

ROBO Cylinder[®] Configurations Cartesian Robot



www.intelligentactuator.com

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)



\mathcal{I} 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. No Battery-less Absolute Encoder No Battery, No Maintenance, No Homing, and No Price Increase. No Going Back to Incremental.

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.

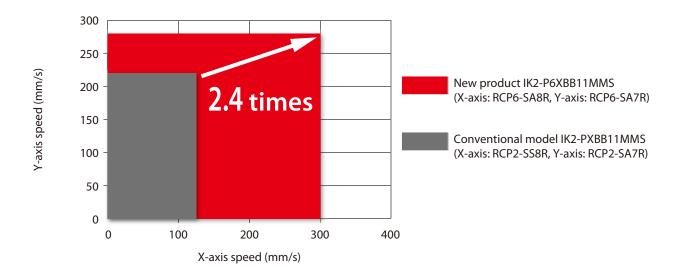
The advantages of battery-less.

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



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

3-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

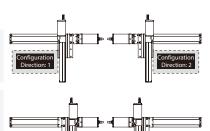
Select from 4 patterns of Y-axis configuration directions. (See the figure at right)

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: $p5 \sim 34$

Configuration Direction



YZB (Z-axis base mount) type



Z-axis

(-axis

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 1

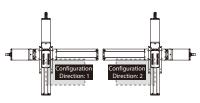
Select from 2 patterns of Z-axis configuration directions. (See the figure at right)

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



XYB (Y-axis base mount) + Z-axis base mount type

For this type, the base surface of the Z-axis is fixed to the Y-axis slider of XYB type (Y-axis base is fixed to X-axis slider).

Point 1

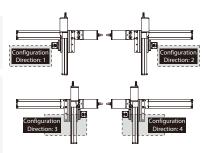
The Z-axis body is fixed and the slider moves vertically.

Point 2

Cable tracks can be selected for Y-axis and 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 3-axis configurations IK3-P6BB: $p53{\sim}82$

Configuration Direction



Cartesian Robot

ROBO C	ylinder 2-axis (ROBO C	ylinder 3-a	xis C	onfi	iguratio	ns		
	IK2-P6XBD1□□S	5				IK3-P6BBC1□□]S	53		
	IK2-P6XBD2□□S	7		-	IK3-P6BBC2□□] S	55			
	IK2-P6XBD3□□S	9			IK3-P6BBC3□□] S	57			
	IK2-P6XBC1□□S	11				IK3-P6BBB1□□	S	59		
	IK2-P6XBC2□□S	13				IK3-P6BBB2□□	S	61		
	IK2-P6XBC3□□S	15			IK3	IK3-P6BBB3□□	S	63	R	2
	IK2-P6XBB1□□S	17			Stepper Motor	IK3-P6BBF1□□	S	65		
	IK2-P6XBB2□□S	19	a starting			IK3-P6BBF2□□	S	68		
	IK2-P6XBB3□□S	21				IK3-P6BBF3□□	S	71		
	IK2-P6XBF1□□S	23			IK3-P6BBE1□□	S	74			
	IK2-P6XBF2□□S	25			IK3-P6BBE2□□	S	77			
IK2	IK2-P6XBF3□□S	27				IK3-P6BBE3□□	S	80		
Stepper Motor	IK2-P6XBE1□□S	29								
	IK2-P6XBE2	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	4							
	IK2-P6YBB2□□S	49								
	IK2-P6YBB3□□S	51			Opt	tions				83

IK	2-P6	SXBD	1	S	RCP6 2-axis con	figurations		5A6R (side-mc 5A4R (side-mc	
■ Model Specificat Items	Series — IK2 — Configuration Direction 1104 Refer to Robot Type Descriptions on page 3	Type PGXBD1 S Speed Type Ss: X Ultra High Speed/ Y Ultra High Speed	Encoder Type - WA - Encoder Type WA: Battery-less Absolute	First Axis (X-axis) Stroke 5: S0mm (Every 50mm)	Second Axis (Y-axis) Options Refer to Options table below.	Controller — PM1 — Controller Refer to Applicable Controllers table below.	1L : 1m Refer 3L : 3m Cable	 Second ng Wiring	
RoHS					ad by Acceleration e: X ultra high spe		igh speed		(Unit: kg



Acceleration/ deceleration (G)	
0.1	3
0.3	3

Y-axis stroke

0.5

0.7

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

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

2

1

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.

Sti	roke				
Y-a	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	
oke	400	0	0	0	
str	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: 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	See 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									
Туре	Cable code	Length							
	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.

Specifications		
ltem	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 ø10mm rolled C10	Ball screw ø8mm 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 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)	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 *

* 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

J	IK2-P6XBD1

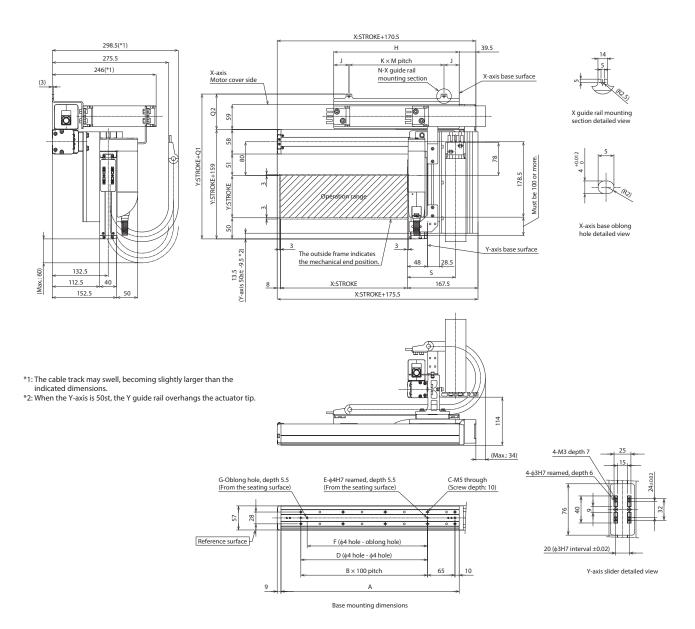
Dimensions

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)

Dimensions by Stroke

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
К	1	1	1	1	1	1	1	3	3	2	2	2	2	2	2	3
М	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

 S
 114.5
 121
 127.5

* Dimensions Q1, Q2 and S change depending on the size of the cable track.

IK	2-P6	XBD	2	S	RCP6 2-axis con	figurations	X-axis: SA6C (straig Y-axis: SA4R (side-n	
Model Specificati Items	Series IK2 – P Configuration Direction 1 to 4 Refer to Robot Type Descriptions on page 3	Type	Encoder Type – WA – Encoder Type WA: Battery-less Absolute	First Axis (X-axis) Stroke 5: S0mm 2 (Every 50mm)	Second Axis (Y-axis) Options Refer to Options table (1) below.	Controller — PM1 — Controller Rafer to Applicable Controllers table below.	Cable -	Options Options Options Refer to Options table (2) below.
RoHS		13			ad by Acceleration be: X ultra high spe		igh speed	(Unit: kg

Acceleration/ deceleration (G)

0.1

0.3

0.5

0.7



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.

S	troke			
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
<u></u>	350	0	0	0
stroke (mm)	400	0	0	0
str	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

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

Y-axis stroke

(mm)

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

🗆 X-axis: SA6C, 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	See M-91			
MSEL-PC/PG	See M-245			

50~150

(Every 50mm)

3

3

2

1

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

* 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

casie Lengin							
Туре	Cable code	Length					
Chan dead to a c	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.

Specifications							
ltem	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 ϕ 10mm rolled C10	Ball screw ø8mm 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	Track	
		_
		т.

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)	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

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

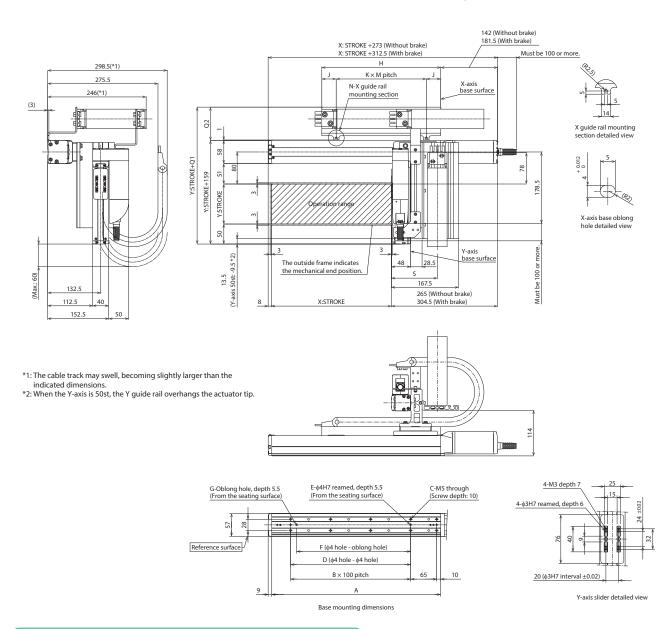
Dimensions

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
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
К	1	1	1	1	1	1	1	3	3	2	2	2	2	2	2	3
М	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	-												

* Dimensions Q1, Q2 and S change depending on the size of the cable track.

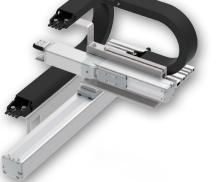
IK2	2-P6	SXBD	3		RCP6 2-axis con	figurations		xis: SA6C (stra xis: SA4C (stra	
Model Specificati Items	Series IK2 – I Configuration Direction 1 to 4 Refer to Robot Type Descriptions on page 3	Type PGXBD3	Encoder Type -	First Axis (X-axis) Stroke 5: 50mm (Every 50mm)	Second Axis (Y-axis) Options Refer to Options table (1) below.	Controller — PM1 — Controller Refer to Applicable Controllers table below.	Cable Length 1L : 1m 3L : 3m 5L : 5m DL: 0m	Cable First Second Wiring Wiring Refer to Cable Track table below.	Options Options Options Refer to Options table (2) below.
oHS					ad by Acceleration e: X ultra high spe		igh spe	ed	(Unit

Acceleration/ deceleration (G)

> 0.1 0.3

0.5

0.7



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.

Stroke								
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				
oke	400	0	0	0				
str	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

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

Y-axis stroke

(mm)

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	C M 01		
MCON-LC/LCG	See M-91		
MSEL-PC/PG	See M-245		

50~150

(Every 50mm)

3

2

1

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

* 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						
Charles I have	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.

