> Dimensions Q1, Q2 and S change depending on the size of the cable track.





The photograph above shows the configuration direction "1" where both the first wiring and second wiring have cable tracks. Please refer to P.3 for other configuration directions.

#### Payload by Acceleration ■ MM type: X medium speed/Y medium speed (Unit: kg) 50~100 150 200 250 Acceleration/ deceleration (G) (Every 50mm) 0.1 16 15 12.5 9 0.3 16 15 12.5 9 0.5 10 9 0.7 5.5 6

6

#### ■ HH type: X high speed/Y high speed

#### SS type: X ultra high speed/Y ultra high speed

5.5

71 3 .1.						
Y-axis stroke Acceleration/ (mm) deceleration (G)		200	250			
0.1	11	10.5	9			
0.3	8					
0.5	5					
0.7	4					

, ,		
Acceleration/ deceleration (	Y-axis stroke (mm)	50~250 (Every 50mm)
(	).1	3
C	).3	1.5

<sup>\*</sup> When both X and Y axes have the same acceleration/deceleration. When there is significant vibration, decrease the speed and acceleration/deceleration as required.

#### 150 250 Y-axis stroke (mm) 100 Ö 100 150 200 0 250 300 350 400 450 0 0 500 X-axis stroke 550 0 600 650 700 750 800 850 0 0 0 0 900 950 1000 0 0 1050 1100

#### Applicable Controllers

Controllers are sold separately. Please contact IAI for more information.

#### ☐ X-axis: SA8C

Туре	Reference page in the General Catalog 2016
PCON-CFB/CGFB	See M-113

#### ☐ Y-axis: SA7C

Туре	Reference page in the General Catalog 2016					
PCON-CB/CGB	See M-113					
PCON-CYB/PLB/POB	See M-129					
MCON-C/CG	See M-91					
MCON-LC/LCG	See M-91					
MSEL-PC/PG	See M-245					

<sup>\*</sup> Operation is possible with the high output setting specification. When connecting to the MCON controller, "High-output setting specification" must be selected. Please contact IAI regarding use with the high-output setting disabled.

## Cable Length

Type	Cable code	Length
Character and the second	1L	1m
	3L	3m
Standard type	5L	5m
		Specified length (15m max )

- Note 1. All-axis standard cable is used.
- Note 2. The length of the second axis cable is from the exit of the cable track.
- A separate cable is included for wiring inside the cable track.

  Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

#### Cable Track

Туре	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)	
Without cable track (cable only)	nout cable track (cable only) N				
Cable track S size (inner width: 38mm)	CT		0	0	
Cable track M size (inner width: 50mm)	CTM	See P.85	0	0	
Cable track L size (inner width: 63mm)	CTL	3ee F.03	0	0	
Cable track XL size (inner width: 80mm) *	CTXL		0	Cannot be selected *	

Only the first wiring can be selected

#### Specifications

It		V:-	Vt-				
Item		X-axis	Y-axis				
Axis model		RCP6-SA8C	RCP6-SA7C				
Stroke (Every 50mm)		50~1100mm	50~250mm				
MN		300mm/s	280mm/s				
Max. speed *	HH	400mm/s	560mm/s				
	SS	650mm/s	640mm/s				
Motor size		56□ High thrust stepper motor	56□ Stepper motor				
Ball screw	MM	10mm	8mm				
lead	HH	20mm	16mm				
lead	SS	30mm	24mm				
Drive system		Ball screw φ16mm rolled C10	Ball screw φ12mm rolled C10				
Positioning repea	tability	±0.01mm					
Base material		Aluminum					
Ambient operating temperature, humidity		0~40°C, 85% RH or less (non-condensing)					

## \* The maximum speed may not be reached if the travel distance is short or acceleration is low. Maximum speed may change depending on the stroke. For details, refer to the Maximum Speed by Stroke table on P.86.

Туре	Option code	page	X-axis	Y-axis
Brake	В	See P.83	0	0
Cable exit direction (Top)	CJT	See P.83	0	
Cable exit direction (Right)	CJR	See P.83	0	Cannot be
Cable exit direction (Left)	CJL	See P.83	0	selected
Cable exit direction (Bottom)	CJB	See P.83	0	
Non-motor end specification	NM	See P 84	0	0

Reference

See P.84

#### Options (2)

Slider section roller specification

Options (1)

Туре	Option code	Reference page
Foot plate	FTP	See P.83

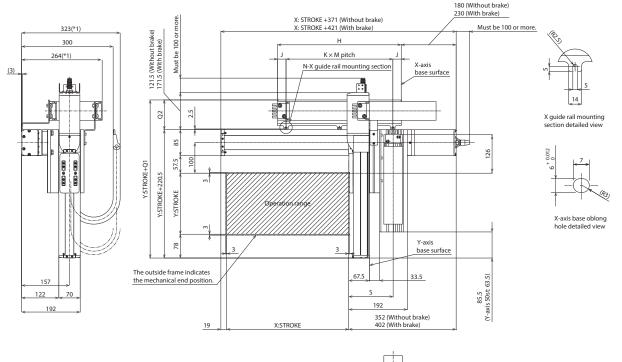
SR

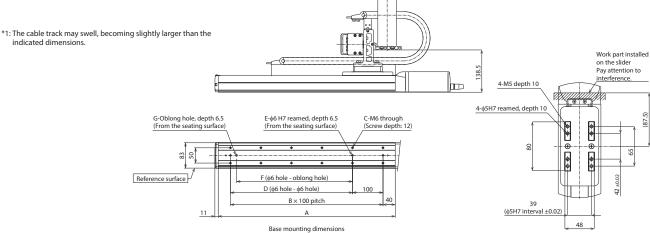
- IK2 Cartesian Robot

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



- Note 1. The configuration position in the figure is home.
- Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
- Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.





### (\*) Notes

The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer.

When the foot plate option is selected, the unit will be shipped fixed on the foot plate. (See P.83)

Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.85)

#### **■** Dimensions by Stroke

X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
A	230	280	330	380	430	480	530	580	630	680	730	780	830	880	930	980	1030	1080	1130	1180	1230	1280
В	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12
С	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26
D	0	100	100	200	200	300	300	400	400	500	500	600	600	700	700	800	800	900	900	1000	1000	1100
E	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	0	0	80	180	180	280	280	380	380	480	480	580	580	680	680	780	780	880	880	980	980	1080
G	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Н	230	255	280	305	330	355	380	405	430	455	480	505	530	555	580	605	630	655	680	705	730	755
J	30	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	27.5	22.5	27.5	77.5	52.5	65	77.5	52.5	27.5	77.5	22.5	55	27.5
K	1	1	1	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	4	4	4
M	170	200	225	125	137.5	150	162.5	175	187.5	200	145	150	125	150	150	150	175	200	175	165	155	175
N	2	2	2	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5	5	5

Cable track size	CT	CTM	CTL	CTXL
Q1	305	318	331	348
Q2	84.5	97.5	110.5	127.5
ς	139	145.5	152	_

<sup>\*</sup> Dimensions Q1, Q2 and S change depending on the size of the cable track.

Y-axis slider detailed view

#### RCP6 2-axis configurations X-axis: WSA14R (side-mounted) Y-axis: SA7R (side-mounted) First Axis (X-axis) Second Axis (Y-axis) Cable Model Specification Items P6XBF1□ □S IK2 Configuration Direction Speed Type **Encoder Type** Stroke Options Controller Cable First Direction MM: X Medium Speed/Y Medium Speed 1 to 4 HH: X High Speed/Y High Speed Refer to Robot Type SS: X Ultra High Speed/Y Ultra High Speed Wiring Wiring Refer to Applicable Controllers table below Length Refer to 1L : 1m 3L : 3m (Every 50mm) Cable Track table below



The photograph above shows the configuration direction "1" where both the first wiring and second wiring have cable tracks. Please refer to P.3 for other configuration directions.

#### Payload by Acceleration

#### ■ MM type: X medium speed/Y medium speed

(Unit: kg)

Y-axis strok Acceleration/ (mm deceleration (G)	30~100	150~200 (Every 50mm)	250~300 (Every 50mm)	350	400		
0.1	16	15	12.5	12	10.5		
0.3	16	15	12.5	12	10.5		
0.5		12					
0.7		9.5					

#### ■ HH type: X high speed/Y high speed ■ SS type: X ultra high speed/Y ultra high speed

Y-axis stroke (mm) deceleration (G)	50~100 (Every 50mm)	150~300 (Every 50mm)	350~400 (Every 50mm)
0.1	8	7.5	
0.3	8	7.5	
0.5	5	4.5	4
0.7	3	2.5	2

0	Y-axis stroke (mm) deceleration (G)	50~100 (Every 50mm)	150~300 (Every 50mm)	350~400 (Every 50mm)
	0.1	6	5.5	5
	0.3	5.5	5	4.5
	0.5	3	2.5	2

When both X and Y axes have the same acceleration/deceleration. When there is significant vibration, decrease the speed and acceleration/deceleration as required.

#### Y-axis stroke (mm) 100 150 250 300 350 400 50 0 0 0 0 0 0 0 0 100 150 0 0 0 0 200 250 0 0 0 0 0 0 0 0 0 0 0 0 0 300 350 X-axis stroke 400 0 0 0 0 450 0 500 550 0 600 650 0 0 700 0 0 0 0 0 750 0 0 800

#### Applicable Controllers

Controllers are sold separately. Please contact IAI for more information.

#### ☐ X-axis: WSA14R, Y-axis: SA7R

Туре	Reference page in the General Catalog 2016
PCON-CB/CGB	See M-113
PCON-CYB/PLB/POB	See M-129
MCON-C/CG	See M-91
MCON-LC/LCG	3ee W-91
MSEL-PC/PG	See M-245

<sup>\*</sup> Operation is possible with the high output setting specification. When connecting to the MCON controller, "High-output setting specification" must be selected. Please contact IAI regarding use with the high-output setting disabled.

## Cable Length

Type	Cable code	Length
	1L	1m
Standard type	3L	3m
	5L	5m
	□L	Specified length (15m max.)

Note 1. All-axis standard cable is used.

Note 2. The length of the second axis cable is from the exit of the cable track.

A separate cable is included for wiring inside the cable track.

Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

## Cable Track

Туре	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)
Without cable track (cable only)	N		0	0
Cable track S size (inner width: 38mm)	СТ		0	0
Cable track M size (inner width: 50mm)	CTM	See P.85	0	0
Cable track L size (inner width: 63mm)	CTL	See P.85	0	0
Cable track XL size (inner width: 80mm) *	CTXL		0	Cannot be selected *

Only the first wiring can be selected

#### Options

Туре	Option code	Reference page	X-axis	Y-axis
Brake	В	See P.83	0	0
Non-motor end specification	NM	See P.84	0	0
Slider section roller specification	SR	See P.84	0	0

#### Specifications

Item		X-axis	Y-axis			
Axis model		RCP6-WSA14R	RCP6-SA7R			
Stroke (Every 50mm)		50~800mm	50~400mm			
MM IIII	210mm/s	280mm/s				
Max. speed *	HH	420mm/s	560mm/s			
	SS	560mm/s	640mm/s			
Motor size		56□ Stepper motor	56□ Stepper motor			
D.II.	MM	8mm	8mm			
Ball screw lead	HH	16mm	16mm			
leau	SS	24mm	24mm			
Drive system		Ball screw \( \psi 12mm \) rolled C10	Ball screw \( \phi 12mm \) rolled C10			
Positioning repea	tability	±0.01mm				
Base material		Aluminum				
Ambient operating temperature, humidity		0~40°C, 85% RH or less (non-condensing)				

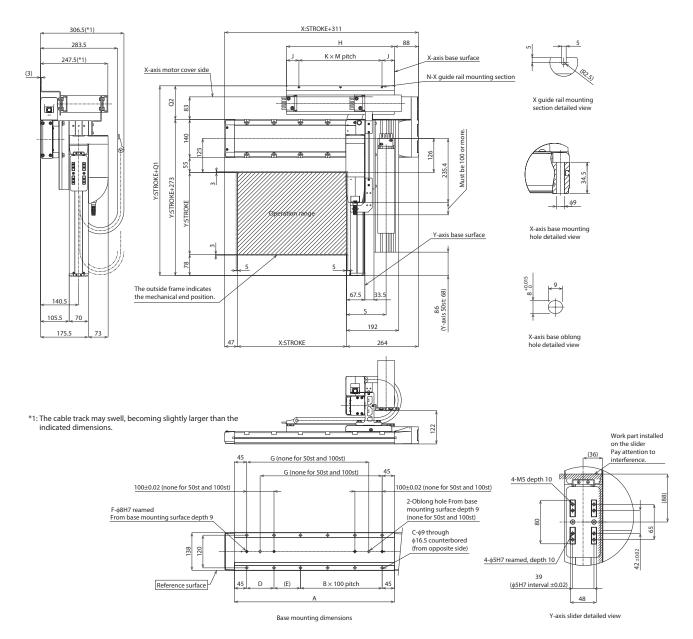
<sup>\*</sup> The maximum speed may not be reached if the travel distance is short or acceleration is low. Maximum speed may change depending on the stroke. For details, refer to the Maximum Speed by Stroke table on P.86.



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



- Note 1. The configuration position in the figure is home.
- Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
- Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.



### (\*) Notes

The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer.

Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.85)

X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
A	237	287	337	387	437	487	537	587	637	687	737	787	837	887	937	987
В	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
С	4	4	8	8	10	10	12	12	14	14	16	16	18	18	20	20
D	-	-	100	100	100	100	100	100	100	100	100	100	100	100	100	100
E	147	197	47	97	47	97	47	97	47	97	47	97	47	97	47	97
F	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4
G	-	-	198	248	298	348	398	448	498	548	598	648	698	748	798	848
Н	221	246	271	296	321	346	371	396	421	446	471	496	521	546	571	596
J	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	45.5	43	48	45.5	43	43	45.5	43
K	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
M	130	155	90	102.5	115	127.5	140	152.5	110	120	125	135	145	115	120	127.5
N	2	2	3	3	3	3	3	3	4	4	4	4	4	5	5	5

Cable track size	CT	CTM	CTL	CTXL
Q1	383.5	396.5	409.5	426.5
Q2	110.5	123.5	136.5	153.5
S	139	145.5	152	-

<sup>\*</sup> Dimensions Q1, Q2 and S change depending on the size of the cable track.

#### 2-P6XBF2 RCP6 2-axis configurations X-axis: WSA14C (straight) Y-axis: SA7R (side-mounted) First Axis (X-axis) Second Axis (Y-axis) Cable Specification Items P6XBF2□ □S IK2 WA - 🗆 Configuration Direction Speed Type **Encoder Type** Stroke Options Controller Cable First Direction MM: X Medium Speed/Y Medium Speed 1 to 4 HH: X High Speed/Y High Speed Refer to Robot Type SS: X Ultra High Speed/Y Ultra High Speed Wiring Wiring Refer to Applicable Controllers table below Length Refer to 1L : 1m 3L : 3m (Every 50mm) Cable Track table below

Ad



The photograph above shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Please refer to P.3 for other configuration directions.

#### Payload by Acceleration

#### ■ MM type: X medium speed/Y medium speed

(Unit: kg) 50~100 150~200 250~300 350 400 Acceleration/ deceleration (G) (Every 50mm) (Every 50mm) (Every 50mm) 0.1 16 15 12.5 12 10.5 0.3 15 12.5 12 10.5 0.5 12 10.5 0.7 9.5

## ■ HH type: X high speed/Y high speed ■ SS type: X ultra high speed/Y ultra high speed

# 50~300 350~400 (Every (Every 50mm) 50mm)

5.5

5

5

4.5

Y-axis stroke (mm) Acceleration/ deceleration (G)		150~300 (Every 50mm)	350~400 (Every 50mm)	Y-axis stroke Acceleration/ (mm) deceleration (G)  Y-axis stroke (mm) (Every 50mm)	150 (E
0.1	8		7.5	0.1 6	
0.3		8		0.3 5.5	
0.5	5	4.5	4	0.5 3	
0.7	3	2.5	2		

<sup>\*</sup> When both X and Y axes have the same acceleration/deceleration. When there is significant vibration, decrease the speed and acceleration/deceleration as required.