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 ϕ 10mm rolled C10	Ball screw ø8mm 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 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)	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 *

* Only the first wiring can be selected

Options (1)

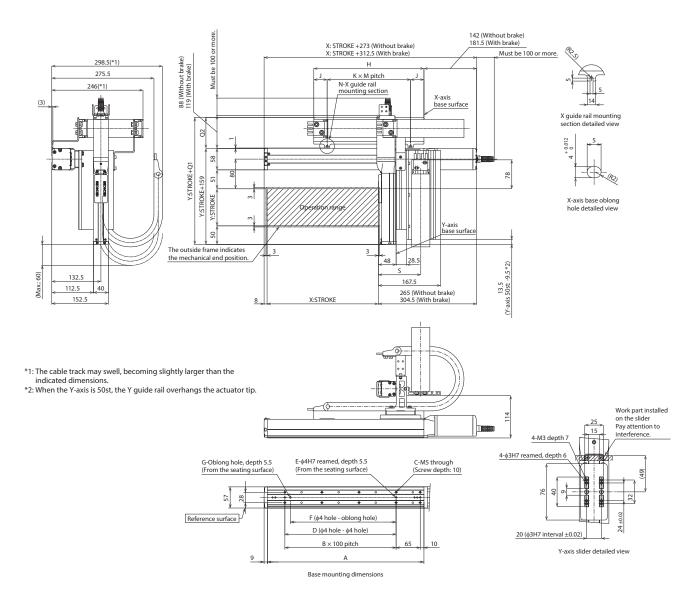
Туре	Option code	Reference page	X-axis	Y-axis
Brake	В	See P.83	0	0
Cable exit direction (Top)	CJT	See P.83	0	
Cable exit direction (Right)	CJR	See P.83	0	Cannot be
Cable exit direction (Left)	CJL	See P.83	0	selected
Cable exit direction (Bottom)	CJB	See P.83	0	
Non-motor end specification	NM	See P.84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



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
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
К	1	1	1	1	1	1	1	3	3	2	2	2	2	2	2	3
М	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	-												

* Dimensions Q1, Q2 and S change depending on the size of the cable track.

2-P6XB0 **RCP6 2-axis configurations** X-axis: SA7R (side-mounted) Y-axis: SA6R (side-mounted) First Axis (X-axis) Second Axis (Y-axis) Controller Cable Model Encoder Type Series Type Specification Items IK2 WA **PM1** - 🗆 ٦ Configuration Direction Speed Type Encoder Type Stroke Options Controller Cable First Second
 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 Option table below. WA: Battery-less Refer to 1L : 1m 3L : 3m (Every 50mm) Cable Track table below Description on page 3 5L □L Payload by Acceleration RoHS MM type: X medium speed/Y medium speed (Unit: kg) Y-axis stroke (mm) 50~100

Acceleration/ deceleration (G)

Acceleration/ deceleration (G)

0.1

0.3

0.5

0.7

1

0.1

0.3

0.5

0.7

Y-axis stroke (mm)

When both X and Y axes have the same acceleration/

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



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.

Stroke

	lione				
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
X-axis stroke (mm)	350	0	0	0	0
8	400	0	0	0	0
str	450	0	0	0	0
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.

50~200

(Every 50mm)

5

5

4

2

(Every 50mm)

9

9

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

Acceleration/ deceleration (G)

0.1

0.3

0.5

0.7

1

C X-axis: SA7R, Y-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	See M-91
MSEL-PC/PG	See M-245

150

8

8

6

4

Y-axis stroke (mm)

200

6

6

6

4

4

50

3

2

100~200

(Every 50mm)

2.5

1.5

* 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
Standard type	1L	1m
	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.

Specificatio	ns				
ltem		X-axis	Y-axis		
Axis model		RCP6-SA7R	RCP6-SA6R		
Stroke (Every 50m	nm)	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		
Dell eerous	MM	8mm	6mm		
Ball screw lead	HH	16mm	12mm		
leau	SS	24mm	20mm		
Drive system		Ball screw ø12mm rolled C10	Ball screw φ10mm 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. IK2-P6XBC1□□S

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)	СТМ	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 *

* 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	Ó	Ó				

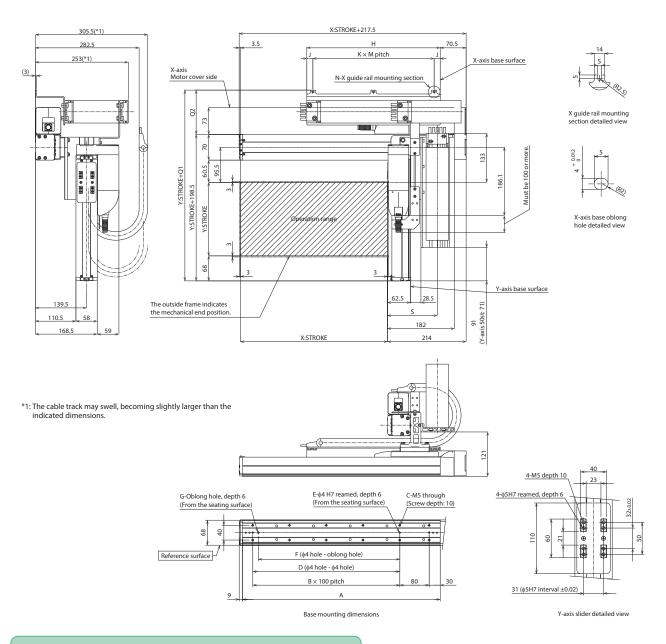
Dimensions

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)

Dimensions by Stroke

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
К	1	1	1	2	2	2	2	2	2	3	3	3	2	2	2	3
М	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	-												

* Dimensions Q1, Q2 and S change depending on the size of the cable track.

IK2-P6XBC2 **RCP6 2-axis configurations** X-axis: SA7C (straight) Y-axis: SA6R (side-mounted) First Axis (X-axis) Second Axis (Y-axis) Controller Cable Options Model Encoder Type Series Type Specification Items P6XBC2 **PM1** IK2 WA ٦ Configuration Direction Speed Type Encoder Type Stroke Options Controller Cable First Second 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. WA: Battery-less 5: 50mm Refer to Option table (1) below. Refer to 1L : 1m 3L : 3m (Every 50mm) Cable Track table below Description on page 3 5L □L

200

0

0

0

RoHS



Payload by Acceleration

MM type: X medium s	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	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)	Y-axis stroke Acceleration/ (mm) deceleration (G)	50	100~200 (Every 50mm)	
0.1	5	0.1	4		
0.3	5	0.3	4		
0.5	4	0.5	3	2.5	
0.7	2	0.7	2 1.5		
* When both X and Y axes have the sa	me acceleration/	1		1	

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

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.

100

0

0

0

0

0

0

0

150

0

Ο

0

0

0

0

0

0

50

0

0

0

0

0

Applicable Controllers

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

🗆 X-axis: SA7C, Y-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-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

Stroke

(mm

stroke

X-axis

Y-axis stroke (mm)

50

100

150

200

250

300 350

400 450

500

550

600 650

700

750 800

Cable code	Length
1L	1m
3L	3m
5L	5m
	Specified length (15m max.)
	Cable code 1L 3L 5L L

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-SA7C	RCP6-SA6R				
Stroke (Every 50n	nm)	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 φ12mmBall screw φ10mmrolled C10rolled C10					
Positioning repea	atability	±0.01mm					
Base material		Aluminum					
Ambient operatir temperature, hur	5	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 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)	СТМ	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 *

* Only the first wiring can be selected Ontions (1)

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) Type Option code Reference page Foot plate FTP See P.83

IK2-P6XBC2

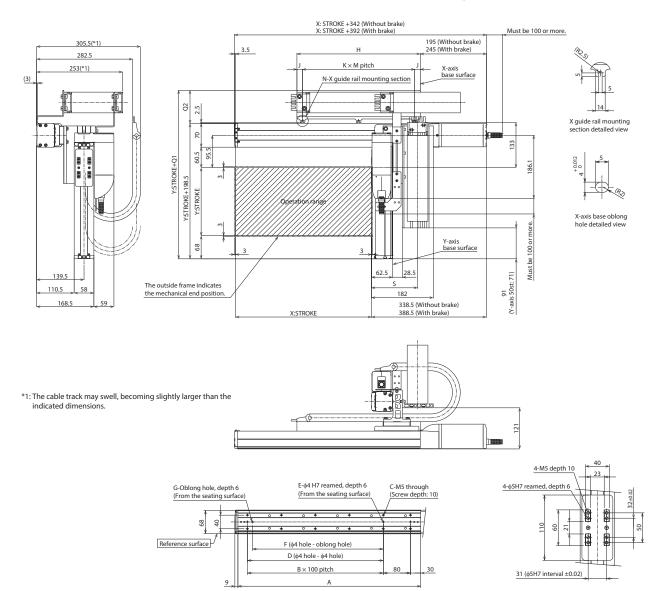
Dimensions

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.



Base mounting dimensions

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)

Dimensions by Stroke

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
К	1	1	1	2	2	2	2	2	2	3	3	3	2	2	2	3
М	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
					1											
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	-]											

 * Dimensions Q1, Q2 and S change depending on the size of the cable track.

2-P6XB RCP6 2-axis configurations X-axis: SA7C (straight) Y-axis: SA6C (straight) First Axis (X-axis) Second Axis (Y-axis) Controller Cable Options Model Encoder Type Series Туре Specification Items P6XBC3 IK2 WA **PM1** ٦ Configuration Direction Speed Type Encoder Type Stroke Options Controller Cable First Second 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 Option: table (1) below. Refer to Applicable Controllers table below Refer to Options table (2) below. WA: Battery-less 5: 50mm Refer to 1L : 1m 3L : 3m (Every 50mm) Cable Track table below Description on page 3 5L □L Payload by Acceleration RoHS MM type: X medium speed/Y medium speed (Unit: kg)

> Acceleration/ deceleration (G)

Acceleration/ deceleration (G)

0.1

0.3

0.5

0.7

1

0.1

0.3

0.5

0.7

Y-axis stroke (mm)

When both X and Y axes have the same acceleration/

deceleration. When there is significant vibration, decrease



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.

5	lioke				
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
l %	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

the speed and acceleration/deceleration as required.