#### 100 Y-axis stroke (mm) 50 150 300 350 200 250 400 50 0 0 0 100 0 150 0 0 0 200 250 0 0 300 0 0 350 K-axis stroke 0 0 0 0 0 0 0 400 450 0 0 0 500 0 550 600 0 0 650 700 750 800 0

#### Applicable Controllers

Controllers are sold separately. Please contact IAI for more information.

#### ☐ X-axis: WSA14C, Y-axis: SA7R

Туре	Reference page in the General Catalog 2016		
PCON-CB/CGB	See M-113		
PCON-CYB/PLB/POB	See M-129		
MCON-C/CG	See M-91		
MCON-LC/LCG	3ee W-91		
MSEL-PC/PG	See M-245		

<sup>\*</sup> Operation is possible with the high output setting specification. When connecting to the MCON controller, "High-output setting specification" must be selected. Please contact IAI regarding use with the high-output setting disabled.

### Cable Length

Type	Cable code	Length
	1L	1m
Standard type	3L	3m
Standard type	5L	5m
	□L	Specified length (15m max.)

Note 1. All-axis standard cable is used.

Note 2. The length of the second axis cable is from the exit of the cable track.

A separate cable is included for wiring inside the cable track.

Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified

in 1m increments up to 15m.

#### Specifications

ltem		X-axis	Y-axis			
Axis model		RCP6-WSA14C	RCP6-SA7R			
Stroke (Every 50r	nm)	50~800mm	50~400mm			
	MM	210mm/s	280mm/s			
Max. speed *	HH	420mm/s	560mm/s			
	SS	560mm/s	640mm/s			
Motor size		56□ Stepper motor	56□ Stepper motor			
Ball screw	MM	8mm	8mm			
lead	HH	16mm	16mm			
leau	SS	24mm	24mm			
Drive system		Ball screw \phi12mm rolled C10	Ball screw φ12mm rolled C10			
Positioning repea	atability	±0.01mm				
Base material		Aluminum				
Ambient operating temperature, humidity		0~40°C, 85% RH or less (non-condensing)				

<sup>\*</sup> The maximum speed may not be reached if the travel distance is short or acceleration is low. Maximum speed may change depending on the stroke. For details, refer to the Maximum Speed by Stroke table on P.86.

#### Cable Track

Туре	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)
Without cable track (cable only)	N		0	0
Cable track S size (inner width: 38mm)	CT		0	0
Cable track M size (inner width: 50mm)	CTM	See P.85	0	0
Cable track L size (inner width: 63mm)	CTL	3ee F.03	0	0
Cable track XL size (inner width: 80mm) *			0	Cannot be selected *

Only the first wiring can be selected

#### Options

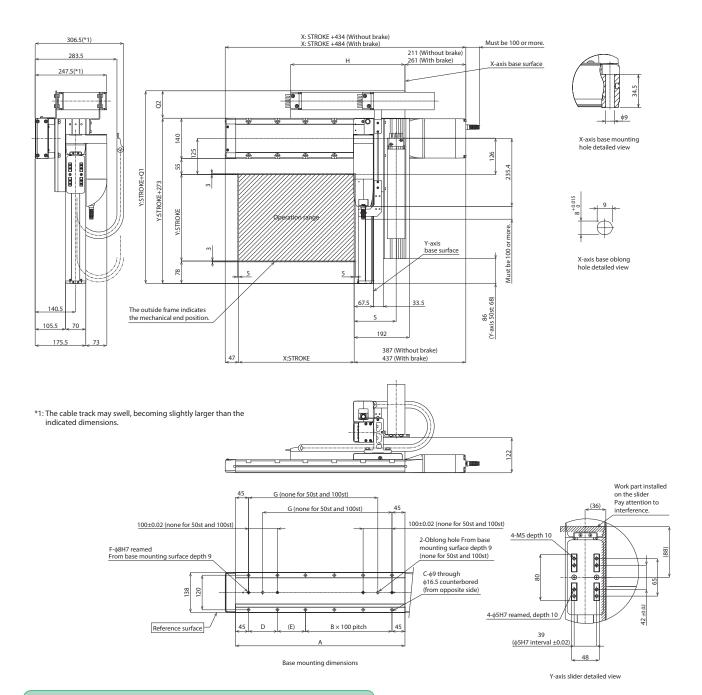
Туре	Option code	Reference page	X-axis	Y-axis
Brake	В	See P.83	0	0
Cable exit direction (Top)	CJT	See P.83	0	
Cable exit direction (Right)	CJR	See P.83	0	Cannot be
Cable exit direction (Left)	CJL	See P.83	0	selected
Cable exit direction (Bottom)	CJB	See P.83	0	
Non-motor end specification	NM	See P.84	0	0
Slider section roller specification	SR	See P.84	0	0

- IK2 Cartesian Robot

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



- Note 1. The configuration position in the figure is home.
- Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
- Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.



### (\*) Notes

The X-axis cable track guide rail is fixed on the X-axis body. Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.85)

,																
X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
A	237	287	337	387	437	487	537	587	637	687	737	787	837	887	937	987
В	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
С	4	4	8	8	10	10	12	12	14	14	16	16	18	18	20	20
D	-	-	100	100	100	100	100	100	100	100	100	100	100	100	100	100
E	147	197	47	97	47	97	47	97	47	97	47	97	47	97	47	97
F	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4
G	-	-	198	248	298	348	398	448	498	548	598	648	698	748	798	848
Н	221	246	271	296	321	346	371	396	421	446	471	496	521	546	571	596

Cable track size	CT	CTM	CTL	CTXL
Q1	356	368	383	401
Q2	83	95	110	128
S	139	145.5	152	_

<sup>\*</sup> Dimensions Q1, Q2 and S change depending on the size of the cable track.

#### IK2-P6XBF3 **RCP6 2-axis configurations** X-axis: WSA14C (straight) Y-axis: SA7C (straight) First Axis (X-axis) Second Axis (Y-axis) Cable Model Specification Items P6XBF3□□S IK2 - 🗆 Configuration Direction Speed Type **Encoder Type** Stroke Options Controller Cable First Direction MM: X Medium Speed/Y Medium Speed 1 to 4 HH: X High Speed/Y High Speed Refer to Robot Type SS: X Ultra High Speed/Y Ultra High Speed Wiring Wiring Refer to Applicable Controllers table below Length Refer to (Every 50mm) Cable Track table below



The photograph above shows the configuration direction "1" where both the first wiring and second wiring have cable tracks. Please refer to P.3 for other configuration directions.

#### Payload by Acceleration

#### ■ MM type: X medium speed/Y medium speed

(Unit: kg) 50~100 150~200 250~300 350 400 Acceleration/ deceleration (G) (Every 50mm) (Every 50mm) (Every 50mm) 0.1 16 15 12.5 12 10.5 0.3 12.5 12 10.5 0.5 12 10.5 0.7 9.5

#### ■ HH type: X high speed/Y high speed ■ SS type: X ultra high speed/Y ultra high speed

	-	_	-		_	-		-
Y-axis stroke (mm) deceleration(G)		150~300 (Every 50mm)	350~400 (Every 50mm)	Y-axis Acceleration/ deceleration (G)	stroke (mm)	50~100 (Every 50mm)	150~300 (Every 50mm)	350~400 (Every 50mm)
0.1	3	8	7.5	0.1		6	5.5	5
0.3		8	7.5	0.3		5.5	5	4.5
0.5	5	4.5	4	0.5		3	2.5	2
0.7	3	2.5	2					

When both X and Y axes have the same acceleration/deceleration. When there is significant vibration, decrease the speed and acceleration/deceleration as required.

#### Stroke

	LIOKE								
Y-ax	is stroke (mm)	50	100	150	200	250	300	350	400
	50	0	0	0	0	0	0	0	0
	100	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	0	0	0
	200	0	0	0	0	0	0	0	0
	250	0	0	0	0	0	0	0	0
(mm)	300	0	0	0	0	0	0	0	0
Ε.	350	0	0	0	0	0	0	0	0
stroke	400	0	0	0	0	0	0	0	0
st	450	0	0	0	0	0	0	0	0
X-axis	500	0	0	0	0	0	0	0	0
×	550	0	0	0	0	0	0	0	0
	600	0	0	0	0	0	0	0	0
	650	0	0	0	0	0	0	0	0
	700	0	0	0	0	0	0	0	0
	750	0	0	0	0	0	0	0	0
	800	0	0	0	0	0	0	0	0

#### Applicable Controllers

Controllers are sold separately. Please contact IAI for more information.

#### ☐ X-axis: WSA14C, Y-axis: SA7C

Туре	Reference page in the General Catalog 2016		
PCON-CB/CGB	See M-113		
PCON-CYB/PLB/POB	See M-129		
MCON-C/CG	S - M 01		
MCON-LC/LCG	See M-91		
MSEL-PC/PG	See M-245		

<sup>\*</sup> Operation is possible with the high output setting specification. When connecting to the MCON controller, "High-output setting specification" must be selected. Please contact IAI regarding use with the high-output setting disabled.

#### Cable Length

Type	Cable code	Length		
	1L	1m		
Ctandard tupo	3L	3m		
Standard type	5L	5m		
	□L	Specified length (15m max.)		

Note 1. All-axis standard cable is used.

Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.

Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

### Specifications

Item		X-axis	Y-axis		
Axis model		RCP6-WSA14C	RCP6-SA7C		
Stroke (Every 50n	nm)	50~800mm	50~400mm		
	MM	210mm/s	280mm/s		
Max. speed *	HH	420mm/s	560mm/s		
	SS	560mm/s	640mm/s		
Motor size		56□ Stepper motor	56□ Stepper motor		
Ball screw	MM	8mm	8mm		
lead	HH	16mm	16mm		
leau	SS	24mm	24mm		
Drive system		Ball screw $\phi$ 12mm rolled C10	Ball screw φ12mm rolled C10		
Positioning repea	tability	±0.01mm			
Base material		Aluminum			
Ambient operating temperature, humidity		0~40°C, 85% RH or less (non-condensing)			

<sup>\*</sup> The maximum speed may not be reached if the travel distance is short or acceleration is low. Maximum speed may change depending on the stroke. For details, refer to the Maximum Speed by Stroke table on P.86.

Туре	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)
Without cable track (cable only)	N		0	0
Cable track S size (inner width: 38mm)	CT		0	0
Cable track M size (inner width: 50mm)	СТМ	See P.85	0	0
Cable track L size (inner width: 63mm)	CTL	3ee F.03	0	0
Cable track XL size (inner width: 80mm) *	CTXL		0	Cannot be selected *

Only the first wiring can be selected

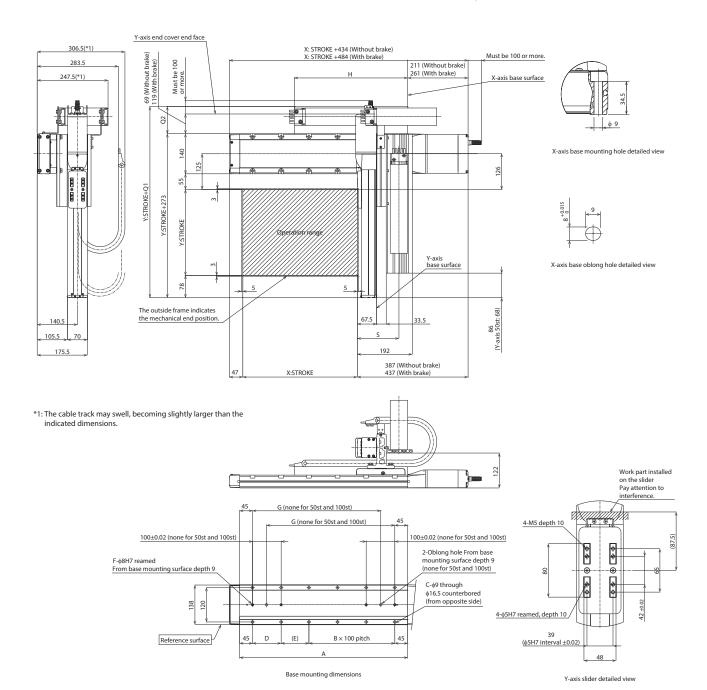
Туре	Option code	Reference page	X-axis	Y-axis
Brake	В	See P.83	0	0
Cable exit direction (Top)	CJT	See P.83	0	
Cable exit direction (Right)	CJR	See P.83	0	Cannot be
Cable exit direction (Left)	CJL	See P.83	0	selected
Cable exit direction (Bottom)	CJB	See P.83	0	
Non-motor end specification	NM	See P.84	0	0
Slider section roller specification	SR	See P.84	0	0



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



- Note 1. The configuration position in the figure is home.
- Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
- Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.



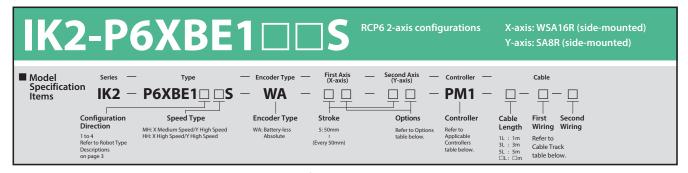
## (\*) Notes

The X-axis cable track guide rail is fixed on the X-axis body. Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.85)

X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
A	237	287	337	387	437	487	537	587	637	687	737	787	837	887	937	987
В	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
С	4	4	8	8	10	10	12	12	14	14	16	16	18	18	20	20
D	-	-	100	100	100	100	100	100	100	100	100	100	100	100	100	100
E	147	197	47	97	47	97	47	97	47	97	47	97	47	97	47	97
F	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4
G	-	-	198	248	298	348	398	448	498	548	598	648	698	748	798	848
Н	221	246	271	296	321	346	371	396	421	446	471	496	521	546	571	596

Cable track size	CT	CTM	CTL	CTXL
Q1	356	368	383	401
Q2	83	95	110	128
S	139	145.5	152	-

<sup>\*</sup> Dimensions Q1, Q2 and S change depending on the size of the cable track.





The photograph above shows the configuration direction "1" where both the first wiring and second wiring have cable tracks. Please refer to P.3 for other configuration directions.

#### Payload by Acceleration

#### ■ MH type: X medium speed/Y high speed

(Unit-ka)

■ Mili type. A medium s	peeu/ i ii	igii speed				(Offic. kg)
Y-axis stroke (mm) deceleration (G)	50~100 (Every 50mm)	150~200 (Every 50mm)	250~300 (Every 50mm)	350~400 (Every 50mm)	450	500
0.1	17	16	15	14	12	10
0.3	17 16		15	14	12	10
0.5	1	1	10	).5	1	0

#### ■ HH type: X high speed/Y high speed

Y-axis stroke (mm) deceleration (G)	50~100	150~250 (Every 50mm)	300~400 (Every 50mm)	450~500 (Every 50mm)
0.1	10	9.5	9	8.5
0.3	9	8.5	8	7.5
0.5	4	3.5	3	2.5

\* When both X and Y axes have the same acceleration/deceleration. When there is significant vibration, decrease the speed and acceleration/deceleration as required.

#### Stroke Y-axis stroke (mm) 250 450 500 0 0 0 0 0 0 0 100 150 200 250 000 300 350 0 0 0 0 0 0 0 0 400 450 500 0 0 0 0 0 0 0 550 0000 600 650 0 0 0 0 700 750 800 850 900 950 1000

#### Applicable Controllers

Controllers are sold separately. Please contact IAI for more information.

☐ X-axis: WSA16R, Y-axis: SA8R

Туре	Reference page in the General Catalog 2016
PCON-CFB/ CGFB	See M-113

## 1100 Cable Length

Specifications

1050

Type	Cable code	Length
Standard type	1L	1m
	3L	3m
	5L	5m
	□L	Specified length (15m max.)

Note 1. All-axis standard cable is used.

Note 2. The length of the second axis cable is from the exit of the cable track.

A separate cable is included for wiring inside the cable track.

Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

#### Cable Track

Туре	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)		
Without cable track (cable only)	N		0	0		
Cable track S size (inner width: 38mm)	CT		0	0		
Cable track M size (inner width: 50mm)	СТМ	See P.85	0	0		
Cable track L size (inner width: 63mm)	CTL	See P.85	0	0		
Cable track XL size (inner width: 80mm) *	CTXL		0	Cannot be selected *		

Option code

В

NM

SR

Reference

page

See P.83

See P.84

See P.84

X-axis

0

0

Y-axis

0

Type

Non-motor end specification

Slider section roller specification

Brake

#### Options

Specifications												
Item		X-axis	Y-axis									
Axis model		RCP6-WSA16R	RCP6-SA8R									
Stroke (Every 50m	nm)	50~1100mm	50~500mm									
A4	MH	210mm/s	400mm/s									
Max. speed *	HH	365mm/s	650mm/s									
Motor size		56□ High thrust stepper	56□ High thrust stepper									
WIOTOI SIZE		motor	motor									
Ball screw	MH	10mm	20mm									
lead	HH	20mm	2011111									
Drive system		Ball screw \phi16mm rolled C10	Ball screw φ16mm rolled C10									
Positioning repea	tability	±0.01mm										
Base material		Aluminum										
Ambient operatir temperature, hun		0~40°C, 85% RH or less (non-condensing)										

* The maximum speed may not be reached if the travel distance is short or
acceleration is low. Maximum speed may change depending on the stroke. For
details, refer to the Maximum Speed by Stroke table on P.86.

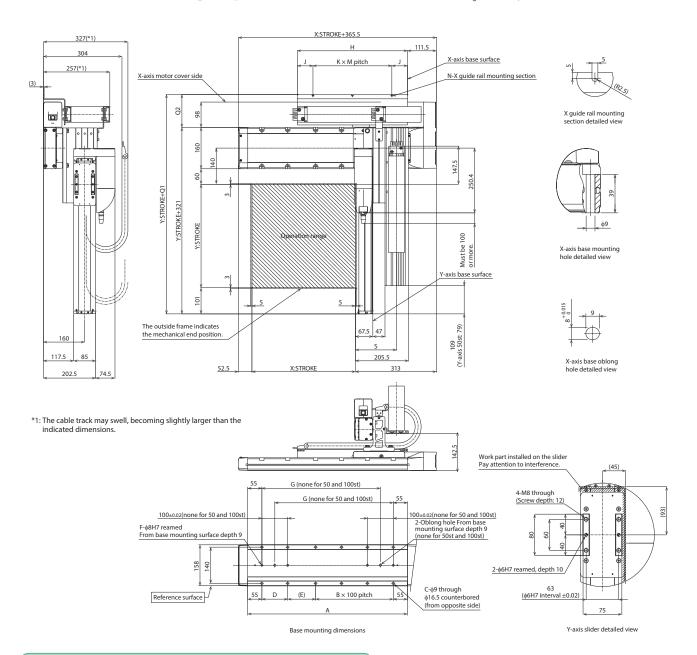
<sup>\*</sup> Only the first wiring can be selected



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



- Note 1. The configuration position in the figure is home.
- Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
- Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.



## (\*) Notes

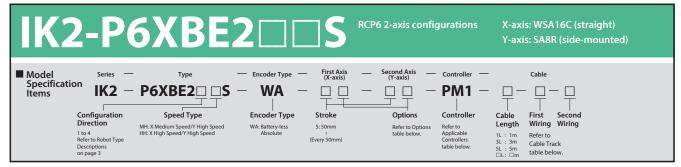
The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer.

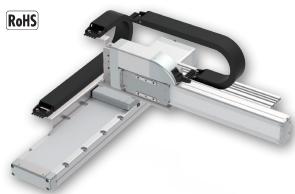
Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.85)

X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
A	268	318	368	418	468	518	568	618	668	718	768	818	868	918	968	1018	1068	1118	1168	1218	1268	1318
В	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
С	4	4	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
D	-	-	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
E	158	208	58	108	58	108	58	108	58	108	58	108	58	108	58	108	58	108	58	108	58	108
F	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
G	-	-	208	258	308	358	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158
Н	251	276	301	326	351	376	401	426	451	476	501	526	551	576	601	626	651	676	701	726	751	776
J	60.5	60.5	60.5	60.5	60.5	60.5	60.5	60.5	60.5	58	63	60.5	58	58	60.5	58	60.5	58	60.5	63	63	63
K	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4	4	5	5	5
M	130	155	90	102.5	115	127.5	140	152.5	110	120	125	135	145	115	120	127.5	132.5	140	145	120	125	130
N	2	2	3	3	3	3	3	3	4	4	4	4	4	5	5	5	5	5	5	6	6	6

Cable track size	CT	CTM	CTL	CTXL
Q1	448.5	448.5	448.5	465.5
Q2	127.5	127.5	127.5	144.5
S	152.5	159	165.5	_

<sup>\*</sup> Dimensions Q1, Q2 and S change depending on the size of the cable track.





The photograph above shows the configuration direction "1" where both the first wiring and second wiring have cable tracks. Please refer to P3 for other configuration directions.

#### Payload by Acceleration

#### ■ MH type: X medium speed/Y high speed

(Unit- ka)

= Wir type. X medium speed/ 1 mgm speed										
Y-axis stroke (mm) deceleration (G)	50~100 (Every 50mm)	150~200 (Every 50mm)	250~300 (Every 50mm)	350~400 (Every 50mm)	450	500				
0.1	17	16	15	14	12	10				
0.3	17	16	15	14	12	10				
0.5	1	1	10	).5	1	0				

#### ■ HH type: X high speed/Y high speed

Y-axis stroke (mm) deceleration (G)	50~100 (Every 50mm)	150~250 (Every 50mm)	300~400 (Every 50mm)	450~500 (Every 50mm)
0.1	10	9.5	9	8.5
0.3	9	8.5	8	7.5
0.5	4	3.5	3	2.5

\* When both X and Y axes have the same acceleration/deceleration. When there is significant vibration, decrease the speed and acceleration/deceleration as required.

#### Stroke Y-axis stroke (mm)

#### Applicable Controllers

Controllers are sold separately. Please contact IAI for more information.

☐ X-axis: WSA16C, Y-axis: SA8R

Туре	Reference page in the General Catalog 2016
PCON-CFB/ CGFB	See M-113

## Cable Length

Type	Cable code	Length
	1L	1m
Chamaland toma	3L	3m
Standard type	5L	5m
	□L	Specified length (15m max.)

Note 1. All-axis standard cable is used.

Note 2. The length of the second axis cable is from the exit of the cable track.

A separate cable is included for wiring inside the cable track.

A separate cable is included for wiring inside the cable track.

Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

#### Cable Track

Туре	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)
Without cable track (cable only)	N		0	0
Cable track S size (inner width: 38mm)	CT		0	0
Cable track M size (inner width: 50mm)	CTM	See P.85	0	0
Cable track L size (inner width: 63mm)	CTL	See P.85	0	0
Cable track XL size (inner width: 80mm) *	CTXL		0	Cannot be selected *

<sup>\*</sup> Only the first wiring can be selected

## Options

Туре	Option code	Reference page	X-axis	Y-axis
Brake	В	See P.83	0	0
Cable exit direction (Top)	CJT	See P.83	0	
Cable exit direction (Right)	CJR	See P.83	0	Cannot be
Cable exit direction (Left)	CJL	See P.83	0	selected
Cable exit direction (Bottom)	CJB	See P.83	0	
Non-motor end specification	NM	See P.84	0	0
Slider section roller specification	SR	See P.84	0	0

## Specifications

Item		X-axis	Y-axis			
Axis model		RCP6-WSA16C	RCP6-SA8R			
Stroke (Every 50n	nm)	50~1100mm	50~500mm			
Max. speed *	MH	210mm/s	400mm/s			
iviax. speed	HH	365mm/s	650mm/s			
Motor size		56□ High thrust stepper motor	56□ High thrust stepper motor			
Ball screw	MH	10mm	20mm			
lead	HH	20mm	2011111			
Drive system		Ball screw φ16mm Ball screw φ16mm rolled C10 rolled C10				
Positioning repea	tability	±0.01mm				
Base material		Aluminum				
Ambient operatir temperature, hur		0~40°C, 85% RH or less (non-condensing)				

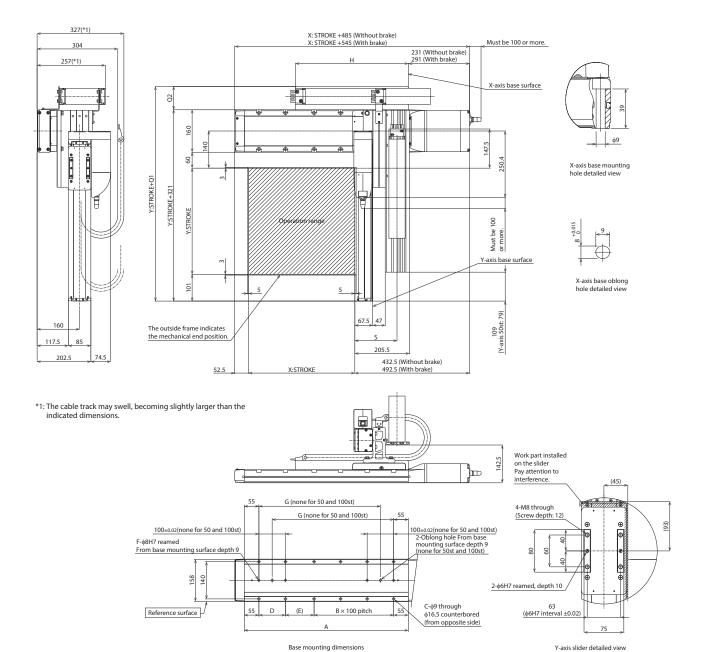
<sup>\*</sup> The maximum speed may not be reached if the travel distance is short or acceleration is low. Maximum speed may change depending on the stroke. For details, refer to the Maximum Speed by Stroke table on P.86.

- IK2 Cartesian Robot

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- Note 1. The configuration position in the figure is home.
- Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
- Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.



## (\*) Notes

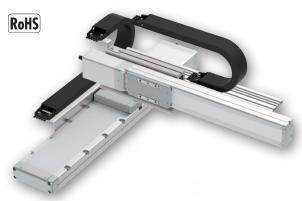
The X-axis cable track guide rail is fixed on the X-axis body. Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.85)

X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
A	268	318	368	418	468	518	568	618	668	718	768	818	868	918	968	1018	1068	1118	1168	1218	1268	1318
В	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
C	4	4	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
D	-	-	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
E	158	208	58	108	58	108	58	108	58	108	58	108	58	108	58	108	58	108	58	108	58	108
F	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
G	-	-	208	258	308	358	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158
Н	251	276	301	326	351	376	401	426	451	476	501	526	551	576	601	626	651	676	701	726	751	776

Cable track size	CT	CTM	CTL	CTXL
Q1	396.5	408.5	423.5	441.5
Q2	75.5	87.5	102.5	120.5
S	152.5	159	165.5	-

<sup>\*</sup> Dimensions Q1, Q2 and S change depending on the size of the cable track.

#### **RCP6 2-axis configurations** X-axis: WSA16C (straight) Y-axis: SA8C (straight) First Axis (X-axis) Second Axis (Y-axis) Cable Model Specification Items IK2 P6XBE3□ □S - 🗆 Configuration Direction Speed Type **Encoder Type** Stroke Options Controller Cable First Wiring Wiring MH: X Medium Speed/Y High Speed HH: X High Speed/Y High Speed Refer to Applicable Controllers table below Length 1 to 4 Refer to Robot Type Descriptions on page 3 Refer to (Every 50mm) Cable Track table below



The photograph above shows the configuration direction "1" where both the first wiring and second wiring have cable tracks. Please refer to P.3 for other configuration directions.

#### Payload by Acceleration

#### ■ MH type: X medium speed/V high speed

■ IVIII type. A medium speed/1 mgm speed									
Y-axis stroke (mm) deceleration (G)	50~100 (Every 50mm)	150~200 (Every 50mm)	250~300 (Every 50mm)	350~400 (Every 50mm)	450	500			
0.1	17	16	15	14	12	10			
0.3	17	16	15	14	12	10			
0.5	1	1	10	).5	1	0			

#### ■ HH type: X high speed/Y high speed

Y-axis stroke (mm) deceleration (G)	50~100 (Every 50mm)	150~250 (Every 50mm)	300~400 (Every 50mm)	450~500 (Every 50mm)
0.1	10	9.5	9	8.5
0.3	9	8.5	8	7.5
0.5	4	3.5	3	2.5

<sup>\*</sup> When both X and Y axes have the same acceleration/deceleration. When there is significant vibration, decrease the speed and acceleration/deceleration as required.

# Stroke

Y-ax	is stroke (mm)	50	100	150	200	250	300	350	400	450	500
	50	0	0	0	0	0	0	0	0	0	0
	100	0	0	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	0	0	0	0	0
	200	0	0	0	0	0	0	0	0	0	0
	250	0	0	0	0	0	0	0	0	0	0
	300	0	0	0	0	0	0	0	0	0	0
	350	0	0	0	0	0	0	0	0	0	0
Ι_	400	0	0	0	0	0	0	0	0	0	0
(mm)	450	0	0	0	0	0	0	0	0	0	0
e .	500	0	0	0	0	0	0	0	0	0	0
stroke	550	0	0	0	0	0	0	0	0	0	0
	600	0	0	0	0	0	0	0	0	0	0
Xis	650	0	0	0	0	0	0	0	0	0	0
X-a	700	0	0	0	0	0	0	0	0	0	0
^	750	0	0	0	0	0	0	0	0	0	0
	800	0	0	0	0	0	0	0	0	0	0
	850	0	0	0	0	0	0	0	0	0	0
	900	0	0	0	0	0	0	0	0	0	0
	950	0	0	0	0	0	0	0	0	0	0
	1000	0	0	0	0	0	0	0	0	0	0
	1050	0	0	0	0	0	0	0	0	0	0
	1100	0	0	0	0	0	0	0	0	0	0

#### Applicable Controllers

Controllers are sold separately. Please contact IAI for more information.

☐ X-axis: WSA16C, Y-axis: SA8C

Туре	Reference page in the General Catalog 2016
PCON-CFB/ CGFB	See M-113

#### Cable Length

	Type	Cable code	Length
		1L	1m
	Charadaud hura	3L	3m
	Standard type	5L	5m
		□L	Specified length (15m max.)

Note 1. All-axis standard cable is used.

Note 2. The length of the second axis cable is from the exit of the cable track.

A separate cable is included for wiring inside the cable track.

Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Туре	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)
Without cable track (cable only)	N		0	0
Cable track S size (inner width: 38mm)	CT		0	0
Cable track M size (inner width: 50mm)	CTM	See P.85	0	0
Cable track L size (inner width: 63mm)	CTL	See P.85	0	0
Cable track XL size (inner width: 80mm) *	CTXL		0	Cannot be selected *

<sup>\*</sup> Only the first wiring can be selected

#### Specifications

Item		X-axis	Y-axis			
Axis model		RCP6-WSA16C	RCP6-SA8C			
Stroke (Every 50n	nm)	50~1100mm	50~500mm			
Max. speed *	MH	210mm/s	400mm/s			
Max. speed	HH	365mm/s	650mm/s			
Motor size		56□ High thrust stepper motor	56□ High thrust stepper motor			
Ball screw	MH	10mm	20mm			
lead	HH	20mm	20mm			
Drive system		Ball screw \$16mm Ball screw \$16mm rolled C10 rolled C10				
Positioning repea	tability	±0.01mm				
Base material		Aluminum				
Ambient operatir temperature, hur		0~40°C, 85% RH or less (non-condensing)				

<sup>\*</sup> The maximum speed may not be reached if the travel distance is short or acceleration is low. Maximum speed may change depending on the stroke. For details, refer to the Maximum Speed by Stroke table on P.86.