Y-axis stroke (mm)

Applicable Controllers

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

50~200

(Every 50mm)

5

5

4

2

50~100

(Every 50mm)

9

9

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

Acceleration/ deceleration (G)

0.1

0.3

0.5

0.7

1

150

8

8

6

4

Y-axis stroke (mm) 200

6

6

6

4

4

50

3

2

100~200

(Every 50mm)

2.5

1.5

🗆 X-axis: SA7C, Y-axis: SA6C

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

* 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		
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.

specifications							
ltem		X-axis	Y-axis				
Axis model		RCP6-SA7C	RCP6-SA6C				
Stroke (Every 50n	nm)	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 ø12mm rolled C10	Ball screw \u00f610mm rolled C10				
Positioning repea	tability	±0.01mm					
Base material		Aluminum					
Ambient operatir temperature, hur	5	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 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)	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 *

* 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

Options (2)		
Туре	Option code	Reference page
Foot plate	FTP	See P.83

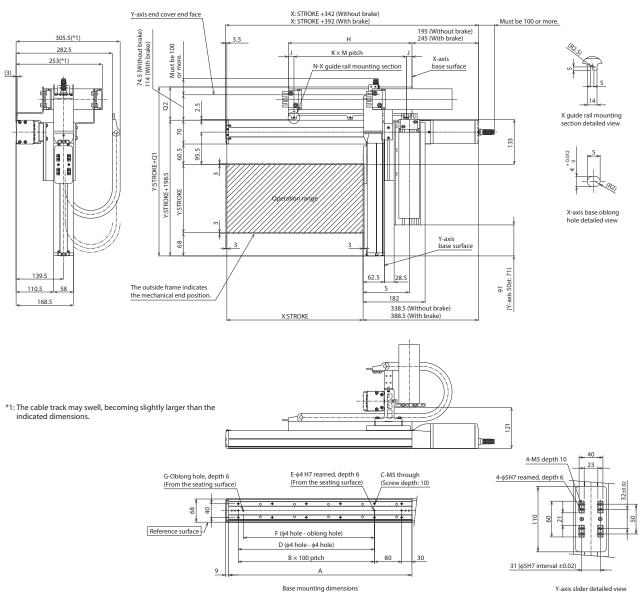
Dimensions

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)

Dimensions by Stroke

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
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	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
К	1	1	1	2	2	2	2	2	2	3	3	3	2	2	2	3
Μ	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	СТ	CTM	CTL	CTXL												
Q1	283	296	309	326												
Q2	84.5	97.5	110.5	127.5												
S	129	135.5	142	-												

RoHS

Stroke

P6 B **RCP6 2-axis configurations** X-axis: SA8R (side-mounted) Y-axis: SA7R (side-mounted) First Axis (X-axis) Second Axis (Y-axis) Controller Cable Model Encoder Type Series Туре Specification Items P6XBB1 S **PM1** IK2 WA - 🗆

A d

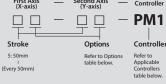
Encoder Type

WA: Battery-less

Configuration Direction Speed Type
 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
 Description on page 3



Payload by Acceleration

Cable First Second Wiring Wiring Length Refer to



1L : 1m 3L : 3m 5L □L 5m ⊡m MM type: X medium speed/X medium speed

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

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

0.1 3 1.5 0.3

SS type: X ultra high speed/Y ultra high speed Y-axis stroke (mm)

50~250

(Every 50mm)

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.

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

	lioke					
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
- U	500	0	0	0	0	0
N S	550	0	0	0	0	0
str	600	0	0	0	0	0
X-axis	650	0	0	0	0	0
-a	700	0	0	0	0	0
$ ^{\sim}$	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	See 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

Ŧ		1 11
Туре	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.

Specificatio	ns					
ltem		X-axis	Y-axis			
Axis model		RCP6-SA8R	RCP6-SA7R			
Stroke (Every 50n	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			
	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 operatir temperature, hur	5	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. IK2-P6XBB1□□S

Cable Track				
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)	СТ		-	-
Cable track M size (inner width: 50mm)	СТМ	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 *

* Only the first wiring can be selected Ontior

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

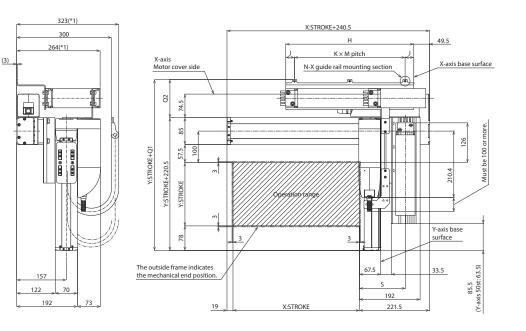
Dimensions

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.



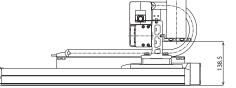


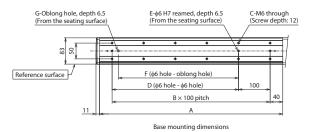
X guide rail mounting section detailed view

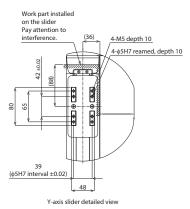


X-axis base oblong hole detailed view

*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)

341 354 371

107.5 120.5 133.5 150.5

139 145.5 152

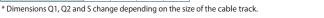
328

Dimensions by Stroke

Q1

Q2

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
М	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
					1																	
Cable track size	CT	CTM	CTL	CTXL																		



IK2-P6XBB2 **RCP6 2-axis configurations** X-axis: SA8C (straight) Y-axis: SA7R (side-mounted)

Model	Series -	Туре	— Encoder Type —	— First Axis (X-axis)	Second Axis (Y-axis)	Controller —	-	Cable	- Options
Specification Items	" IK2 -	– P6XBB2__S	- WA -			PM1 –	·		
	Configuration Direction 1 to 4 Refer to Robot Type Descriptions on page 3	Speed Type MM: X Medium Speed/Y Medium Speed HH: X High Speed/Y High Speed SS: X Ultra High Speed/Y Ultra High Speed	Encoder Type WA: Battery-less Absolute	Stroke 5: 50mm č (Every 50mm)	Options Refer to Options table (1) below.	l Controller Refer to Applicable Controllers table below.	Cable Length 1L : 1m 3L : 3m 5L : 5m □L: □m	First Second Wiring Wiring Refer to Cable Track table below.	l Options Refer to Options table (2) below.

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RoHS

Payload by Acceleration

MM type: X medium s	MM type: X medium speed/Y medium speed (Unit: kg)							
Y-axis stroke Acceleration/ (mm) deceleration (G)		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	5.5					
1	6	5	5.	.5				

HH type: X high speed/Y high speed

Y-axis stroke (mm) ecceleration (G)		200	250	Accelerat
0.1	11	10.5	9	
0.3	8			
0.5	5			
07	4			

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.

* 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
(mm)	450	0	0	0	0	0
	500	0	0	0	0	0
stroke	550	0	0	0	0	0
	600	0	0	0	0	0
xis	650	0	0	0	0	0
X-axis	700	0	0	0	0	0
	750	0	0	0	0	0
	800	0	0	0	0	0

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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

SS type: X ultra high speed/Y ultra high speed Y-axis stroke (mm)

tion/ tion (G)

0.1

0.3

50~250

(Every 50mm)

3

1.5

□ 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	366 IM-à1
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.

1100 Cable Length

850

900

950 1000 1050

Stroke

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

Ō

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.

Specificatio	ns					
ltem		X-axis	Y-axis			
Axis model		RCP6-SA8C	RCP6-SA7R			
Stroke (Every 50m	าm)	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 \u00e916mm rolled C10	Ball screw \u00f812mm 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.

Cable Track

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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)	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 *

* Only the first wiring can be selected 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

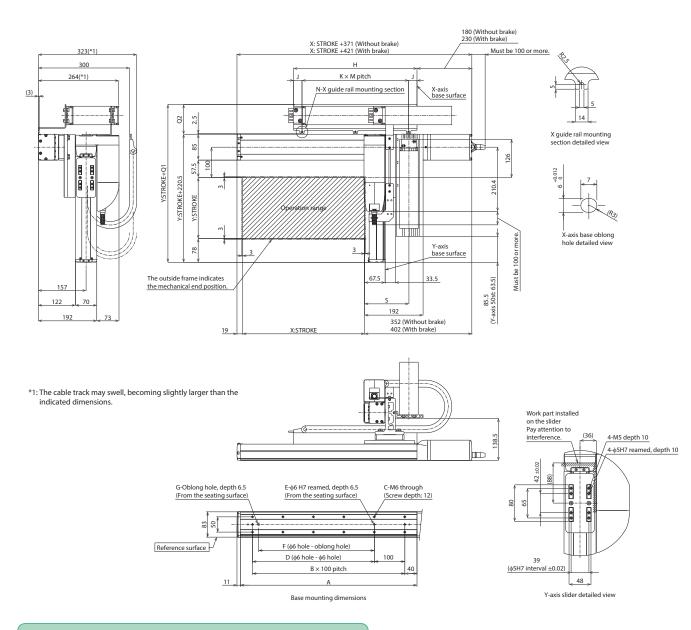
Options (2)		
Туре	Option code	Reference page
Foot plate	FTP	See P.83

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)

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
К	1	1	1	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	4	4	4
М	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	-																		

 * Dimensions Q1, Q2 and S change depending on the size of the cable track.

IK2-P6XBB3 **RCP6 2-axis configurations** X-axis: SA8C (straight) Y-axis: SA7C (straight) Concerned Audio

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lodel	Series -	— Туре	— Encoder Type -	(X-axis)	(Y-axis)	— Controller –	_	Cable	- Optio	ns
pecification ems	IK2 -	− P6XBB3 □ □S	— WA -			- PM1 -	- 🗆 -		- 🗆	j
				T-T-			\top	\top \top	T	
	figuration	Speed Type	Encoder Type	Stroke	Options	Controller	Cable	First Second	Optio	ins
Dire	ection	MM: X Medium Speed/Y Medium Speed	WA: Battery-less	5: 50mm	Refer to Options	Refer to	Length	Wiring Wiring	Refer to	o Options
1 to -		HH: X High Speed/Y High Speed	Absolute	1	table (1) below.	Applicable	1L : 1m	Refer to	table (2	2) below.
	r to Robot Type riptions	SS: X Ultra High Speed/Y Ultra High Speed		(Every 50mm)		Controllers table below.	3L : 3m	Cable Track		
on pa						table below.	5L : 5m □L: □m	table below.		