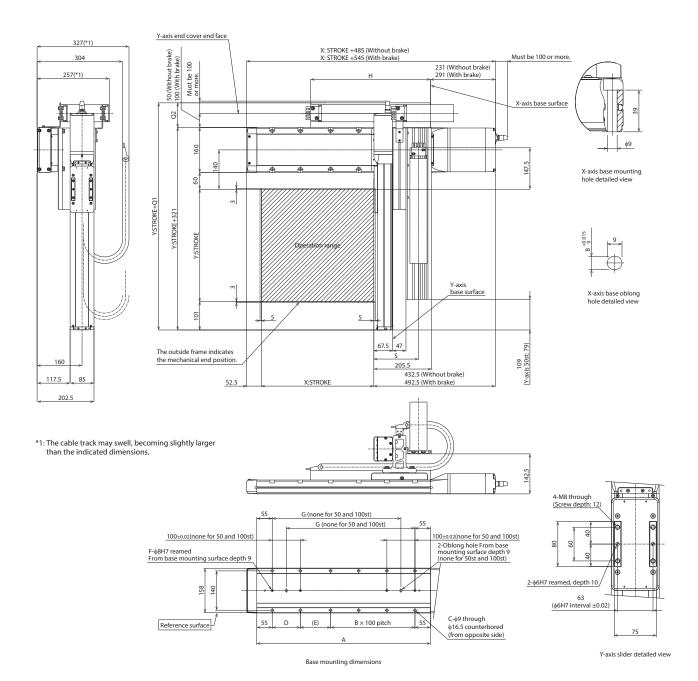
Options				
Туре	Option code	Reference page	X-axis	Y-axis
Brake	В	See P.83	0	0
Cable exit direction (Top)	CJT	See P.83	0	
Cable exit direction (Right)	CJR	See P.83	0	Cannot be
Cable exit direction (Left)	CJL	See P.83	0	selected
Cable exit direction (Bottom)	CJB	See P.83	0	
Non-motor end specification	NM	See P.84	0	0
Slider section roller specification	SR	See P.84	0	0

- IK2 Cartesian Robot

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



- Note 1. The configuration position in the figure is home.
- Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
- Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.



## (\*) Notes

The X-axis cable track guide rail is fixed on the X-axis body. Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.85)

X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
A	268	318	368	418	468	518	568	618	668	718	768	818	868	918	968	1018	1068	1118	1168	1218	1268	1318
В	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
C	4	4	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
D	-	-	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
E	158	208	58	108	58	108	58	108	58	108	58	108	58	108	58	108	58	108	58	108	58	108
F	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
G	-	-	208	258	308	358	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158
Н	251	276	301	326	351	376	401	426	451	476	501	526	551	576	601	626	651	676	701	726	751	776

Cable track size	CT	CTM	CTL	CTXL
Q1	396.5	408.5	423.5	441.5
Q2	75.5	87.5	102.5	120.5
S	152.5	159	165.5	_

 $<sup>^{\</sup>ast}$  Dimensions Q1, Q2 and S change depending on the size of the cable track.

#### **RCP6 2-axis configurations** Y-axis: SA6R (side-mounted) Z-axis: SA4R (side-mounted) Second axis (Z-axis) Cable Model Specification Items P6YBD1□ □S IK2 $\square B \square$ - 🗆 Configuration Direction Speed Type **Encoder Type** Stroke Options Controller Cable First Wiring Wiring SM:Y Ultra High Speed/Z Medium Speed SH:Y Ultra High Speed/Z High Speed Refer to Applicable Controllers table below Length 5: 50mm 1 to 2 Refer to Robot Type Refer to (Every 50mm) Cable Track table below

RoHS



The photograph above shows the configuration direction "1" where both the first wiring and second wiring have cable tracks. Please refer to P.3 for other configuration directions.

#### Payload by Acceleration

#### ■ SM type: Y ultra high speed/Z medium speed

(Unit: kg)

Z-axis stroke (mm) deceleration (G)	
0.1	1.5
0.3	1.5
0.5	1.5

#### ■ SH type: Y ultra high speed/Z high speed

Z-axis stroke (mm) Acceleration/ deceleration (G)	
0.1	1
0.3	1
0.5	1

 $<sup>^{*}</sup>$  When both Y and Z axes have the same acceleration/deceleration. When there is significant vibration, decrease the speed and acceleration/deceleration as required.

Z	-axis stroke (mm)	50	100	150		
	50	0	0	0		
	100	0	0	0		
	150	0	0	0		
	200	0	0	0		
	250	0	0	0		
Ê	300	0	0	0		
E .	350	0	0	0		
) <del>%</del>	400	0	0	0		
st	450	0	0	0		
Y-axis stroke (mm)	500	0	0	0		
>	550	0	0	0		
	600	0	0	0		
	650	0	0	0		
	700	0	0	0		
	750	0	0	0		
	800	0	0	0		

#### Applicable Controllers

Controllers are sold separately. Please contact IAI for more information.

#### ☐ Y-axis: SA6R, Z-axis: SA4R

Type	Reference page in the General Catalog 2016		
PCON-CB/CGB	See M-113		
PCON-CYB/PLB/POB	See M-129		
MCON-C/CG	See M-91		
MCON-LC/LCG	266 M-31		
MSEL-PC/PG	See M-245		

<sup>\*</sup> Operation is possible with the high output setting specification. When connecting to the MCON controller, "High-output setting specification" must be selected. Please contact IAI regarding use with the high-output setting disabled.

### Cable Length

Type	Cable code	Length	
Standard type	1L	1m	
	3L	3m	
	5L	5m	
	□L	Specified length (15m max.)	

Note 1. All-axis standard cable is used.

Note 2. The length of the second axis cable is from the exit of the cable track.

A separate cable is included for wiring inside the cable track.

Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

## Specifications

Specifications							
Item		Y-axis	Z-axis				
Axis model		RCP6-SA6R	RCP6-SA4R				
Stroke (Every 50mm)		50~800mm	50~150mm				
Max. speed *	SM	800mm/s	350mm/s				
	SH	800mm/s	610mm/s				
Motor size		42□ Stepper motor	35□ Stepper motor				
Ball screw	SM	20	5mm				
lead	SH	20mm	10mm				
Drive system		Ball screw \phi10mm rolled C10	Ball screw φ8mm rolled C10				
Positioning repeatability		±0.01mm					
Base material		Aluminum					
Ambient operating temperature, humidity		0~40°C, 85% RH or less (non-condensing)					

<sup>\*</sup> The maximum speed may not be reached if the travel distance is short or acceleration is low. Maximum speed may change depending on the stroke. For details, refer to the Maximum Speed by Stroke table on P.86.

#### Cable Track

Туре	Model	Reference page	First wiring (Y-axis lateral)	Second wiring (Z-axis lateral)
Without cable track (cable only)	N	See P.85	0	0
Cable track S size (inner width: 38mm)	CT		0	0
Cable track M size (inner width: 50mm)	CTM		0	0
Cable track L size (inner width: 63mm)		See P.85	0	0
Cable track XL size (inner width: 80mm) *	CTXL		0	Cannot be selected *

<sup>\*</sup> Only the first wiring can be selected

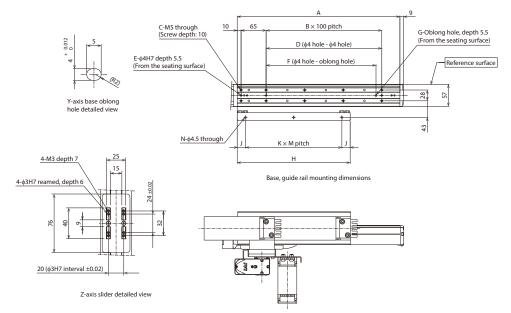
Туре	Option code	Reference page	Y-axis	Z-axis
Brake	В	See P.83	0	Standard equipment *
Cable exit direction (Outside)	CJO	See P.83	0	Cannot be selected
Non-motor end specification	NM	See P.84	0	0
Slider section roller specification	SR	See P.84	0	0

<sup>\*</sup> Be sure to specify.

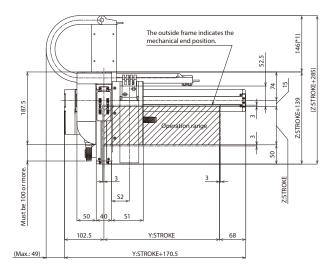


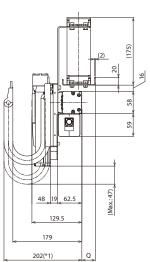


- Note 1. The configuration position in the figure is home.
- Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
- Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.



\*1: The cable track may swell, becoming slightly larger than the indicated dimensions.





# (\*) Notes

The Y-axis cable track guide rail is to be fixed to the Y-axis mounting surface by the customer. Please note that there will be an overhang outside the Y-axis mounting surface. Also, the moving end of the Z-axis cable track is to be fixed to a plate or the like mounted on the Z-axis slider by the customer.

Y: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
Α	172	222	272	322	372	422	472	522	572	622	672	722	772	822	872	922
В	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8
C	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20
D	0	100	100	200	200	300	300	400	400	500	500	600	600	700	700	800
E	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	0	85	85	185	185	285	285	385	385	485	485	585	585	685	685	785
G	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Н	168	193	218	243	268	293	318	343	368	393	418	443	468	493	518	543
J	9	21.5	9	21.5	9	21.5	9	21.5	9	21.5	9	21.5	9	21.5	34	9
K	1	1	1	1	2	2	2	2	2	2	2	2	3	3	3	3
M	150	150	200	200	125	125	150	150	175	175	200	200	150	150	150	175
N	2	2	2	2	3	3	3	3	3	3	3	3	4	4	4	4

Cable track size	CT	CTM	CTL	CTXL
Q	23	35	50	68
S1	82	94	107	-
S2	46	52.5	59	-

<sup>\*</sup> Dimensions Q, S1 and S2 change depending on the size of the cable track.



The photograph above shows the configuration direction "1" where both the first wiring and second wiring have cable tracks. Please refer to P3 for other configuration directions.

#### Payload by Acceleration

#### ■ SM type: Y ultra high speed/Z medium speed

(Unit: kg)

,,	•
Z-axis stroke (mm) deceleration (G)	50~150 (Every 50mm)
0.1	1.5
0.3	1.5
0.5	1.5

#### ■ SH type: Y ultra high speed/Z high speed

Z-axis stroke (mm) Acceleration/ deceleration (G)	
0.1	1
0.3	1
0.5	1

\*When both Y and Z axes have the same acceleration/deceleration. When there is significant vibration, decrease the speed and acceleration/deceleration as required.

### Stroke

Z	-axis stroke (mm)	50	100	150
	50	0	0	0
	100	0	0	0
	150	0	0	0
	200	0	0	0
	250	0	0	0
Ê	300	0	0	0
Y-axis stroke (mm)	350	0	0	0
l sk	400	0	0	0
st	450	0	0	0
axis	500	0	0	0
>	550	0	0	0
	600	0	0	0
	650	0	0	0
	700	0	0	0
	750	0	0	0
	800	0	0	0

### Applicable Controllers

Controllers are sold separately.
Please contact IAI for more information.

### ☐ Y-axis: SA6C, Z-axis: SA4R

Type	Reference page in the General Catalog 2016
PCON-CB/CGB	See M-113
PCON-CYB/PLB/POB	See M-129
MCON-C/CG	See M-91
MCON-LC/LCG	266 M-A1
MSEL-PC/PG	See M-245

\* Operation is possible with the high output setting specification. When connecting to the MCON controller, "High-output setting specification" must be selected. Please contact IAI regarding use with the high-output setting disabled.

# Cable Length

Туре	Cable code	Length
	1L	1m
Ctomployed to up o	3L	3m
Standard type	5L	5m
	□L	Specified length (15m max.)

Note 1. All-axis standard cable is used.

Note 2. The length of the second axis cable is from the exit of the cable track.

A separate cable is included for wiring inside the cable track.

A separate cable is included for wiring inside the cable track.

Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

# Specifications

Specificatio	113					
ltem		Y-axis	Z-axis			
Axis model		RCP6-SA6C	RCP6-SA4R			
Stroke (Every 50n	nm)	50~800mm	50~150mm			
May an and *	SM	800mm/s	350mm/s			
Max. speed *	SH	800mm/s	610mm/s			
Motor size		42□ Stepper motor	35□ Stepper motor			
Ball screw	SM	20	5mm			
lead	SH	20mm	10mm			
Drive system		Ball screw φ10mm Ball screw φ8mm rolled C10 rolled C10				
Positioning repea	tability	±0.01mm				
Base material		Aluminum				
Ambient operating temperature, humidity		0~40°C, 85% RH or less (non-condensing)				

<sup>\*</sup> The maximum speed may not be reached if the travel distance is short or acceleration is low. Maximum speed may change depending on the stroke. For details, refer to the Maximum Speed by Stroke table on P.86.

# Cable Track

Туре	Model	Reference page	First wiring (Y-axis lateral)	Second wiring (Z-axis lateral)
Without cable track (cable only)	N		0	0
Cable track S size (inner width: 38mm)	CT		0	0
Cable track M size (inner width: 50mm)	CTM	See P.85	0	0
Cable track L size (inner width: 63mm)	CTL	3ee P.85	0	0
Cable track XL size (inner width: 80mm) *	CTXL		0	Cannot be selected *

<sup>\*</sup> Only the first wiring can be selected

#### Options

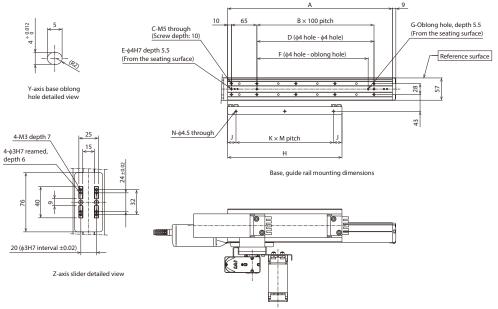
Туре	Option code	Reference page	Y-axis	Z-axis
Brake	В	See P.83	0	Standard equipment *
Cable exit direction (Top)	CJT	See P.83	0	
Cable exit direction (Right)	CJR	See P.83	0	Cannot be
Cable exit direction (Left)	CJL	See P.83	0	selected
Cable exit direction (Bottom)	CJB	See P.83	0	
Non-motor end specification	NM	See P.84	0	0
Slider section roller specification	SR	See P.84	0	0

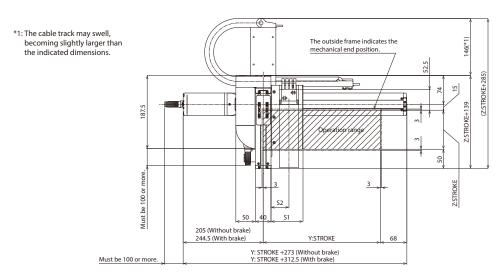
<sup>\*</sup> Be sure to specify.

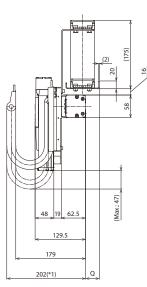




- Note 1. The configuration position in the figure is home.
  - Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
  - Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.







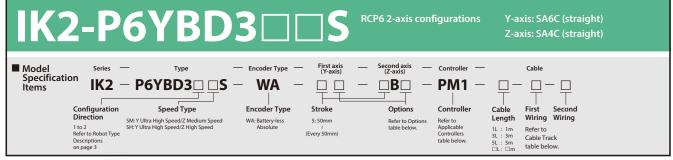
# (\*) Notes

The Y-axis cable track guide rail is to be fixed to the Y-axis mounting surface by the customer. Please note that there will be an overhang outside the Y-axis mounting surface. Also, the moving end of the Z-axis cable track is to be fixed to a plate or the like mounted on the Z-axis slider by the customer.

Y: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
Α	172	222	272	322	372	422	472	522	572	622	672	722	772	822	872	922
В	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8
С	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20
D	0	100	100	200	200	300	300	400	400	500	500	600	600	700	700	800
E	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	0	85	85	185	185	285	285	385	385	485	485	585	585	685	685	785
G	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Н	168	193	218	243	268	293	318	343	368	393	418	443	468	493	518	543
J	9	21.5	9	21.5	9	21.5	9	21.5	9	21.5	9	21.5	9	21.5	34	9
K	1	1	1	1	2	2	2	2	2	2	2	2	3	3	3	3
M	150	150	200	200	125	125	150	150	175	175	200	200	150	150	150	175
N	2	2	2	2	3	3	3	3	3	3	3	3	4	4	4	4

Cable track size	CT	CTM	CTL	CTXL
Q	23	35	50	68
S1	82	94	107	-
S2	46	52.5	59	-

<sup>\*</sup> Dimensions Q, S1 and S2 change depending on the size of the cable track.





The photograph above shows the configuration direction "1" where both the first wiring and second wiring have cable tracks. Please refer to P.3 for other configuration directions.

#### Payload by Acceleration

#### ■ SM type: Y ultra high speed/Z medium speed

(Unit: kg)

,,	•
Z-axis stroke (mm) deceleration (G)	50~150 (Every 50mm)
0.1	1.5
0.3	1.5
0.5	1.5

#### ■ SH type: Y ultra high speed/Z high speed

Z-axis stroke (mm) deceleration (G)	
0.1	1
0.3	1
0.5	1

<sup>\*</sup> When both Y and Z axes have the same acceleration/deceleration. When there is significant vibration, decrease the speed and acceleration/deceleration as required.

# Stroke

Z	-axis stroke (mm)	50	100	150
	50	0	0	0
	100	0	0	0
	150	0	0	0
	200	0	0	0
	250	0	0	0
Ê	300	0	0	0
stroke (mm)	350	0	0	0
o &	400	0	0	0
st	450	0	0	0
Y-axis	500	0	0	0
>	550	0	0	0
	600	0	0	0
	650	0	0	0
	700	0	0	0
	750	0	0	0
	800	0	0	0

#### Applicable Controllers

Controllers are sold separately. Please contact IAI for more information.

### ☐ Y-axis: SA6C, Z-axis: SA4C

Туре	Reference page in the General Catalog 2016
PCON-CB/CGB	See M-113
PCON-CYB/PLB/POB	See M-129
MCON-C/CG	See M-91
MCON-LC/LCG	266 M-31
MSEL-PC/PG	See M-245

<sup>\*</sup> Operation is possible with the high output setting specification. When connecting to the MCON controller, "High-output setting specification" must be selected. Please contact IAI regarding use with the high-output setting disabled.

# Cable Length

Type	Cable code	Length
	1L	1m
Standard type	3L	3m
	5L	5m
	□L	Specified length (15m max.)

Note 1. All-axis standard cable is used.

Note 2. The length of the second axis cable is from the exit of the cable track.

A separate cable is included for wiring inside the cable track.

Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

# Cable Track

Туре	Model	Reference page	First wiring (Y-axis lateral)	Second wiring (Z-axis lateral)
Without cable track (cable only)	N		0	0
Cable track S size (inner width: 38mm)	CT		0	0
Cable track M size (inner width: 50mm)	CTM	See P.85	0	0
Cable track L size (inner width: 63mm)	CTL	3ee F.03	0	0
Cable track XL size (inner width: 80mm) *	CTXL		0	Cannot be selected *

<sup>\*</sup> Only the first wiring can be selected

# Specifications

Item		Y-axis	Z-axis		
Axis model		RCP6-SA6C	RCP6-SA4C		
Stroke (Every 50m	nm)	50~800mm	50~150mm		
Max. speed *	SM	800mm/s	350mm/s		
Max. speed "	SH	80011111/5	610mm/s		
Motor size		42□ Stepper motor	35□ Stepper motor		
Ball screw	SM	20mm	5mm		
lead	SH	20111111	10mm		
Drive system		Ball screw \phi10mm rolled C10	Ball screw φ8mm rolled C10		
Positioning repea	tability	±0.01mm			
Base material		Aluminum			
Ambient operatir temperature, hun	_	0~40°C, 85% RH or less (non-condensing)			

<sup>\*</sup> The maximum speed may not be reached if the travel distance is short or acceleration is low. Maximum speed may change depending on the stroke. For details, refer to the Maximum Speed by Stroke table on P.86.

Туре	Model	Reference page	First wiring (Y-axis lateral)	Second wiring (Z-axis lateral)
Without cable track (cable only)	N		0	0
Cable track S size (inner width: 38mm)	CT		0	0
Cable track M size (inner width: 50mm)	CTM	See P.85	0	0
Cable track L size (inner width: 63mm)	CTL	See P.85	0	0
Cable track XL size (inner width: 80mm) *	CTXL		0	Cannot be selected *
* Only the first wiring can be selected				

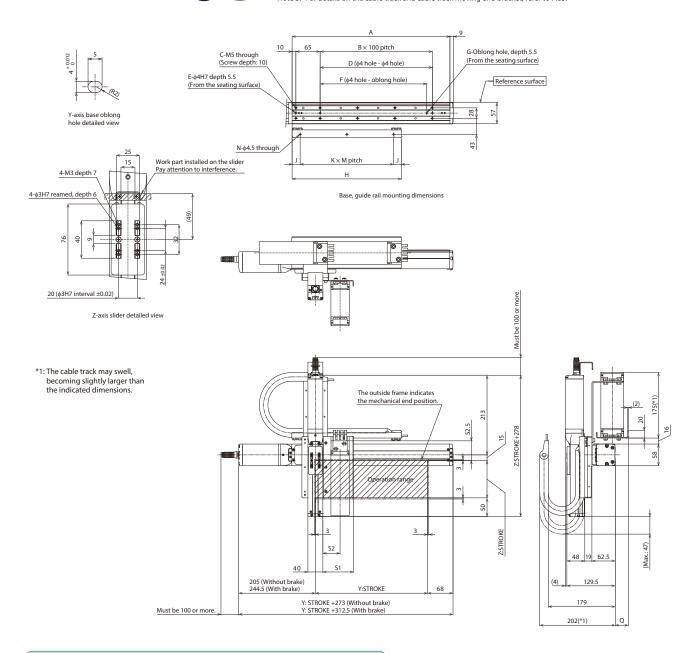
Туре	Option code	Reference page	Y-axis	Z-axis
Brake	В	See P.83	0	Standard equipment *
Cable exit direction (Top)	CJT	See P.83	0	
Cable exit direction (Right)	CJR	See P.83	0	Cannot be
Cable exit direction (Left)	CJL	See P.83	0	selected
Cable exit direction (Bottom)	CJB	See P.83	0	
Non-motor end specification	NM	See P.84	0	0
Slider section roller specification	SR	See P.84	0	0

<sup>\*</sup> Be sure to specify.





- 3D CAD
- Note 1. The configuration position in the figure is home.
- Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
- Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.



# (\*) Notes

The Y-axis cable track guide rail is to be fixed to the Y-axis mounting surface by the customer. Please note that there will be an overhang outside the Y-axis mounting surface. Also, the moving end of the Z-axis cable track is to be fixed to a plate or the like mounted on the Z-axis slider by the customer.

Y: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
A	172	222	272	322	372	422	472	522	572	622	672	722	772	822	872	922
В	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8
С	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20
D	0	100	100	200	200	300	300	400	400	500	500	600	600	700	700	800
E	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	0	85	85	185	185	285	285	385	385	485	485	585	585	685	685	785
G	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Н	168	193	218	243	268	293	318	343	368	393	418	443	468	493	518	543
J	9	21.5	9	21.5	9	21.5	9	21.5	9	21.5	9	21.5	9	21.5	34	9
K	1	1	1	1	2	2	2	2	2	2	2	2	3	3	3	3
M	150	150	200	200	125	125	150	150	175	175	200	200	150	150	150	175
N	2	2	2	2	3	3	3	3	3	3	3	3	4	4	4	4

Cable track size	CT	CTM	CTL	CTXL
Q	23	35	50	68
S1	82	94	107	-
S2	46	52.5	59	-

<sup>\*</sup> Dimensions Q, S1 and S2 change depending on the size of the cable track.

#### RCP6 2-axis configurations Y-axis: SA7R (side-mounted) Z-axis: SA6R (side-mounted) Second axis (Z-axis) Cable Model Specification Items - P6YBC1□□S IK2 $\square B \square$ - 🗆 Configuration Direction Speed Type **Encoder Type** Stroke Options Controller Cable First SL: Y Ultra High Speed/Z Low Speed SM: Y Ultra High Speed/Z Medium Speed SH: Y Ultra High Speed/Z High Speed SS: Y Ultra High Speed/Z Ultra High Speed Wiring Wiring Refer to Applicable Controllers table below Length 5: 50mm 1 to 2 Refer to Robot Type Refer to (Every 50mm) Cable Track table below

RoHS



The photograph above shows the configuration direction "1" where both the first wiring and second wiring have cable tracks. Please refer to P.3 for other configuration directions.

#### Payload by Acceleration

■ SL type: Y ultra high speed/ Z low speed

= ion specu					
Z-axis stroke (mm) deceleration (G)	50~200 (Every 50mm)				
0.1	3				
0.3	3				
0.5	2.5				
CU to accept the second of					

■ SH type: Y ultra high speed/ Z high speed

Z mgm speed	
Z-axis stroke (mm) deceleration (G)	50~200 (Every 50mm)
0.1	1
0.3	1
0.5	1

■ SM type: Y ultra high speed/ Z medium speed

	(Ornang)
Z-axis stroke (mm) deceleration (G)	50~200 (Every 50mm)
0.1	2
0.3	2
0.5	2

(Unit: ka)

SS type: Y ultra high speed/
Z ultra high speed

Z-axis stroke

Z-axis Acceleration/ deceleration (G)	stroke (mm) 50~200 (Every 50mm)
0.1	0.5
0.3	0.5
0.5	0.5

\* When both Y and Z axes have the same acceleration/deceleration. When there is significant vibration, decrease the speed and acceleration/deceleration as required.

#### Stroke

Z	-axis stroke (mm)	50	100	150	200
	50	0	0	0	0
	100	0	0	0	0
	150	0	0	0	0
	200	0	0	0	0
	250	0	0	0	0
Ê	300	0	0	0	0
stroke (mm)	350	0	0	0	0
l &	400	0	0	0	0
str	450	0	0	0	0
Y-axis	500	0	0	0	0
7	550	0	0	0	0
	600	0	0	0	0
	650		0	0	0
	700	0	0	0	0
	750	0	0	0	0
1	900	0	0	0	0

### Applicable Controllers

Controllers are sold separately.

Please contact IAI for more information.

☐ Y-axis: SA7R, Z-axis: SA6R

Type	Reference page in the General Catalog 2016
PCON-CB/CGB	See M-113
PCON-CYB/PLB/POB	See M-129
MCON-C/CG	See M-91
MCON-LC/LCG	266 M-31
MSEL-PC/PG	See M-245

\* Operation is possible with the high output setting specification. When connecting to the MCON controller, "High-output setting specification" must be selected. Please contact IAI regarding use with the high-output setting disabled.

#### Cable Length

	Type	Cable code	Length
		1L	1m
	Charadaud hura	3L	3m
	Standard type	5L	5m
		□L	Specified length (15m max.)

Note 1. All-axis standard cable is used.

Note 2. The length of the second axis cable is from the exit of the cable track.

A separate cable is included for wiring inside the cable track.

A separate cable is included for wiring inside the cable track.

Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

#### Cuasification

Item		Y-axis	Z-axis		
Axis model		RCP6-SA7R	RCP6-SA6R		
Stroke (Every 50	Omm)	50~800mm	50~200mm		
	SL		170mm/s		
May an and *	SM	640,000,000/0	340mm/s		
Max. speed *	SH	640mm/s	680mm/s		
SS			800mm/s		
Motor size	`	56□ Stepper motor	42□ Stepper motor		
	SL		3mm		
Ball screw	SM	24mm	6mm		
lead	SH	24111111	12mm		
	SS		20mm		
Drive system		Ball screw \( \phi 12mm \) rolled C10	Ball screw \phi10mm rolled C10		
Positioning rep	eatability	±0.01mm			
Base material		Aluminum			
Ambient operating temperature, humidity		0~40°C, 85% RH or less (non-condensing)			

# \*The maximum speed may not be reached if the travel distance is short or acceleration is low. Maximum speed may change depending on the stroke. For details, refer to the Maximum Speed by Stroke table on P.86.

#### ablo Track

Туре	Model	Reference page	First wiring (Y-axis lateral)	Second wiring (Z-axis lateral)
Without cable track (cable only)	N		0	0
Cable track S size (inner width: 38mm)	СТ		0	0
Cable track M size (inner width: 50mm)	CTM	See P.85	0	0
Cable track L size (inner width: 63mm)	CTL	3ee F.03	0	0
Cable track XL size (inner width: 80mm) *	CTXL		0	Cannot be selected *

\* Only the first wiring can be selected

#### Options

Туре	Option code	Reference page	Y-axis	Z-axis
Brake	В	See P.83	0	Standard equipment *
Cable exit direction (Outside)	CJO	See P.83	0	Cannot be selected
Non-motor end specification	NM	See P.84	0	0
Slider section roller specification	SR	See P.84	0	0

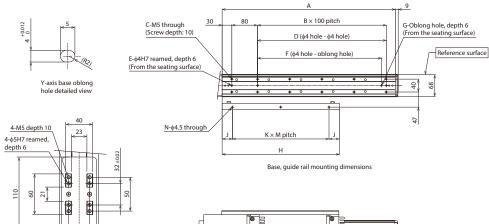
<sup>\*</sup> Be sure to specify.

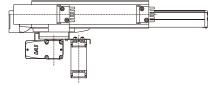






- Note 1. The configuration position in the figure is home.
- Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
- Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.

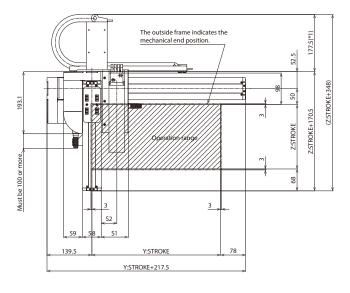


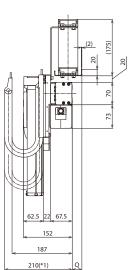


\*1: The cable track may swell, becoming slightly larger than the indicated dimensions.

Z-axis slider detailed view

31 (φ5H7 interval ±0.02)





# (\*) Notes

The Y-axis cable track guide rail is to be fixed to the Y-axis mounting surface by the customer. Please note that there will be an overhang outside the Y-axis mounting surface. Also, the moving end of the Z-axis cable track is to be fixed to a plate or the like mounted on the Z-axis slider by the customer.

Y: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
A	188	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938
В	0	1	- 1	2	2	3	3	4	4	5	5	6	6	7	7	8
C	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20
D	0	0	100	200	200	300	300	400	400	500	500	600	600	700	700	800
E	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	0	85	85	185	185	285	285	385	385	485	485	585	585	685	685	785
G	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
H	189	214	239	264	289	314	339	364	389	414	439	464	489	514	539	564
J	19.5	32	19.5	32	19.5	32	19.5	32	19.5	32	19.5	32	19.5	32	44.5	19.5
K	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3
M	150	150	200	200	250	250	150	150	175	175	200	200	150	150	150	175
N	2	2	2	2	2	2	3	3	3	3	3	3	4	4	4	4

Cable track size	CT	CTM	CTL	CTXL
Q	18	30	45	63
S1	84.5	96.5	109.5	-
S2	48.5	55	61.5	-

<sup>\*</sup> Dimensions Q, S1 and S2 change depending on the size of the cable track.

#### RCP6 2-axis configurations Y-axis: SA7C (straight) Z-axis: SA6R (side-mounted) First axis (Y-axis) Second axis (Z-axis) Cable Model Specification Items − P6YBC2□□S IK2 $\square B \square$ - 🗆 Speed Type Configuration Direction **Encoder Type** Stroke Options Controller Cable First SL: Y Ultra High Speed/Z Low Speed SM: Y Ultra High Speed/Z Medium Speed SH: Y Ultra High Speed/Z High Speed SS: Y Ultra High Speed/Z Ultra High Speed Wiring Wiring Refer to Applicable Controllers table below Length 5: 50mm 1 to 2 Refer to Robot Type Refer to (Every 50mm) Cable Track table below



The photograph above shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Please refer to P.3 for other configuration directions.