RoHS

Chuele



Payload by Acceleration

MM type: X medium s	MM type: X medium speed/Y medium speed (Unit: kg)						
Y-axis stroke Acceleration/ (mm) deceleration (G)		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.	.5			
1	e	5	5.	.5			

HH type: X high speed/Y high speed

Y-axis stroke cceleration/ (mm) leceleration (G)		200	250	Acceleration/ deceleration (G)
0.1	11	10.5	9	0.1
0.3	8			0.3
0.5	5			
07	4			

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.

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

2	troke					
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
Š	550	0	0	0	0	0
sti	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: SA8C

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

SS type: X ultra high speed/Y ultra high speed -axis stroke (mm)

50~250

(Every 50mm) 3

1.5

□ 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	266 IM-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

Туре	Cable code	Length
	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.

Specificatio	ns					
ltem		X-axis	Y-axis			
Axis model		RCP6-SA8C	RCP6-SA7C			
Stroke (Every 50n	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				
	HH	20mm	16mm			
lead	SS	30mm	24mm			
Drive system		Ball screw \u00e916mm rolled C10	Ball screw ø12mm rolled C10			
Positioning repea	tability	±0.01mm				
Base material		Aluminum				
Ambient operation	5	0~40°C, 85% RH or less (non-condensing)				
temperature, hur	many		-			

* 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-P6XBB3□□S

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)	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 Options (1)

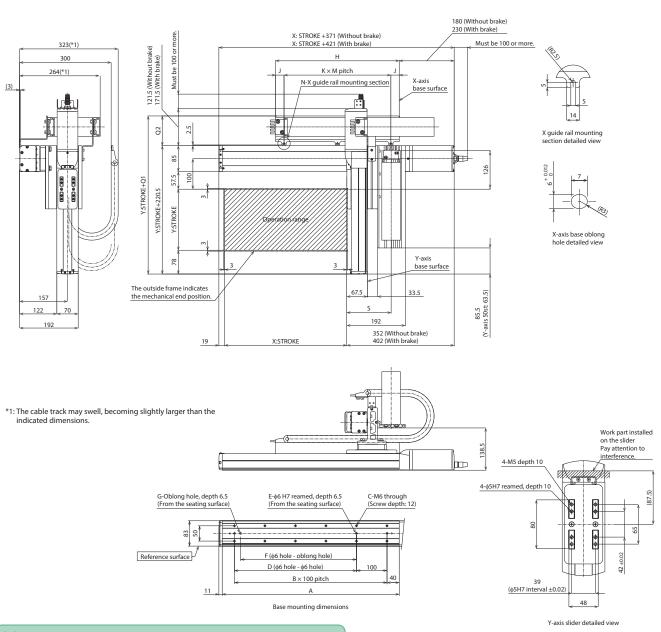
Туре	Option code	Reference page	X-axis	Y-axis
Brake	В	See P.83	0	0
Cable exit direction (Top)	CJT	See P.83	0	
Cable exit direction (Right)	CJR	See P.83	0	Cannot be
Cable exit direction (Left)	CJL	See P.83	0	selected
Cable exit direction (Bottom)	CJB	See P.83	0	
Non-motor end specification	NM	See P.84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



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
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
М	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	-																		

IK2	2-P	6XBF] S	RCP6 2-axis config	gurations			(side-moun e-mounted)	
Model Specification Items	Series - IK2 - Configuration Direction 1 to 4 Refer to Robot Type Descriptions on page 3	Type PGXBF1	Encoder Type — WA — Encoder Type WA: Battery-Jess Absolute	Stroke 5: 50mm (Every 50mm)	Second Axis (Y-axis) Options Refer to Options table below.	Controller — PM1 — Controller Refer to Applicable Controllers table below.		Cable First Secon Wiring Wirin Refer to Cable Track table below.		
RoHS					oad by Acceleration		um spee	d		(Unit

Acceleration/ deceleration (G)

0.1

Y-axis stroke (mm)



0.3		16	1	5	12.5		12	1	0.5
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 Acceleration/ deceleration (G)	50~100 (Every 50mm)	150~300 (Every 50mm)	350~400 (Every 50mm)	Accele	Y-axis str ration/ ration (G)	roke mm)	50~100 (Every 50mm)	150~300 (Every 50mm)	350~400 (Every 50mm)
0.1	;	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						

150~200

(Every 50mm) (Every 50mm) (Every 50mm)

15

250~300

12.5

350

12

400

10.5

50~100

16

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

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.

	0	

Y-a	kis stroke (mm)	50	100	150	200	250	300	350	400
T U.	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
<u></u>	350	0	0	0	0	0	0	0	0
stroke	400	0	0	0	0	0	0	0	0
str	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: 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	See M-91				
MSEL-PC/PG	See M-245				

* Operation is possible with the high output setting "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			
	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.

Specificatio	ns					
ltem		X-axis	Y-axis			
Axis model		RCP6-WSA14R	RCP6-SA7R			
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 ø12mm rolled C10	Ball screw \u00f612mm rolled C10			
Positioning repea	atability	±0.01mm				
Base material		Aluminum				
Ambient operatir temperature, hur		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 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)	СТМ	Can D OF	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

\mathbf{n}				12	
U	D	ч	Ο		Ы

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

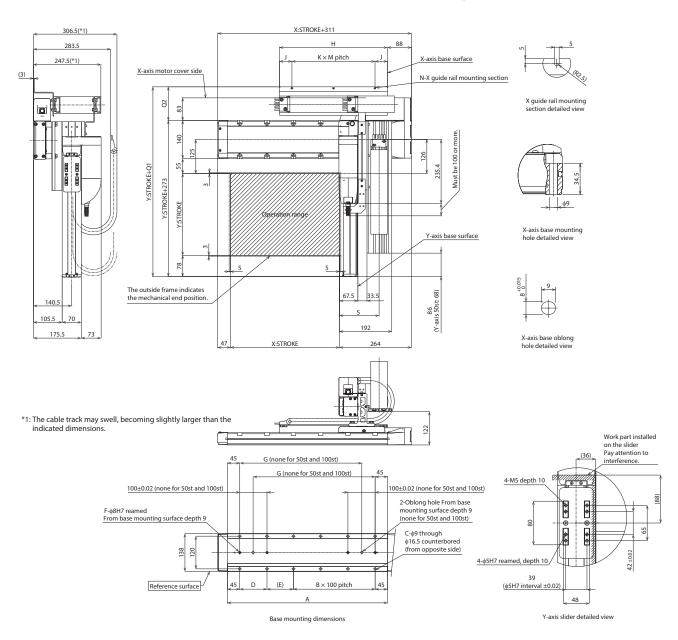
Dimensions

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)

Dimensions by Stroke

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
К	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
М	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	-												

* Dimensions Q1, Q2 and S change depending on the size of the cable track.



2-P6XBF RCP6 2-axis configurations X-axis: WSA14C (straight) Y-axis: SA7R (side-mounted) First Axis (X-axis) Second Axis (Y-axis) Controller Cable Model Encoder Type Туре Specification Items P6XBF2 S IK2 WA **PM1** - 🗆 ٦ Configuration Direction Speed Type Encoder Type Stroke Options Controller Cable First Second
 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 Option table below. WA: Battery-less Refer to 1L : 1m 3L : 3m (Every 50mm) Cable Track table below Description on page 3 5L □L Payload by Acceleration MM type: X medium speed/Y medium speed (Unit: kg)

Acceleration/ deceleration (G)

0.1

0.7

Y-axis stroke (mm)



0.3		16	1	5	12.5	12	1	0.5
0.5				1	1	0.5		
0.7					9.5			
HH type: X high	speed	'Y high	speed	SS	type: X ultra h	igh speed/Y	ultra hig	h speed
Y-axis stroke Acceleration/ deceleration (G)		150~300 (Every 50mm)	350~400 (Every 50mm)	Accele	Y-axis structure ration/ ration (G)	oke 50~100 nm) (Every 50mm)	150~300 (Every 50mm)	350~400 (Every 50mm)
0.1		8			0.1		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

150~200

(Every 50mm) (Every 50mm) (Every 50mm)

15

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

3

50~100

16

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

2

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.

Si	troke								
Y-axi	s 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
Ê	300	0	0	0	0	0	0	0	0
(mm)	350	0	0	0	0	0	0	0	0
stroke	400	0	0	0	0	0	0	0	0
str	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.

250~300

12.5

350

12

400

10.5

□ 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	366 101-91					
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

Туре	Cable code	Length					
	1L	1m					
Standard type	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

ltem		X-axis	Y-axis				
Axis model		RCP6-WSA14C	RCP6-SA7R				
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				
S. II.	MM	8mm	8mm				
Ball screw lead	HH	16mm	16mm				
leau	SS	24mm	24mm				
Drive system		Ball screw ø12mm rolled C10	Ball screw \u00f812mm rolled C10				
Positioning repea	tability	±0.01mm					
Base material		Aluminum					
Ambient operatir temperature, hur	5	0~40°C, 85% RH or less (non-condensing)					

peed 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)	СТ		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

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

Cable Track

	P		- /	-
* Tł		naxii	mun	
	IE II	али	nun	1.21
	1			

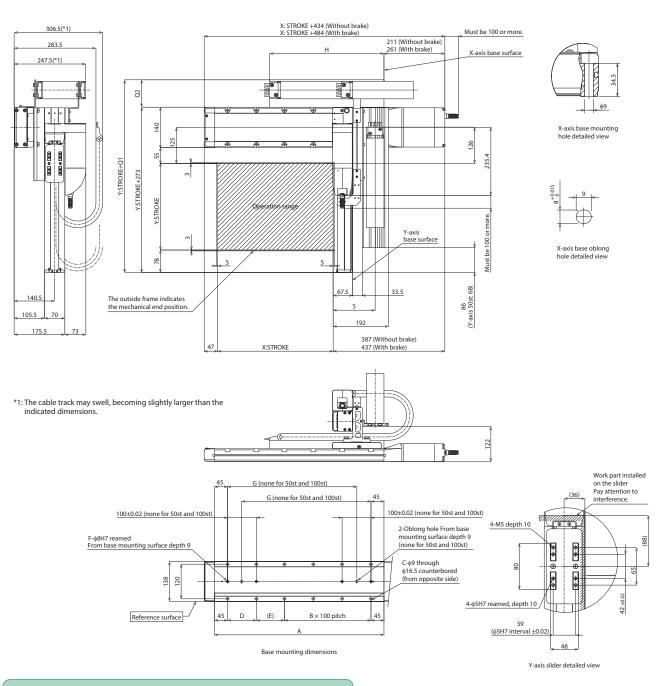
Dimensions

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)