#### Payload by Acceleration

■ SL type: Y ultra high speed/ Z low speed

Z-axis stroke 50~200 (mm) Acceleration/ (Every 50mm) deceleration (G) 0.1 3 0.3 3 0.5

■ SH type: Y ultra high speed/ Z high speed

g speed	
Z-axis stroke (mm) deceleration (G)	50~200 (Every 50mm)
0.1	1
0.3	1
0.5	1

■ SM type: Y ultra high speed/ Z medium speed

Z medium speed	(Unit: kg)
Z-axis stroke (mm) deceleration (G)	50~200 (Every 50mm)
0.1	2
0.3	2
0.5	2

■ SS type: Y ultra high speed/ Z ultra high speed

	Z-axis stroke (mm) deceleration (G)	50~200 (Every 50mm)
1	0.1	0.5
1	0.3	0.5
1	0.5	0.5

\* When both Y and Z axes have the same acceleration/deceleration. When there is significant vibration, decrease the speed and acceleration/deceleration as required.

### Stroke

7.	-axis stroke (mm)	50	100	150	200
	50	0	0	0	0
	100	0	0	0	0
	150	0	0	0	0
		0	0	0	0
	200	=	0		
		250		0	0
Ē	300	0	0	0	0
E .	300 350 400 450	0	0	0	0
×		0	0	0	0
str		0	0	0	0
Y-axis	500	0	0	0	0
>	550	0	0	0	0
	600	0	0	0	0
	650	0	0	0	0
	700	700 0 0		0	0
	750	0	0	0	0
	800	0	0	0	0

### Applicable Controllers

Controllers are sold separately. Please contact IAI for more information.

☐ Y-axis: SA7C, Z-axis: SA6R

Туре	Reference page in the General Catalog 2016
PCON-CB/CGB	See M-113
PCON-CYB/PLB/POB	See M-129
MCON-C/CG	See M-91
MCON-LC/LCG	266 M-31
MSEL-PC/PG	See M-245

\* Operation is possible with the high output setting specification. When connecting to the MCON controller, "High-output setting specification" must be selected. Please contact IAI regarding use with the high-output setting disabled.

#### Cable Length

Type	Cable code	Length
	1L	1m
Chamaland to ma	3L	3m
Standard type	5L	5m
		Specified length (15m max )

Note 1. All-axis standard cable is used.

Note 2. The length of the second axis cable is from the exit of the cable track.

A separate cable is included for wiring inside the cable track.

Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

### Specifications

Item		Y-axis	Z-axis		
Axis model		RCP6-SA7C	RCP6-SA6R		
Stroke (Every 50r	nm)	50~800mm	50~200mm		
	SL		170mm/s		
Max. speed *	SM	640mm/s	340mm/s		
Max. speed	SH	04011111/5	680mm/s		
	SS		800mm/s		
Motor size		56□ Stepper motor	42□ Stepper motor		
	SL		3mm		
Ball screw	SM	24mm	6mm		
lead	SH	2411111	12mm		
	SS		20mm		
Drive system  Positioning repeatability Base material		Ball screw \( \phi 12mm \) rolled C10	Ball screw \( \psi 10mm \) rolled C10		
		±0.01mm			
		Aluminum			
Ambient operati temperature, hu		0~40°C, 85% RH or less (non-condensing)			

Туре	Model	Reference page	First wiring (Y-axis lateral)	Second wiring (Z-axis lateral)
Without cable track (cable only)	N		0	0
Cable track S size (inner width: 38mm)	CT		0	0
Cable track M size (inner width: 50mm)	CTM	See P.85	0	0
Cable track L size (inner width: 63mm)	CTL	3ee F.03	0	0
Cable track XL size (inner width: 80mm) *			0	Cannot be selected *

Only the first wiring can be selected

#### Options

0 0 110115				
Туре	Option code	Reference page	Y-axis	Z-axis
Brake	В	See P.83	0	Standard equipment *
Cable exit direction (Top)	CJT	See P.83	0	
Cable exit direction (Right)	CJR	See P.83	0	Cannot be
Cable exit direction (Left)	CJL	See P.83	0	selected
Cable exit direction (Bottom)	CJB	See P.83	0	
Non-motor end specification	NM	See P.84	0	0
Slider section roller specification	SR	See P.84	0	0

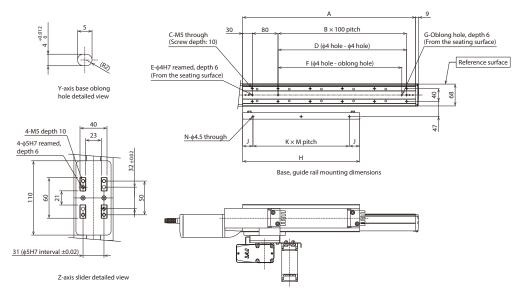
<sup>\*</sup> Be sure to specify.

<sup>\*</sup> The maximum speed may not be reached if the travel distance is short or acceleration is low. Maximum speed may change depending on the stroke. For details, refer to the Maximum Speed by Stroke table on P.86.





- Note 1. The configuration position in the figure is home.
- Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
- Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.



\*1: The cable track may swell, becoming slightly larger than the indicated dimensions.

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\*2: The cable track may swell, becoming slightly larger than the indicated dimensions.

\*2: The cable track may swell, becoming slightly larger than the indicated dimensions.

\*3: The cable track may swell, becoming slightly larger than the indicated dimensions.

\*3: The cable track may swell, becoming slightly larger than the indicated dimensions.

\*3: The cable track may swell, becoming slightly larger than the indicated dimensions.

\*4: The cable track may swell, becoming slightly larger than the indicated dimensions.

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\*4: The cable track may swell, becoming slightly larger than the indicated dimensions.

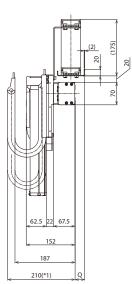
\*4: The cable track may swell, becoming slightly larger than the indicated dimensions.

\*4: The cable track may swell, becoming slightly larger than the indicated dimensions.

\*4: The cable track may swell, becoming slightly larger than the indicated dimensions.

\*4: The cable track ma

Y: STROKE +342 (Without brake)



# (\*) Notes

The Y-axis cable track guide rail is to be fixed to the Y-axis mounting surface by the customer. Please note that there will be an overhang outside the Y-axis mounting surface. Also, the moving end of the Z-axis cable track is to be fixed to a plate or the like mounted on the Z-axis slider by the customer.

#### ■ Dimensions by Stroke

Y: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
Α	188	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938
В	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8
C	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20
D	0	0	100	200	200	300	300	400	400	500	500	600	600	700	700	800
E	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	0	85	85	185	185	285	285	385	385	485	485	585	585	685	685	785
G	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Н	189	214	239	264	289	314	339	364	389	414	439	464	489	514	539	564
J	19.5	32	19.5	32	19.5	32	19.5	32	19.5	32	19.5	32	19.5	32	44.5	19.5
K	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3
M	150	150	200	200	250	250	150	150	175	175	200	200	150	150	150	175
N	2	2	2	2	2	2	3	3	3	3	3	3	4	4	4	4

Cable track size	CT	CTM	CTL	CTXL
Q	18	30	45	63
S1	84.5	96.5	109.5	-
S2	48.5	55	61.5	-

<sup>\*</sup> Dimensions Q, S1 and S2 change depending on the size of the cable track.

Must be 100 or more

#### **RCP6 2-axis configurations** Y-axis: SA7C (straight) Z-axis: SA6C (straight) Second axis (Z-axis) Cable Model Specification Items - P6YBC3□□S IK2 $\square B \square$ - 🗆 Configuration Direction Speed Type **Encoder Type** Stroke Options Controller Cable First SL: Y Ultra High Speed/Z Low Speed SM: Y Ultra High Speed/Z Medium Speed SH: Y Ultra High Speed/Z High Speed SS: Y Ultra High Speed/Z Ultra High Speed Wiring Wiring Refer to Applicable Controllers table below Length 5: 50mm 1 to 2 Refer to Robot Type Refer to (Every 50mm) Cable Track table below



The photograph above shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Please refer to P.3 for other configuration directions.

#### Payload by Acceleration

#### ■ SL type: Y ultra high speed/ Z low speed

Z-axis stroke 50~200 (mm) Acceleration/ (Every 50mm) deceleration (G) 0.1 3 0.3 3 0.5 ■ SH type: Y ultra high speed/

Z high speed						
Z-axis stroke (mm) deceleration (G)	50~200 (Every 50mm)					
0.1	1					
0.3	1					
0.5	1					

■ SM type: Y ultra high speed/ Z medium speed

Z mediam speed	(Offic. kg
Z-axis stroke (mm) deceleration (G)	50~200 (Every 50mm)
0.1	2
0.3	2
0.5	2

■ SS type: Y ultra high speed/ Z ultra high speed

	Z-axis stroke (mm) deceleration (G)	50~200 (Every 50mm)
Ī	0.1	0.5
1	0.3	0.5
	0.5	0.5

<sup>\*</sup> When both Y and Z axes have the same acceleration/deceleration. When there is significant vibration, decrease the speed and acceleration/deceleration as required.

#### Stroke

Z-axis stroke (mm)		50	100	150	200
	50	0	0	0	0
	100	0	0	0	0
	150	0	0	0	0
	200	0	0	0	0
	250	0	0	0	0
Ê	300	0	0	0	0
stroke (mm)	350	0	0	0	0
l &	400	0	0	0	0
str	450	0	0	0	0
Y-axis	500	0	0	0	0
>	550	0	0	0	0
	600	0	0	0	0
	650	0	0	0	0
	700	0	0	0	0
	750	0	0	0	0
	800	0	0	0	0

#### Applicable Controllers

Controllers are sold separately. Please contact IAI for more information.

☐ Y-axis: SA7C, Z-axis: SA6C

Type	Reference page in the General Catalog 2016
PCON-CB/CGB	See M-113
PCON-CYB/PLB/POB	See M-129
MCON-C/CG	See M-91
MCON-LC/LCG	266 M-31
MSEL-PC/PG	See M-245

<sup>\*</sup> Operation is possible with the high output setting specification. When connecting to the MCON controller, "High-output setting specification" must be selected. Please contact IAI regarding use with the high-output setting disabled.

#### Cable Length

_		
Type	Cable code	Length
	1L	1m
Ctandard tupo	3L	3m
Standard type	5L	5m
		Specified length (15m max )

Note 1. All-axis standard cable is used.

Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.

Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Туре	Model	Reference page	First wiring (Y-axis lateral)	Second wiring (Z-axis lateral)
Without cable track (cable only)	N		0	0
Cable track S size (inner width: 38mm)	CT		0	0
Cable track M size (inner width: 50mm)	CTM	See P.85	0	0
Cable track L size (inner width: 63mm)	CTL	3ee F.03	0	0
Cable track XL size (inner width: 80mm) *	CTXL		0	Cannot be selected *

Only the first wiring can be selected

Item		Y-axis	Z-axis	
Axis model		RCP6-SA7C	RCP6-SA6C	
Stroke (Every 5	0mm)	50~800mm	50~200mm	
	SL		170mm/s	
May amand *	SM	640,000 000 /0	340mm/s	
Max. speed *	SH	640mm/s	680mm/s	
	SS		800mm/s	
Motor size		56□ Stepper motor	42□ Stepper motor	
	SL		3mm	
Ball screw	SM	24mm	6mm	
lead	SH	2411111	12mm	
	SS		20mm	
Drive system		Ball screw \( \psi 12mm \) rolled C10	Ball screw \$10mm rolled C10	
Positioning rep	eatability	±0.01mm		
Base material		Aluminum		
Ambient opera temperature, h		0~40°C, 85% RH or less (non-condensing)		

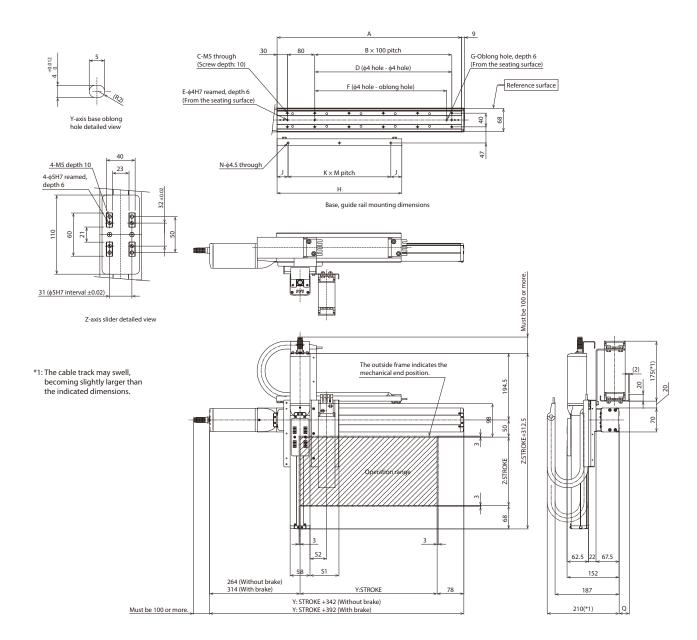
# Be sure to specify.

#### Reference Option code Type Y-axis Z-axis page Standard В See P.83 equipment \* Cable exit direction (Top) CJT See P.83 Cable exit direction (Right) CJR See P.83 Cannot be Cable exit direction (Left) CJL See P.83 0 selected Cable exit direction (Bottom) CJB See P.83 Non-motor end specification NM See P.84 Slider section roller specification SR See P.84





- Note 1. The configuration position in the figure is home.
- Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
- Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.



# (\*) Notes

The Y-axis cable track guide rail is to be fixed to the Y-axis mounting surface by the customer. Please note that there will be an overhang outside the Y-axis mounting surface. Also, the moving end of the Z-axis cable track is to be fixed to a plate or the like mounted on the Z-axis slider by the customer.

Y: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
A	188	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938
В	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8
С	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20
D	0	0	100	200	200	300	300	400	400	500	500	600	600	700	700	800
E	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	0	85	85	185	185	285	285	385	385	485	485	585	585	685	685	785
G	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Н	189	214	239	264	289	314	339	364	389	414	439	464	489	514	539	564
J	19.5	32	19.5	32	19.5	32	19.5	32	19.5	32	19.5	32	19.5	32	44.5	19.5
K	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3
M	150	150	200	200	250	250	150	150	175	175	200	200	150	150	150	175
N	2	2	2	2	2	2	3	3	3	3	3	3	4	4	4	4

Cable track size	CT	CTM	CTL	CTXL
Q	18	30	45	63
S1	84.5	96.5	109.5	-
S2	48.5	55	61.5	-

<sup>\*</sup>Dimensions Q, S1 and S2 change depending on the size of the cable track.

#### **RCP6 2-axis configurations** Y-axis: SA8R (side-mounted) Z-axis: SA7R (side-mounted) First axis (Y-axis) Second axis (Z-axis) Cable Model Specification Items - P6YBB1□ □S IK2 WA $\square B \square$ - 🗆 Configuration Direction Speed Type **Encoder Type** Stroke Options Controller Cable First HL:Y High Speed/Z Low Speed HM:Y High Speed/Z Medium Speed SH:Y Ultra High Speed/Z High Speed SS:Y Ultra High Speed/Z Ultra High Speed Wiring Wiring Refer to Applicable Controllers table below Length 5: 50mm 1 to 2 Refer to Robot Type Refer to 1L : 1m 3L : 3m (Every 50mm) Cable Track table below

RoHS

The photograph above shows the configuration direction "1" where both the first wiring and second wiring have cable tracks. Please refer to P.3 for other configuration directions.

#### Payload by Acceleration

■ HL type: Y high speed/ Z low speed

Z-axis stroke 50~300 (mm) Acceleration/ (Every 50mm) deceleration (G) 0.1 9 0.3 8 0.5

■ SH type: Y ultra high speed/ Z high speed

=g speca	
Z-axis stroke (mm) deceleration (G)	50~300 (Every 50mm)
0.1	3
0.3	2
0.5	1.5

■ HM type: Y high speed/ Z medium speed

(Unit: kg) Z-axis stroke 50~300 (mm) Acceleration/ (Every 50mm) deceleration (G) 0.1 4.5 0.3 4 0.5 3.5

SS type: Y ultra high speed/ Z ultra high speed

)		Z-axis stroke (mm) deceleration (G)	50~200 (Every 50mm)	(Every
	П	0.1	1	.5
		0.3	1	.5
	П	0.5	1.5	1

<sup>\*</sup> When both Y and Z axes have the same acceleration/deceleration. When there is significant vibration, decrease the speed and acceleration/deceleration as required.