Dimensions by Stroke

Q2 S

X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
А	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												
01	356	369	393	401	1											

2-P6XBF3 RCP6 2-axis configurations X-axis: WSA14C (straight) Y-axis: SA7C (straight) First Axis (X-axis) Second Axis (Y-axis) Controller Cable Model Encoder Type Series Туре Specification Items P6XBF3 S **PM1** IK2 WA - 🗆 Configuration Direction Speed Type Encoder Type Stroke Options Controller Cable First Second
 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 Option table below. WA: Battery-less Refer to 1L : 1m 3L : 3m (Every 50mm) Cable Track table below Description on page 3 5L □L Payload by Acceleration

> Acceleration/ deceleration (G)

0.1

03



0.5		10		5	12.5	12		10.5	
0.5				1	2		10.5		
0.7		9.5							
HH type: X high	igh speed/	Y ultra hig	gh speed						
Y-axis stroke Acceleration/ deceleration (G)		150~300 (Every 50mm)	350~400 (Every 50mm)	Accele	Y-axis stre ration/ ration (G)	oke 50~100 nm) (Every 50mm)	(Every	350~400 (Every 50mm)	
0.1	8	3	7.5		0.1	6	5.5	5	
0.3	8	3	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						

150~200

15

15

250~300

12.5

125

(Every 50mm) (Every 50mm)

350

12

12

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

MM type: X medium speed/Y medium speed

50~100

(Every 50mm)

16

16

Y-axis stroke (mm)

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

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.

	tr		

				'n					
Y-a:	kis 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
<u></u>	350	0	0	0	0	0	0	0	0
stroke	400	0	0	0	0	0	0	0	0
str	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	See M-91
MCON-LC/LCG	3ee M-91
MSEL-PC/PG	See M-245

(Unit: kg)

400

10.5

10 5

* 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				
	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

ltem		X-axis	Y-axis				
Axis model		RCP6-WSA14C	RCP6-SA7C				
Stroke (Every 50n	חm)	50~800mm	50~400mm				
Max. speed *	MM	210mm/s	280mm/s				
	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				
icau	SS	24mm	24mm				
Drive system		Ball screw ø12mm rolled C10	Ball screw \u00f812mm rolled C10				
Positioning repea	tability	±0.01mm					
Base material		Aluminum					
Ambient operatir temperature, hur		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 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)	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 *

* Only the first wiring can be selected

O	pti	on	s		

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

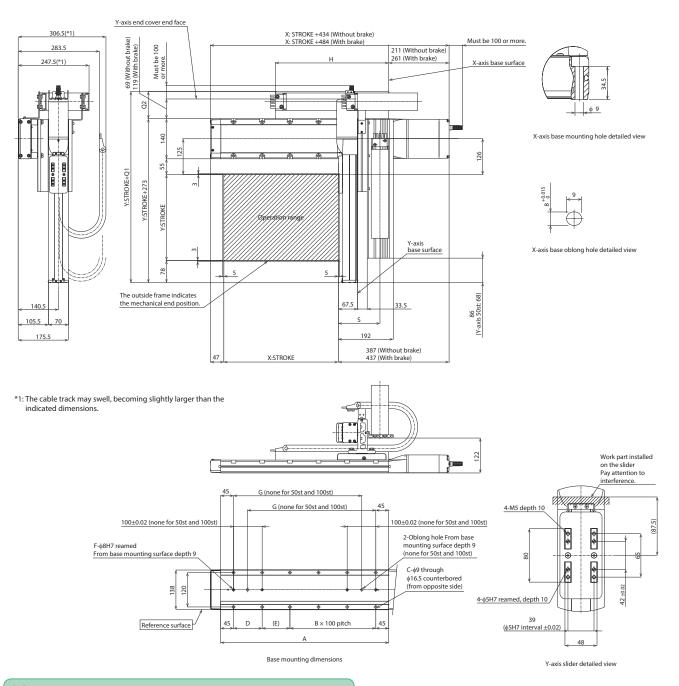
Dimensions





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)

Dimensions by Stroke

				· · · · · · · · · · · · · · · · · · ·												
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
C	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	-												

* Dimensions Q1, Q2 and S change depending on the size of the cable track.

IK	2-P	6XBE			RCP6 2-axis config	gurations	16R (side-mounted) R (side-mounted)
Model Specificati Items	Series IK2 – Configuration Direction 1 to 4 Refer to Robot Type Descriptions on page 3	Type P6XBE1 Speed Type MH: X Medium Speed/Y High Speed HH: X High Speed/Y High Speed	Encoder Type Type Type Type Fincoder Type WA: Battery-less Absolute	First Axis (X-axis) Stroke 5: 50mm č (Every 50mm)	Second Axis (Y-axis) Options Refer to Options table below.	Controller – PM1 – Controller Refer to Applicable Controllers table below.	
				Paylo	oad by Acceleration		



wiring and second wiring have cable tracks. Please refer to P.3 for other configuration directions.

MH type: X medium speed/Y high speed (Unit: kg) Y-axis stroke 50~100 150~200 250~300 350~400 (mm) (Every (Every (Every (Every 450 500 Acceleration/ deceleration (G) 50mm) 50mm) 50mm) 50mm) 0.1 17 16 15 14 12 10 0.3 17 16 15 14 12 10 0.5 10.5 10 11

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.

'-axis 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
400	0	0	0	0	0	0	0	0	0	0
450 500 550 600	0	0	0	0	0	0	0	0	0	0
u 500	0	0	0	0	0	0	0	0	0	0
ð 550	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
ୁ 650	0	0	0	0	0	0	0	0	0	0
sixe- 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: WSA16R, Y-axis: SA8R

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

Second wiring (Y-axis lateral)

0

0

Cannot be

selected *

Cable Length

Туре	Cable code	Length
	1L	1m
Standard type	3L	3m
Stanuaru 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						
ltem		X-axis	Y-axis			
Axis model		RCP6-WSA16R	RCP6-SA8R			
Stroke (Every 50m	nm)	50~1100mm	50~500mm			
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	20			
lead	HH	20mm	20mm			
Drive system		Ball screw ¢16mm rolled C10	Ball screw ¢16mm 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.

Туре	Model	Reference page	First wiring (X-axis lateral)
Without cable track (cable only)	N		0
Cable track S size (inner width: 38mm)	СТ		0
Cable track M size (inner width: 50mm)	СТМ	See P.85	0
Cable track L size (inner width: 63mm)	CTL	3ee F.03	0
Cable track XL size (inner width: 80mm) *	CTXL		0

* Only the first wiring can be selected

Cable Track

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

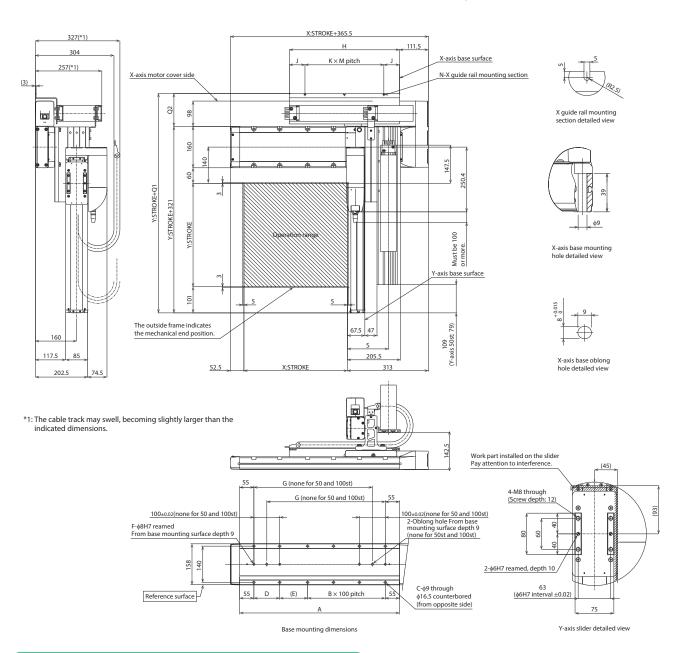
Dimensions

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

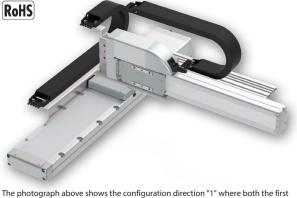
The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer.

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)

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	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
К	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4	4	5	5	5
М	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
Ν	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	-																		

2-P6XBE X-axis: WSA16C (straight) Y-axis: SA8R (side-mounted) Model First Axis (X-axis) Second Axis (Y-axis) Controller Cable Encoder Type Series Туре Specification Items **PM1** IK2 P6XBE2 S WA - 🗆 Configuration Direction Speed Type Encoder Type Stroke Options Controller Cable First Second Wiring Wiring Refer to Applicable Controllers table belov Length MH: X Medium Speed/Y High Speed HH: X High Speed/Y High Speed 5: 50mm Refer to Option table below. WA: Battery-less 1 to 4 Refer to Robot Type Refer to 1L : 1m (Every 50mm) 3L Cable Track table below Description on page 3 5L □L Payload by Acceleration



wiring and second wiring have cable tracks. Please refer to P.3 for other configuration directions.

MH type: X medium speed/Y high speed (Unit: kg) Y-axis stroke 50~100 150~200 250~300 350~400 (mm) (Every (Every (Every 450 500 (Every Acceleration/ deceleration (G) 50mm) 50mm) 50mm) 50mm) 0.1 17 16 15 14 12 10 0.3 14 12 10 17 16 15 0.5 10.5 10 11

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.

-axis 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
400	0	0	0	0	0	0	0	0	0	0
450 500 550 600	0	0	0	0	0	0	0	0	0	0
J 500	0	0	0	0	0	0	0	0	0	0
ð 550	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
€ 650	0	0	0	0	0	0	0	0	0	0
sixe- 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: SA8R

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

Cable Length

Туре	Cable code	Length
	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.

Specificatio	ns				
ltem		X-axis	Y-axis		
Axis model		RCP6-WSA16C	RCP6-SA8R		
Stroke (Every 50m	חm)	50~1100mm	50~500mm		
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	zomm		
Drive system		Ball screw ¢16mm rolled C10	Ball screw \u00f816mm 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.