#### Z-axis stroke (mm) 100 150 250 300 0 0 0 0 100 150 250 300 350 400 450 0 500 Ö 0 Ö Ö Y-axis stroke 550 Ō 600 650 700 750 800 850 900 950 1000 1050

### Applicable Controllers

Controllers are sold separately. Please contact IAI for more information.

☐ Y-axis: SA8R

Туре	Reference page in the General Catalog 2016
PCON-CFB/CGFB	See M-113

☐ Z-axis: SA7R

Type	Reference page in the General Catalog 2016
PCON-CB/CGB	See M-113
PCON-CYB/PLB/POB	See M-129
MCON-C/CG	Sec. M. 0.1
MCON-LC/LCG	See M-91
MSEL-PC/PG	See M-245

<sup>\*</sup> Operation is possible with the high output setting specification. When connecting to the MCON controller, "High-output setting specification" must be selected. Please contact IAI regarding use with the high-output setting disabled.

# 1100 Cable Length

Type	Cable code	Length
	1L	1m
Chandand hone	3L	3m
Standard type	5L	5m
		Specified length (15m may)

Note 1. All-axis standard cable is used.

Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.

Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

#### Cable Track

Туре	Model	Reference page	First wiring (Y-axis lateral)	Second wiring (Z-axis lateral)
Without cable track (cable only)	N		0	0
Cable track S size (inner width: 38mm)	CT		0	0
Cable track M size (inner width: 50mm)	CTM	See P.85	0	0
Cable track L size (inner width: 63mm)	CTL	3ee F.03	0	0
Cable track XL size (inner width: 80mm) *	CTXL		0	Cannot be selected *

Option code

В

CJO

NM

SR

Reference

page

See P.83

See P.83

See P 84

See P.84

Y-axis

0

Z-axis

Standard

equipment \* Cannot be

selected

### Specifications

ltem		Y-axis	Z-axis	
Axis model		RCP6-SA8R	RCP6-SA7R	
Stroke (Every 50m	nm)	50~1100mm	50~300mm	
	HL	400	105mm/s	
May amond *	HM	400mm/s	280mm/s	
Max. speed *	SH	650mm/s	560mm/s	
	SS	050(11(11)/5	640mm/s	
Motor size		56□ High thrust stepper motor	56□ Stepper motor	
	HL	20mm	4mm	
Ball screw	HM	20111111	8mm	
lead	SH	30mm	16mm	
	SS	3011111	24mm	
Drive system		Ball screw \phi16mm rolled C10	Ball screw \( \psi 12mm \) rolled C10	
Positioning repeatability		±0.01mm		
Base material		Aluminum		
Ambient operating temperature, humidity		0~40°C, 85% RH or less (non-condensing)		

\* The maximum speed may not be reached if the travel distance is short or acceleration is low. Maximum speed may change depending on the stroke. For details, refer to the Maximum Speed by Stroke table on P.86. Cable exit direction (Outside)

Non-motor end specification

Slider section roller specification

Brake

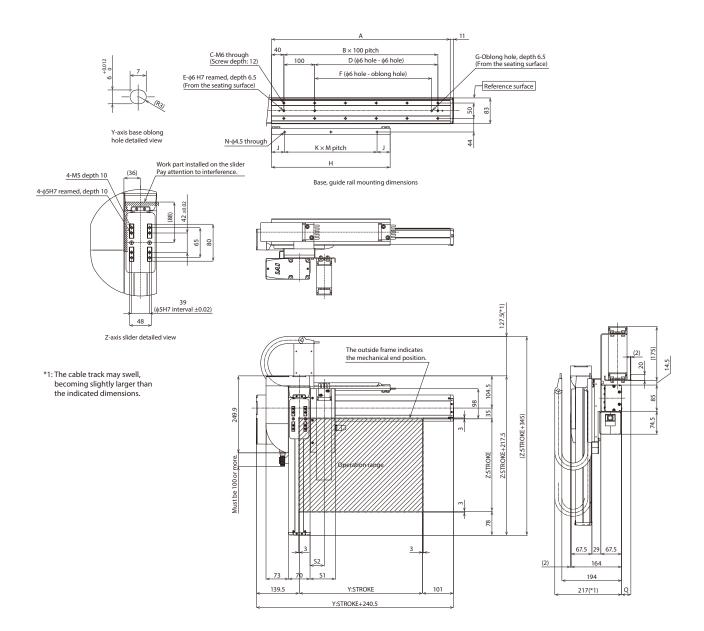
<sup>\*</sup> Only the first wiring can be selected Options

<sup>\*</sup> Be sure to specify.





- 3D CAD
- Note 1. The configuration position in the figure is home.
- Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
- Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.



# (\*) Notes

The Y-axis cable track guide rail is to be fixed to the Y-axis mounting surface by the customer. Please note that there will be an overhang outside the Y-axis mounting surface. Also, the moving end of the Z-axis cable track is to be fixed to a plate or the like mounted on the Z-axis slider by the customer.

Y: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
A	230	280	330	380	430	480	530	580	630	680	730	780	830	880	930	980	1030	1080	1130	1180	1230	1280
В	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12
C	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26
D	0	100	100	200	200	300	300	400	400	500	500	600	600	700	700	800	800	900	900	1000	1000	1100
E	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	0	0	80	180	180	280	280	380	380	480	480	580	580	680	680	780	780	880	880	980	980	1080
G	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Н	210	235	260	285	310	335	360	385	410	435	460	485	510	535	560	585	610	635	660	685	710	735
J	30	42.5	30	42.5	30	42.5	30	42.5	30	42.5	30	42.5	30	42.5	55	30	42.5	55	30	42.5	55	17.5
K	1	1	1	1	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	4
M	150	150	200	200	125	125	150	150	175	175	200	200	150	150	150	175	175	175	200	200	200	175
N	2	2	2	2	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5

Cable track size	CT	CTM	CTL	CTXL
Q	18	30	45	63
S1	82	94	107	-
52	46	52.5	59	_

<sup>\*</sup> Dimensions Q, S1 and S2 change depending on the size of the cable track.

#### **RCP6 2-axis configurations** Y-axis: SA8C (straight) Z-axis: SA7R (side-mounted) First axis (Y-axis) Second axis (Z-axis) Cable Model Specification Items - P6YBB2□□S IK2 WA $\square B \square$ - 🗆 Configuration Direction Speed Type **Encoder Type** Stroke Options Controller Cable First HL:Y High Speed/Z Low Speed HM:Y High Speed/Z Medium Speed SH:Y Ultra High Speed/Z High Speed SS:Y Ultra High Speed/Z Ultra High Speed Wiring Wiring Refer to Applicable Controllers table below Length 5: 50mm 1 to 2 Refer to Robot Type Refer to 1L : 1m 3L : 3m (Every 50mm) Cable Track table below



The photograph above shows the configuration direction "1" where both the first wiring and second wiring have cable tracks. Please refer to P.3 for other configuration directions.

#### Payload by Acceleration

■ HL type: Y high speed/ Z low speed

Z-axis stroke (mm) deceleration (G)	50~300 (Every 50mm)				
0.1	9				
0.3	8				
0.5	7				
- C. L					

■ SH type: Y ultra high speed/ Z high speed

Z mgm speed	
Z-axis stroke (mm) deceleration (G)	50~300 (Every 50mm)
0.1	3
0.3	2
0.5	1.5

#### ■ HM type: Y high speed/ Z medium speed

Z medium speed	(Unit: kg)
Z-axis stroke (mm) deceleration (G)	50~300 (Every 50mm)
0.1	4.5
0.3	4
0.5	3.5

SS type: Y ultra high speed/ Z ultra high speed

)	Accelerate decelerate	tion/	s stroke (mm)	50~200 (Every 50mm)	(Every				
		0.1		1.	.5				
		0.3		1.	.5				
		0.5		1.5	1				

<sup>\*</sup>When both Y and Z axes have the same acceleration/deceleration. When there is significant vibration, decrease the speed and acceleration/deceleration as required.

#### Stroke Z-axis stroke (mm) 50 100 150 250 300 0 0 0 O 100 150 200 250 300 350 0 0 400 450 500 0 0 0 Y-axis stroke 550 600 650 700 750 800 850 900 950 1000 1050

# Applicable Controllers

Controllers are sold separately.
Please contact IAI for more information.

☐ Y-axis: SA8C

Туре	Reference page in the General Catalog 2016
PCON-CFB/CGFB	See M-113

☐ Z-axis: SA7R

Туре	Reference page in the General Catalog 2016	
PCON-CB/CGB	See M-113	
PCON-CYB/PLB/POB	See M-129	
MCON-C/CG	See M-91	
MCON-LC/LCG		
MSEL-PC/PG	See M-245	

<sup>\*</sup> Operation is possible with the high output setting specification. When connecting to the MCON controller, "High-output setting specification" must be selected.

Please contact IAI regarding use with the high-output setting disabled.

# 1100 Cable Length

Type	Cable code	Length
	1L	1m
Chandand hone	3L	3m
Standard type	5L	5m
		Specified length (15m may)

Note 1. All-axis standard cable is used.

Note 2. The length of the second axis cable is from the exit of the cable track.

A separate cable is included for wiring inside the cable track.

Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

#### Cable Track

Туре	Model	Reference page	First wiring (Y-axis lateral)	Second wiring (Z-axis lateral)
Without cable track (cable only)	N		0	0
Cable track S size (inner width: 38mm)	CT		0	0
Cable track M size (inner width: 50mm)	CTM	See P.85	0	0
Cable track L size (inner width: 63mm)	CTL	3ee F.63	0	0
Cable track XL size (inner width: 80mm) *	CTXL		0	Cannot be selected *

<sup>\*</sup> Only the first wiring can be selected

#### Specifications

Item		Y-axis	Z-axis		
Axis model		RCP6-SA8C	RCP6-SA7R		
Stroke (Every 50m	nm)	50~1100mm	50~300mm		
	HL	400mm/s	105mm/s		
Max. speed *	HM	40011111/3	280mm/s		
Max. speed	SH	650mm/s	560mm/s		
SS		03011111/5	640mm/s		
Motor size		56□ High thrust stepper motor	56□ Stepper motor		
	HL	20mm	4mm		
Ball screw	HM	2011111	8mm		
lead	SH	30mm	16mm		
	SS	30111111	24mm		
Drive system		Ball screw \phi16mm rolled C10	Ball screw \$12mm rolled C10		
Positioning repeatability		±0.01mm			
Base material		Aluminum			
Ambient operatir temperature, hun		0~40°C, 85% RH or less (non-condensing)			

<sup>\*</sup> Be sure to specify.

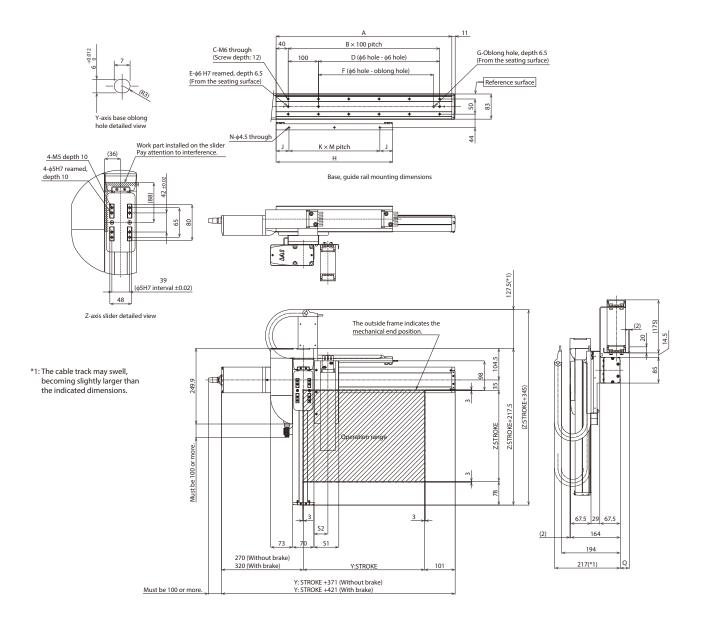
Options				
Туре	Option code	Reference page	Y-axis	Z-axis
Brake	В	See P.83	0	Standard equipment *
Cable exit direction (Top)	CJT	See P.83	0	
Cable exit direction (Right)	CJR	See P.83	0	Cannot be
Cable exit direction (Left)	CJL	See P.83	0	selected
Cable exit direction (Bottom)	CJB	See P.83	0	
Non-motor end specification	NM	See P.84	0	0
Slider section roller specification	SR	See P.84	0	0

<sup>\*</sup> The maximum speed may not be reached if the travel distance is short or acceleration is low. Maximum speed may change depending on the stroke. For details, refer to the Maximum Speed by Stroke table on P.86.





- Note 1. The configuration position in the figure is home.
- Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
- Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.



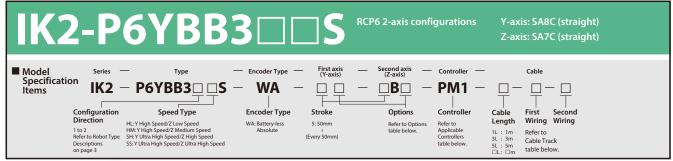
# (\*) Notes

The Y-axis cable track guide rail is to be fixed to the Y-axis mounting surface by the customer. Please note that there will be an overhang outside the Y-axis mounting surface. Also, the moving end of the Z-axis cable track is to be fixed to a plate or the like mounted on the Z-axis slider by the customer.

Y: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
A	230	280	330	380	430	480	530	580	630	680	730	780	830	880	930	980	1030	1080	1130	1180	1230	1280
В	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12
C	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26
D	0	100	100	200	200	300	300	400	400	500	500	600	600	700	700	800	800	900	900	1000	1000	1100
E	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	0	0	80	180	180	280	280	380	380	480	480	580	580	680	680	780	780	880	880	980	980	1080
G	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
H	210	235	260	285	310	335	360	385	410	435	460	485	510	535	560	585	610	635	660	685	710	735
J	30	42.5	30	42.5	30	42.5	30	42.5	30	42.5	30	42.5	30	42.5	55	30	42.5	55	30	42.5	55	17.5
K	1	1	1	1	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	4
M	150	150	200	200	125	125	150	150	175	175	200	200	150	150	150	175	175	175	200	200	200	175
N	2	2	2	2	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5

Cable track size	CT	CTM	CTL	CTXL
Q	18	30	45	63
S1	82	94	107	-
S2	46	52.5	59	-

<sup>\*</sup> Dimensions Q, S1 and S2 change depending on the size of the cable track.





The photograph above shows the configuration direction "1" where both the first wiring and second wiring have cable tracks. Please refer to P.3 for other configuration directions.

#### Payload by Acceleration

■ HL type: Y high speed/ Z low speed

- · · · · · · · · · · · · · · · · · · ·	
Z-axis stroke (mm) deceleration (G)	50~300 (Every 50mm)
0.1	9
0.3	8
0.5	7
<b>=</b> a	

■ SH type: Y ultra high speed/ Z high speed

50~300 (Every 50mm)
3
2
1.5

■ HM type: Y high speed/ Z medium speed

z medium speed	(Unit: kg)
Z-axis stroke (mm) deceleration (G)	50~300 (Every 50mm)
0.1	4.5
0.3	4
0.5	3.5

SS type: Y ultra high speed/ Z ultra high speed

Z-axis stroke Acceleration/ (mm	50~200 (Every			
deceleration (G)		50mm)		
0.1	1	.5		
0.3	1.5			
0.5	1.5	1		

\* When both Y and Z axes have the same acceleration/deceleration. When there is significant vibration, decrease the speed and acceleration/deceleration as required.

# Stroke

Z-axis	stroke (mm)	50	100	150	200	250	300
	50	0	0	0	0	0	0
	100	0	0	0	0	0	0
Ì	150	0	0	0	0	0	0
Ì	200	0	0	0	0	0	0
ĺ	250	0	0	0	0	0	0
Ì	300	0	0	0	0	0	0
Ì	350	0	0	0	0	0	0
_	400	0	0	0	0	0	0
(mm)	450	0	0	0 0		0	0
9	500	0	0	0	0	0	0
송	550	0	0	0 0 0		0	0
stroke	600	0	0	0	0	0	0
ė.	650	0	0	0	0	0	0
Y-axis	700	0	0	0	0	0	0
_	750	0	0	0	0	0	0
	800	0	0	0	0	0	0
Ì	850	0	0	0	0	0	0
	900	0	0	0	0	0	0
	950	0	0	0	0	0	0
	1000	0	0	0	0	0	0
	1050	0	0	0	0	0	0
	1100	0	0	0	0	0	0

#### Cable Length

Type	Cable code	Length
	1L	1m
Charadaud hura	3L	3m
Standard type	5L	5m
	□L	Specified length (15m max.)

Note 1. All-axis standard cable is used.

Note 2. The length of the second axis cable is from the exit of the cable track.

A separate cable is included for wiring inside the cable track.

Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

#### Cable Trac

Туре	Model	Reference page	First wiring (Y-axis lateral)	Second wiring (Z-axis lateral)
Without cable track (cable only)	N		0	0
Cable track S size (inner width: 38mm)	СТ		0	0
Cable track M size (inner width: 50mm)	CTM	See P.85	0	0
Cable track L size (inner width: 63mm)	CTL	3ee F.03	0	0
Cable track XL size (inner width: 80mm) *	CTXL	0	Cannot be selected *	

<sup>\*</sup> Only the first wiring can be selected

#### ecifications

Item		Y-axis	Z-axis		
Axis model		RCP6-SA8C	RCP6-SA7C		
Stroke (Every 50n	nm)	50~1100mm	50~300mm		
	HL	400mm/s	105mm/s		
Max. speed *	HM	40011111/5	280mm/s		
Max. speed	SH	650mm/s	560mm/s		
	SS	03011111/5	640mm/s		
Motor size		56□ High thrust stepper motor	56□ Stepper motor		
	HL	20mm	4mm		
Ball screw	HM	2011111	8mm		
lead	SH	30mm	16mm		
	SS	3011111	24mm		
Drive system		Ball screw \phi16mm rolled C10	Ball screw \( \psi 12mm \) rolled C10		
Positioning repea	tability	±0.01mm			
Base material		Aluminum			
Ambient operatir temperature, hur	ng nidity	0~40°C, 85% RH or less (non-condensing)			

<sup>\*</sup>The maximum speed may not be reached if the travel distance is short or acceleration is low. Maximum speed may change depending on the stroke. For details, refer to the Maximum Speed by Stroke table on P.86.

# Applicable Controllers

Controllers are sold separately.
Please contact IAI for more information.

#### ☐ Y-axis: SA8C

Туре	Reference page in the General Catalog 2016
PCON-CFB/CGFB	See M-113

# ☐ Z-axis: SA7C

Туре	Reference page in the General Catalog 2016
PCON-CB/CGB	See M-113
PCON-CYB/PLB/POB	See M-129
MCON-C/CG	Sec. M. 0.1
MCON-LC/LCG	See M-91
MSEL-PC/PG	See M-245

<sup>\*</sup> Operation is possible with the high output setting specification. When connecting to the MCON controller, "High-output setting specification" must be selected.

Please contact IAI regarding use with the high-output setting disabled.

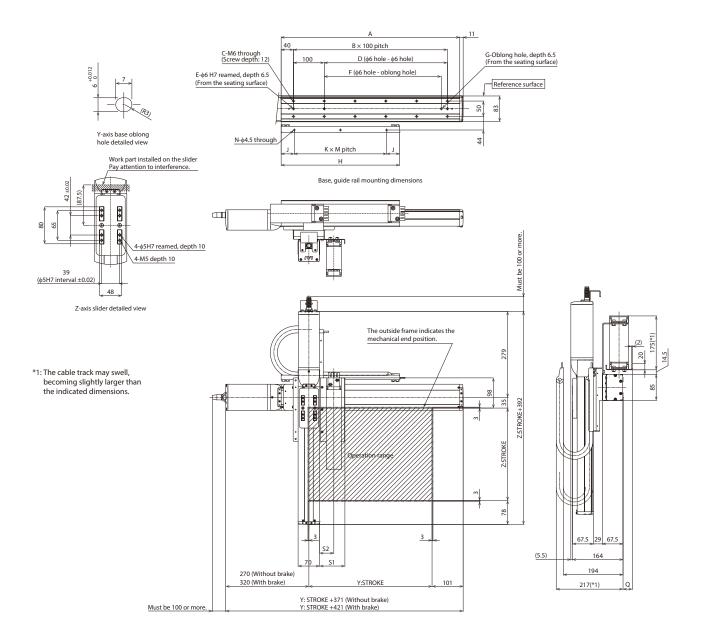
#### Options

Туре	Option code	Reference page	Y-axis	Z-axis
Brake	В	See P.83	0	Standard equipment *
Cable exit direction (Top)	CJT	See P.83	0	
Cable exit direction (Right)	CJR	See P.83	0	Cannot be
Cable exit direction (Left)	CJL	See P.83	0	selected
Cable exit direction (Bottom)	CJB	See P.83	0	
Non-motor end specification	NM	See P.84	0	0
Slider section roller specification	SR	See P.84	0	0
* Be sure to specify.				





- Note 1. The configuration position in the figure is home.
- Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
- Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.



# (\*) Notes

The Y-axis cable track guide rail is to be fixed to the Y-axis mounting surface by the customer. Please note that there will be an overhang outside the Y-axis mounting surface. Also, the moving end of the Z-axis cable track is to be fixed to a plate or the like mounted on the Z-axis slider by the customer.

Y: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
A	230	280	330	380	430	480	530	580	630	680	730	780	830	880	930	980	1030	1080	1130	1180	1230	1280
В	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12
С	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26
D	0	100	100	200	200	300	300	400	400	500	500	600	600	700	700	800	800	900	900	1000	1000	1100
E	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	0	0	80	180	180	280	280	380	380	480	480	580	580	680	680	780	780	880	880	980	980	1080
G	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Н	210	235	260	285	310	335	360	385	410	435	460	485	510	535	560	585	610	635	660	685	710	735
J	30	42.5	30	42.5	30	42.5	30	42.5	30	42.5	30	42.5	30	42.5	55	30	42.5	55	30	42.5	55	17.5
K	1	1	1	1	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	4
М	150	150	200	200	125	125	150	150	175	175	200	200	150	150	150	175	175	175	200	200	200	175
N	2	2	2	2	3	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5

Cable track size	CT	CTM	CTL	CTXL
Q	18	30	45	63
S1	82	94	107	-
S2	46	52.5	59	-

 $<sup>^{*}</sup>$  Dimensions Q, S1 and S2 change depending on the size of the cable track.

**Cartesian Robot** 

# Cartesian Robot Options

### Brake

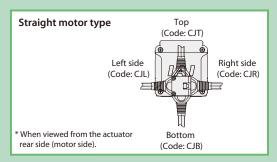
Option Code B

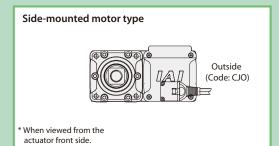
Description This is a holding mechanism that prevents the slider from falling and damaging any attached fittings when the power or servo is turned off.

### **Cable Exit Direction**

# Option Code CJT / CJR / CJL / CJB / CJO

Description This option allows you to change the exit direction of the motor-encoder cable to top, bottom, left, or right.

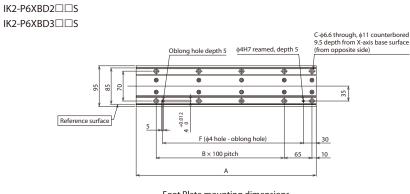




### **Foot Plate**

Option Code FTP

Description X-axis can be installed from the top with this Foot Plate.

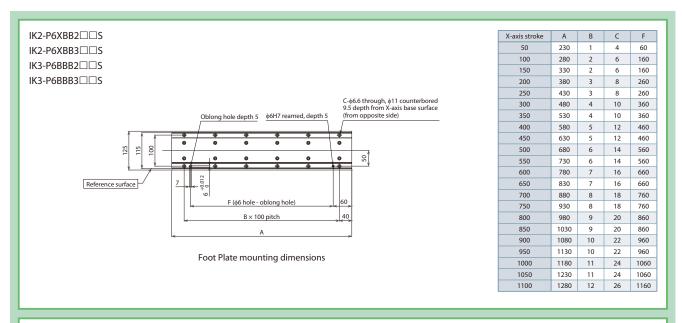


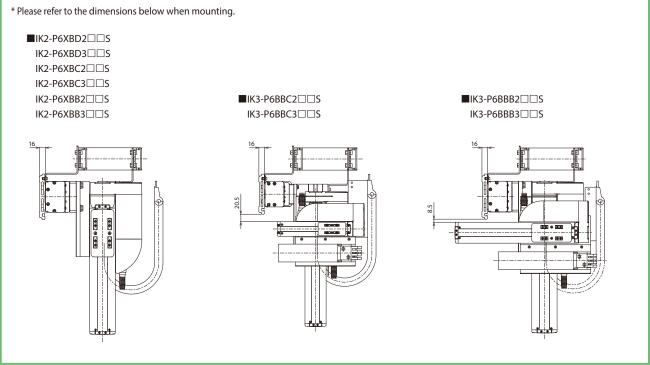
50	1/2	0	4	30
100	222	1	6	130
150	272	1	6	130
200	322	2	8	230
250	372	2	8	230
300	422	3	10	330
350	472	3	10	330
400	522	4	12	430
450	572	4	12	430
500	622	5	14	530
550	672	5	14	530
600	722	6	16	630
650	772	6	16	630
700	822	7	18	730
750	872	7	18	730
800	922	8	20	830

Foot Plate mounting dimensions

IK2-P6XBC2□□S IK2-P6XBC3□□S IK3-P6BBC2□□S IK3-P6BBC3□□S	C-∳6.6 through 9.5 depth from	X-axis bas
000	Oblong hole depth 5	side)
Reference surface	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	
	F (\( \phi \) 4 hole - oblong hole \\  B \times 100 pitch \\  A	
	Foot Plate mounting dimensions	

X-axis stroke	Α	В	C	F
50	188	0	4	45
100	238	1	6	145
150	288	1	6	145
200	338	2	8	245
250	388	2	8	245
300	438	3	10	345
350	488	3	10	345
400	538	4	12	445
450	588	4	12	445
500	638	5	14	545
550	688	5	14	545
600	738	6	16	645
650	788	6	16	645
700	838	7	18	745
750	888	7	18	745
800	938	8	20	845





# **Non-motor End Specification**

Option Code

# NM

Description The normal home position is set by the slider and rod on the motor side, however there is the option for the home position to be on the other side to accommodate variations in equipment layout, etc. (Please note that changing the home position after the actuators are shipped may require the products to be sent back to IAI for re-setting.)

### **Slider Roller Specification**

Option Code SR

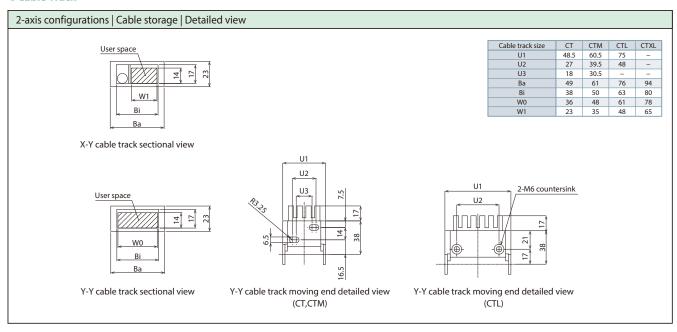
Description The slider of the standard slider type specification is changed to the same roller structure as the cleanroom type. When using the slider roller spec., the appearance and dimensions of the slider cover will be the same as the cleanroom type.

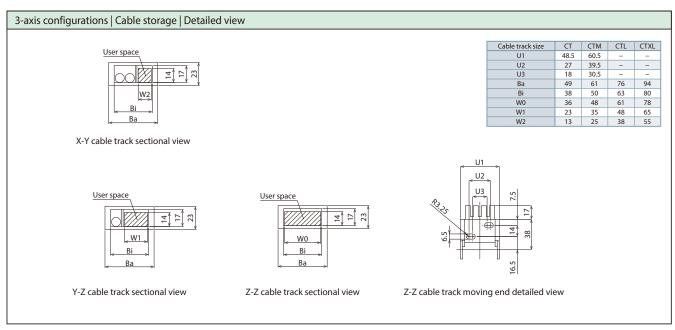
Changing to roller specification will make the external view and dimensions of the slider cover the same as the cleanroom type.

**Cartesian Robot-**

# **Appendix**

#### **●**Cable Track





Bigger user space is available by ordering as a special specification, if it is insufficient. \*Please contact IAI for more information.

### **Cable Length**

Cable code	Length	RCP6 2-axis IK2-P6	RCP6 3-axis IK3-P6
1L	1m	0	0
2L	2m	0	0
3L	3m	0	0
4L	4m	0	0
5L	5m	0	0
6L	6m	0	0
7L	7m	0	0
8L	8m	0	0
9L	9m	0	0
10L	10m	0	0
11L	11m	0	0
12L	12m	0	0
13L	13m	0	0
14L	14m	0	0
15L	15m	0	0

# Table of Maximum Speed by Stroke

Only models and axes whose maximum speed varies depending on the stroke are listed.

For models and axes not listed below, the maximum speed is as stated on the product page for full stroke.

- IK2-P6XBD1□□S X-axis: SA6R
- IK2-P6XBD2□□S X-axis: SA6C
- IK2-P6XBD3□□S X-axis: SA6C

(Unit: mm/s)

Stroke	50~750	800
Speed type	(Every 50mm)	(mm)
SS	640	575

- IK2-P6XBC1□□S X-axis: SA7R
- IK2-P6XBC2□□S X-axis: SA7C
- IK2-P6XBC3□□S X-axis: SA7C

(Unit: mm/s)

Stroke Speed type	50~700 (Every 50mm)	750 (mm)	800 (mm)
MM	280	275	245
НН	560		500
SS	640		

- IK2-P6XBB1□□S X-axis: SA8R
- IK2-P6XBB2□□S X-axis: SA8C
- IK2-P6XBB3□□S X-axis: SA8C

(Unit: mm/s)

Stroke Speed type	50~900 (Every 50mm)	950 (mm)	1000 (mm)	1050 (mm)	1100 (mm)
MM	300	285	260	235	220
НН	400				
SS	650				

- IK2-P6XBE1□□S X-axis: WSA16R
- IK2-P6XBE2□□S X-axis: WSA16C
- IK2-P6XBE3□□S X-axis: WSA16C

(Unit: mm/s)

Stroke Speed type	50~1050 (Every 50mm)	1100 (mm)	
MH	210	205	
HH	365		

- IK2-P6YBD1□□S Y-axis: SA6R
- IK2-P6YBD2□□S Y-axis: SA6C
- IK2-P6YBD3□□S Y-axis: SA6C

(Unit: mm/s)

Stroke	30030	700	750	800
Speed type	(Every 50mm)	(mm)	(mm)	(mm)
SM	900	735	650	575
SH	800			

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# IAI America, Inc.

 Headquarters: 2690 W. 237th Street, Torrance, CA 90505
 (800) 736-1712

 Chicago Office: 110 E. State Pkwy, Schaumburg, IL 60173
 (800) 944-0333

 Atlanta Office: 1220 Kennestone Circle, Suite 108, Marietta, GA 3006
 (888) 354-9470

# www.intelligentactuator.com

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### IAI Industrieroboter GmbH

Ober der Röth 4, D-65824 Schwalbach am Taunus, Germany

#### IAI (Shanghai) Co., Ltd.

Shanghai Jiahua Business Center A8-303, 808, Hongqiao Rd., Shanghai 200030, China

# IAI Robot (Thailand) Co., Ltd.

825 Phairojkijja Tower 12th Floor, Bangna-Trad RD., Bangna, Bangna, Bangkok 10260, Thailand