IK2-P6XBE2

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)	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 Ontions

Cable Track

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

PCON-CFB/ CGFB	Se

	17		

RCP6 2-axis configurations

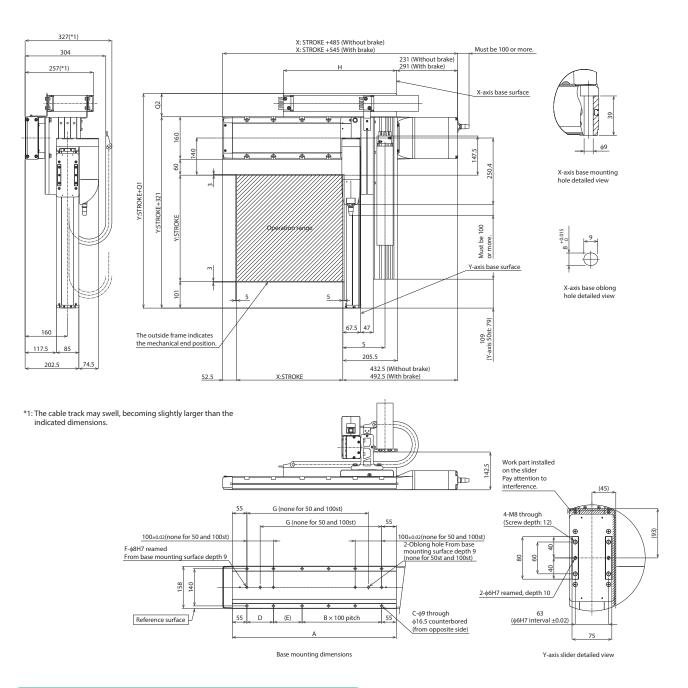
Dimensions

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.

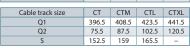


(*) Notes

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)

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	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



* Dimensions Q1, Q2 and S change depending on the size of the cable track.

IK:	2-P	6XBE	3] S	RCP6 2-axis config	gurations	X-axis: WSA16C Y-axis: SA8C (st	
Model Specificat Items	Series - IK2 - Configuration Direction 1to 4 Refer to Robot Type Descriptions on page 3	Type P6XBE3 Speed Type MH: X Medium Speed/Y High Speed HH: X High Speed/Y High Speed	Encoder Type MA Fancoder Type Konservers WA: Battery-tess Absolute	First Axis (X-axis) Stroke 5: 50mm (Every 50mm)	Second Axis (Y-axis) Options Refer to Options table below.	Controller – PM1 – Controller Applicable Controllers table below.	Cable Cable Cable Cable First Secc Length Cable SL: 3m SL: 3m Cable Track table below.	
				Payl	oad by Acceleration			



MH type: X medium speed/Y high speed

Mill type. A medium s	min type. A medium speed / Tingn speed									
Y-axis stroke (mm) deceleration (G)		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	11		10).5	10					

HH type: X high speed/Y high speed

Y-axis stroke Acceleration/ 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

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

'-axis 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
400	0	0	0	0	0	0	0	0	0	0
E 450	0	0	0	0	0	0	0	0	0	0
J 500	0	0	0	0	0	0	0	0	0	0
450 500 550 600	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0
S 650	0	0	0	0	0	0	0	0	0	0
sixe- 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

(Unit-ka)

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

□ X-axis: WSA16C, Y-axis: SA8C

Ο

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

Second wiring (Y-axis lateral)

0

0

Cannot be

selected *

Cable Length

Туре	Cable code	Length	
	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.

Specifications									
ltem		X-axis	Y-axis						
Axis model		RCP6-WSA16C	RCP6-SA8C						
Stroke (Every 50m	חm)	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	2011111						
Drive system		Ball screw ¢16mm rolled C10	Ball screw \u00f616mm 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.

IK2-P6XBE3□□S

Туре	Model	Reference page	First wiring (X-axis lateral)
Without cable track (cable only)	N		0
Cable track S size (inner width: 38mm)	СТ		0
Cable track M size (inner width: 50mm)	СТМ	See P.85	0
Cable track L size (inner width: 63mm)	CTL	Jee P.85	0

* Only the first wiring can be selected

Cable Track

Options

Cable track XL size (inner width: 80mm) *

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

CTXL

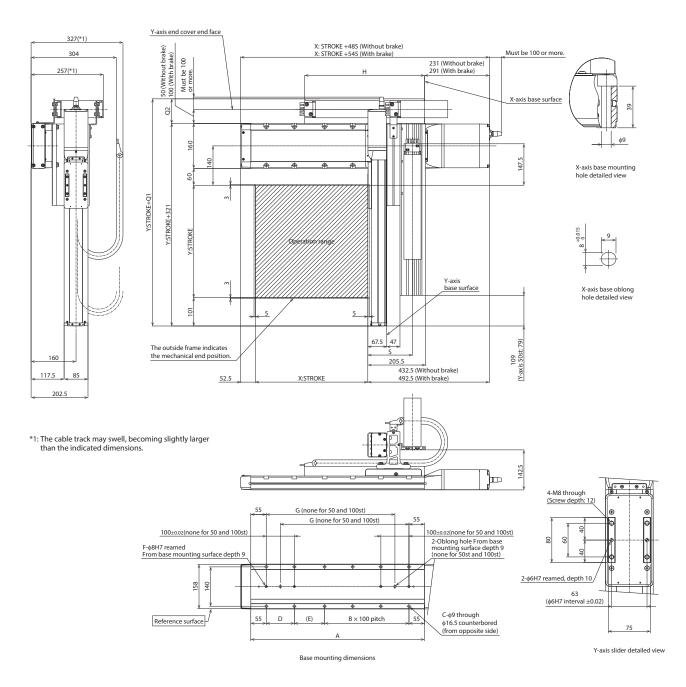
Dimensions

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)

Dimensions by Stroke

S

X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
А	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
Cable track size	CT	CTM	CTL	CTXL																		
Q1	396.5	408.5	423.5	441.5																		
02	75.5	87.5	102.5	120.5																		

 K2-P6YBD1
 S
 RCP6 2-axis configurations
 Y-axis: SA6R (side-mounted)

 Z-axis: SA4R (side-mounted)
 Z-axis: SA4R (side-mounted)

Model	Series	— Туре	— Encoder Type –	— First axis (Y-axis)	Second axis (Z-axis)	Controller —	-	Cable
Specificatio Items	ⁿ IK2		- WA -		— <u>□</u> B <u>□</u> —	PM1 -		
	Configuration	Speed Type	Encoder Type	Stroke	Options	Controller	Cable	First Second
	Direction	SM: Y Ultra High Speed/Z Medium Speed	WA: Battery-less	5: 50mm	Refer to Options	Refer to	Length	Wiring Wiring
	1 to 2 Refer to Robot Type Descriptions on page 3	SH: Y Ultra High Speed/Z High Speed	Absolute	(Every 50mm)	table below.	Applicable Controllers table below.	1L : 1m 3L : 3m 5L : 5m □L : □m	Refer to Cable Track table below.

Acceleration/

Acceleration/

deceleration (G) 0.1 0.3 0.5

deceleration (G) 0.1

0.3

0.5

Payload by Acceleration

Z-axis stroke

(mm)

SH type: Y ultra high speed/Z high speed Z-axis stroke

(mm)

SM type: Y ultra high speed/Z medium speed

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.

Stroke

2	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					
, Š	400	0	0	0					
str	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.

vibration, decrease the speed and acceleration/deceleration as required.

* When both Y and Z axes have the same acceleration/deceleration. When there is significant

□ Y-axis: SA6R, Z-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	See M-91
MSEL-PC/PG	See M-245

50~150

(Every 50mm)

1.5

1.5

1.5

50~150

(Every 50mm)

1

(Unit: kg)

* 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

cubic Lenge		
Туре	Cable code	Length
Charles data	1L	1m
	3L	3m
Standard type	5L	5m
		Specified length (15m max.)

Note 1. All-axis standard cable is used.

Note 1. 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		Y-axis	Z-axis				
Axis model		RCP6-SA6R RCP6-SA4R					
Stroke (Every 50r	nm)	50~800mm	50~150mm				
May arread *	SM	800mm/s	350mm/s				
Max. speed *	SH	800mm/s	610mm/s				
Motor size		42 Stepper motor	35 Stepper motor				
Ball screw	SM	20mm	5mm				
lead	SH	20mm	10mm				
Drive system		Ball screw ∳10mm rolled C10	Ball screw ø8mm rolled C10				
Positioning repea	atability	±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.

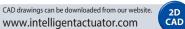
Cable Track

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)	СТМ	C D 05	0	0
Cable track L size (inner width: 63mm)	CTL	See P.85	0	0
Cable track XL size (inner width: 80mm) *	e (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)	cıo	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		

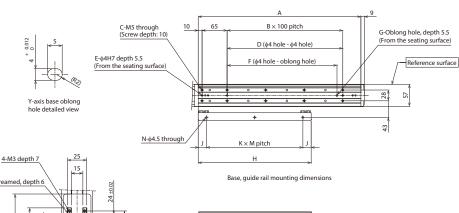
* Be sure to specify.



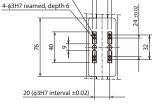


Note 1. The configuration position in the figure is home.

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.

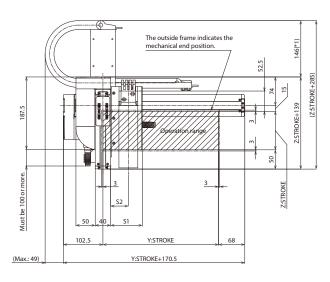


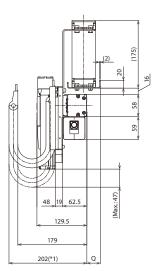
3 .0



Z-axis slider detailed view

*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.

Dimensions by Stroke

V CLUL	50	100	150	200	250	200	250	400	450	500	550	600	650	700	750	000
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
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
К	1	1	1	1	2	2	2	2	2	2	2	2	3	3	3	3
М	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	-												

* Dimensions Q, S1 and S2 change depending on the size of the cable track.

IK2-P6YBD2 S RCP6 2-axis configurations

Y-axis: SA6C (straight) Z-axis: SA4R (side-mounted)

50~150

(Every 50mm)

1.5

1.5

1.5

50~150

(Every 50mm)

1

(Unit: kg)

Model	Series -	Туре	— Encoder Type —	– First axis – (Y-axis)	Second axis (Z-axis)	Controller —	-	Cable
Specificatio Items	" IK2 ·	- P6YBD2 <u>□</u> □S	- WA -		- B -	PM1 –	· 무-	
	Configuration Direction	Speed Type	Encoder Type WA: Battery-less	Stroke	Options	Controller Refer to	Cable Length	First Second Wiring Wiring
	1 to 2 Refer to Robot Type Descriptions	SH: Y Ultra High Speed/Z High Speed	Absolute	(Every 50mm)	Refer to Options table below.	Applicable Controllers table below.	1L : 1m 3L : 3m 5L : 5m	Refer to Cable Track table below.

Acceleration/

Acceleration/

deceleration (G) 0.1 0.3 0.5

deceleration (G) 0.1

0.3

0.5

Payload by Acceleration

Z-axis stroke

(mm)

SH type: Y ultra high speed/Z high speed Z-axis stroke

(mm)

SM type: Y ultra high speed/Z medium speed



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.

Stroke

2	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							
Š.	400	0	0	0							
sti	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.

vibration, decrease the speed and acceleration/deceleration as required.

* When both Y and Z axes have the same acceleration/deceleration. When there is significant

□ Y-axis: SA6C, Z-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 14 01			
MCON-LC/LCG	See 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

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

Note 1. All-axis standard cable is used.

Note 1. 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		Y-axis	Z-axis						
Axis model		RCP6-SA6C	RCP6-SA4R						
Stroke (Every 50	mm)	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	20mm	5mm						
lead	SH	20mm	10mm						
Drive system		Ball screw ∳10mm rolled C10	Ball screw ø8mm rolled C10						
Positioning repe	atability	±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 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)	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 *

* 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				

Dimensions

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.

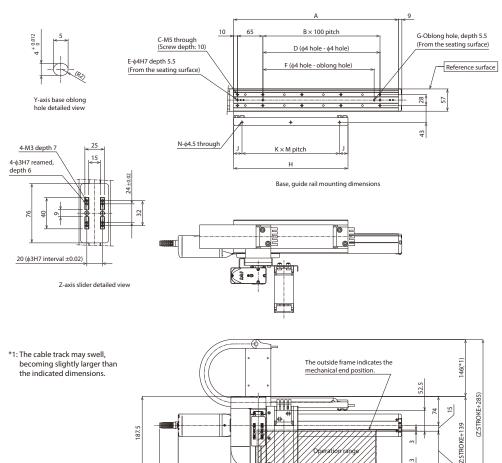
m

3

68

20

Z:STROKE



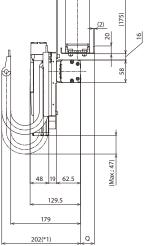
3

S2

S

Y: STROKE +273 (Without brake) Y: STROKE +312.5 (With brake)

Y:STROKE



(*) 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.

205 (Without brake)

244.5 (With brake)

Must be 100 or more

Must be 100 or more

Dimensions by Stroke

N. Charles	50	100	150	200	250	200	250	400	450	500	550	600	650	700	750	000
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
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
К	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	-												

* Dimensions Q, S1 and S2 change depending on the size of the cable track.

K2-P6YBD3 S RCP6 2-axis configurations Y-axis: SA6C (straight) Z-axis: SA4C (straight)

Model	Series -	Туре	— Encoder Type —	 First axis (Y-axis) 	Second axis (Z-axis)	Controller —	-	Cable
Specification Items	" IK2 -		- WA -		<u> </u>	PM1 -		- 므 ᄆ
	Configuration Direction	Speed Type	Encoder Type	Stroke	Options Refer to Options	Controller Refer to	Cable Length	First Second Wiring Wiring
	1 to 2 Refer to Robot Type Descriptions on page 3	SH: Y Ultra High Speed/Z High Speed	Absolute	(Every 50mm)	table below.	Applicable Controllers table below.	1L : 1m 3L : 3m 5L : 5m □L: □m	Refer to Cable Track table below.

Acceleration/

Acceleration/

deceleration (G) 0.1 0.3 0.5

deceleration (G) 0.1

0.3

0.5

Payload by Acceleration

Z-axis stroke

(mm)

SH type: Y ultra high speed/Z high speed Z-axis stroke

(mm)

SM type: Y ultra high speed/Z medium speed



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.

Stroke

2	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							
<u></u>	350	0	0	0							
Š.	400	0	0	0							
Y-axis stroke (mm)	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.

vibration, decrease the speed and acceleration/deceleration as required.

* When both Y and Z axes have the same acceleration/deceleration. When there is significant

□ 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	C 14 01				
MCON-LC/LCG	See M-91				
MSEL-PC/PG	See M-245				

50~150

(Every 50mm)

1.5

1.5

1.5

50~150

(Every 50mm)

1

(Unit: kg)

* 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

cubic Lenge		
Туре	Cable code	Length
	1L	1m
Standard type	3L	3m
Stanuaru type	5L	5m
		Specified length (15m max.)

Note 1. All-axis standard cable is used.

Note 1. 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-SA6C	RCP6-SA4C			
Stroke (Every 50mm)		50~800mm	50~150mm			
SM		000mm/a	350mm/s			
Max. speed *	SH	800mm/s	610mm/s			
Motor size		42 Stepper motor	35 Stepper motor			
Ball screw	SM	20mm	5mm			
lead	SH	20mm	10mm			
Drive system		Ball screw ∳10mm rolled C10	Ball screw ø8mm rolled C10			
Positioning repe	atability	±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 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)	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 *

* 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

175(*1)

82

47)

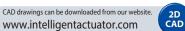
(Max.:

16

(2)

20

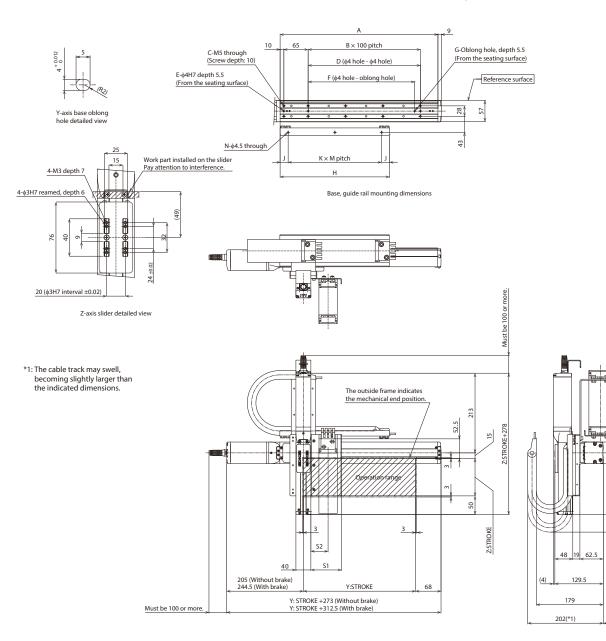
Dimensions





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.

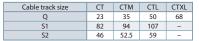


(*) Notes

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.

Dimensions by Stroke

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
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
М	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



* Dimensions Q, S1 and S2 change depending on the size of the cable track.

IK2-P6YBC1 S RCP6 2-axis configurations Y-axis: SA7 Z-axis: SA6

Model	Series -	— Туре	— Encoder Type —	 First axis (Y-axis) 	Second axis (Z-axis)	Controller —	-	Cable
Specificatio Items	^m IK2 -	- P6YBC1 S	— WA -		— <u>□</u> B <u>□</u> —	PM1 -		
	c c			T-T-			T	T T
	Configuration	Speed Type	Encoder Type	Stroke	Options	Controller	Cable	First Second
	Direction	SL: Y Ultra High Speed/Z Low Speed	WA: Battery-less	5: 50mm	Refer to Options	Refer to	Length	Wiring Wiring
	1 to 2	SM: Y Ultra High Speed/Z Medium Speed	Absolute	2	table below.	Applicable	1L : 1m	Refer to
	Refer to Robot Type	SH: Y Ultra High Speed/Z High Speed		(Every 50mm)		Controllers	3L : 3m	
	Descriptions	SS: Y Ultra High Speed/Z Ultra High Speed				table below.	5L : 5m	Cable Track
	on page 3	5 1						table below.

Payload by Acceleration

Z low speed

0.3

0.5

0.1

0.3

0.5

Z high speed

Acceleration/ deceleration (G)

SH type: Y ultra high speed/

Z-axis stroke

(mm)

Acceleration/

deceleration (G) 0.1

SL type: Y ultra high speed/

Z-axis stroke

(mm)

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.

Stroke

3	lioke				
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
Y-axis stroke (mm)	350	0	0	0	0
oke	400	0	0	0	0
s str	450	0	0	0	0
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.

50~200

(Every 50mm)

3

3

2.5

50~200

(Every 50mm)

1

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.

🗆 Y-axis: SA7R, 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

Туре	Cable code	Length	
	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.

Specifications

		-			
Item		Y-axis	Z-axis		
Axis model		RCP6-SA7R	RCP6-SA6R		
Stroke (Every 50r	nm)	50~800mm	50~200mm		
	SL		170mm/s		
Max croad *	SM	640mm/s	340mm/s		
Max. speed *	SH	040mm/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 ¢12mm rolled C10	Ball screw ø10mm rolled C10		
Positioning repea	atability	±0.01mm			
Base material		Aluminum			
Ambient operatii temperature, hur	ng midity	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. IK2-P6YBC1

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)	СТ		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

Options	
Options	

Туре	Option code	Reference page	Y-axis	Z-axis
Brake	В	See P.83	0	Standard equipment *
Cable exit direction (Outside)	CIO	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

* Be sure to specify.

Y-axis: SA7R (side-mounted) Z-axis: SA6R (side-mounted)

SM type: Y ultra high speed/

Z-axis stroke

(mm)

(Unit: kg)

50~200

(Every 50mm)

2

2

2

50~200

(Every 50mm)

0.5

0.5

0.5

Z medium speed

0.1

0.3

0.5

Z ultra high speed

0.1

0.3

0.5

SS type: Y ultra high speed/

Z-axis stroke

(mm)

Acceleration/ deceleration (G)

Acceleration/ deceleration (G)

Dimensions

0.012

depth 6

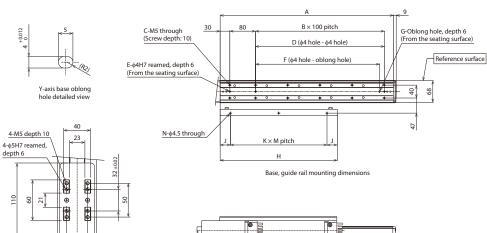
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CAD drawings can be downloaded from our website. www.intelligentactuator.com



Note 1. The configuration position in the figure is home.

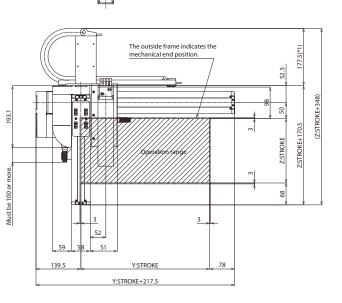
Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks. Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.

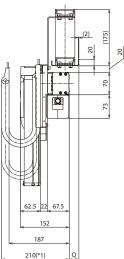


31 (\u00f65H7 interval ±0.02)

Z-axis slider detailed view

*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.

Dimensions by Stroke

•																
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
М	150	150	200	200	250	250	150	150	175	175	200	200	150	150	150	175
Ν	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	-												

* Dimensions Q, S1 and S2 change depending on the size of the cable track.

IK2-P6YBC2 **RCP6 2-axis configurations** Y-axis: SA7C (straight) Z-axis: SA6R (side-mounted)

Mardal	Series -	.	- Encoder Type -	_ First axis		Second axis	Controller -		Cable	
Model Specification	n	— Туре		(Y-axis)		(Z-axis)			Cable	
Items	‴ IK2 -	$-$ P6YBC2 \square \square S	— WA -	- 🗆 🗆	—	$\Box B \Box -$	PM1 -	- 🗆 -		
				TT				T	\top \top	
	Configuration	Speed Type	Encoder Type	Stroke		Options	Controller	Cable	First Second	ł –
	Direction	SL: Y Ultra High Speed/Z Low Speed	WA: Battery-less	5:50mm		Refer to Options	Refer to	Length	Wiring Wiring	
	1 to 2 Refer to Robot Type Descriptions on page 3	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	Absolute	(Every 50mm)		table below.	Applicable Controllers table below.	1L : 1m 3L : 3m 5L : 5m □I : □m	Refer to Cable Track table below.	

Payload by Acceleration

Z low speed

0.3

0.5

0.1

Z high speed

Acceleration/ deceleration (G)

SH type: Y ultra high speed/

Z-axis stroke

(mm)

Acceleration/

deceleration (G) 0.1

SL type: Y ultra high speed/

Z-axis stroke

(mm)



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.

0.3 0.3 0.5 1 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.

50~200

(Every 50mm)

3

3

2.5

50~200

(Every 50mm)

1

Z-axi	s 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
	350	0	0	0	0
stroke	400	0	0	0	0
	450	0	0	0	0
Y-axis	500	0	0	0	0
÷	550	0	0	0	0
	600	0	0	0	0

Ο

0

0

Applicable Contro	ollers
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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	See M-91
MSEL-PC/PG	See M-245

SM type: Y ultra high speed/ Z medium speed

Acceleration/

deceleration (G)

Acceleration/ deceleration (G)

0.1

0.3

0.5

Z ultra high speed

0.1

SS type: Y ultra high speed/

Z-axis stroke

(mm)

Z-axis stroke

(mm)

(Unit: kg)

50~200

(Every 50mm)

2

2

2

50~200

(Every 50mm)

0.5

0.5

0.5

* 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

650 700

750

800

Туре	Cable code	Length
	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.

0

0

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

Specifications

opeenieum	5115					
ltem		Y-axis	Z-axis			
Axis model		RCP6-SA7C	RCP6-SA6R			
Stroke (Every 50	mm)	50~800mm	50~200mm			
	SL		170mm/s			
Max. speed *	SM	640mm/s	340mm/s			
Max. speed	SH	0401111/5	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		Ball screw ø12mm rolled C10	Ball screw ø10mm rolled C10			
Positioning repe	atability	±0.01mm				
Base material		Aluminum				
Ambient operat temperature, hu		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. IK2-P6YBC2□□S

Cable Track

0

0

		Reference	First wiring	Second wiring	
Туре	Model	page	(Y-axis lateral)	(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)	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 *	

* Only the first wiring can be selected

	n ti		nc
U	рι	10	IIS

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

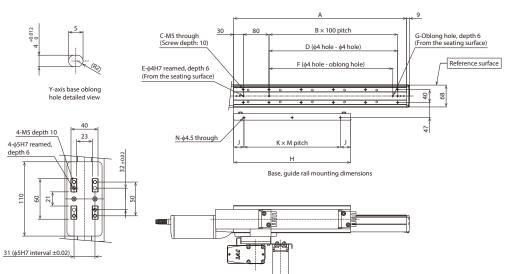
20

Dimensions

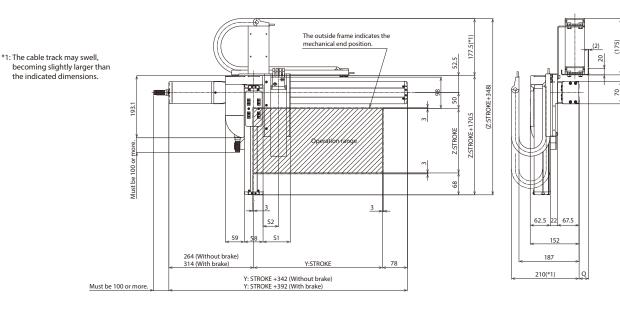


Note 1. The configuration position in the figure is home.

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.



Z-axis slider detailed view



(*) 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

V Charles	50	100	150	200	250	200	250	400	450	500	550	600	650	700	750	000
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
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
К	1	1	1	1	1	1	2	2	2	2	2	2	3	3	3	3
М	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	-												



* Dimensions Q, S1 and S2 change depending on the size of the cable track.

K2-P6YBC3 S RCP6 2-axis configurations Y-axis: Z-axis:

Y-axis: SA7C (straight) Z-axis: SA6C (straight)

Model	Series —	Туре	— Encoder Type —	– First axis (Y-axis)	Second axis (Z-axis)	Controller —		Cable	
Specification Items	IK2 —	P6YBC3	— WA –	- 무무	B	PM1 -	무-		
Confi Direc	l iguration tion _{SL: Y}	Speed Type	Encoder Type WA: Battery-less	Stroke	Options Refer to Options	Controller Refer to	Cable Length	First Second Wiring Wiring	
1 to 2 Refer to Descrip on page	SM: ' o Robot Type SH: ' otions SS: Y	Y Ultra High Speed/Z Medium Speed / Ultra High Speed/Z High Speed / Ultra High Speed/Z Ultra High Speed	Absolute	(Every 50mm)	table below.	Applicable Controllers table below.	1L : 1m 3L : 3m 5L : 5m □L: □m	Refer to Cable Track table below.	

Payload by Acceleration

Z low speed

Acceleration/

deceleration (G) 0.1

SL type: Y ultra high speed/

Z-axis stroke

(mm)



0.330.52.5SH type: Y ultra high speed/
Z high speedSS ty
Z ultZ-axis stroke
Acceleration (G)50~200
(Every 50mm)Acceleration (G)Celeration
(Every 50mm)

Acceleration/ (mm) deceleration (G) 50~200 (Every 50mm)

0.1

0.3

SM type: Y ultra high speed/ Z medium speed

Z-axis stroke

(Unit: kg)

2

2

2

0.5	
SS type: Y ultra high s	peed/

z nign speed		Z ultra high speed	
Z-axis stroke Acceleration/ (mm) deceleration (G)	50~200 (Every 50mm)	Z-axis stroke Acceleration/ (mm) deceleration (G)	50~200 (Every 50mm)
0.1	1	0.1	0.5
0.3	1	0.3	0.5
0.5	1	0.5	0.5
* When both Y and Z axes hav vibration, decrease the spee		tion/deceleration. When there is deceleration as required.	significant

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.

Stroke

	lione				
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
Y-axis stroke (mm)	350	0	0	0	0
oke	400	0	0	0	0
s str	450	0	0	0	0
axis	500	0	0	0	0
7	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.

50~200

(Every 50mm)

3

□ Y-axis: SA7C, Z-axis: SA6C

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	366 10-31
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
	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

ltem		Y-axis	Z-axis				
Axis model		RCP6-SA7C	RCP6-SA6C				
Stroke (Every 50r	nm)	50~800mm	50~200mm				
	SL		170mm/s				
Max. speed *	SM	640mm/s	340mm/s				
Max. speed	SH	0401111/5	680mm/s				
	SS		800mm/s				
Motor size		56 Stepper motor	42 Stepper motor				
	SL		3mm				
Ball screw	SM	24mm	6mm 12mm				
lead	SH	24000					
	SS		20mm				
Drive system		Ball screw \u00f812mm rolled C10	Ball screw ϕ 10mm rolled C10				
Positioning repe	atability	±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. IK2-P6YBC3

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)	СТ		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 *

* Only the first wiring can be selected

T (0)	ptions
	puons

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

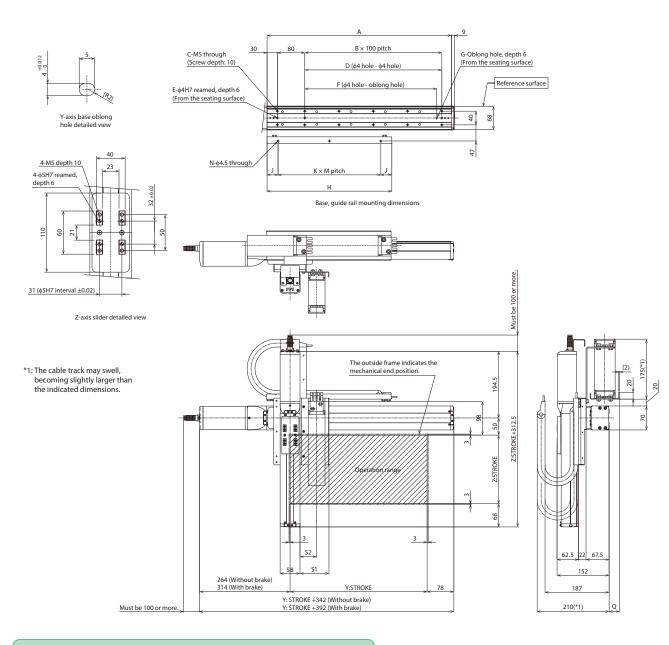
Dimensions

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 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
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
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
М	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

* Dimensions Q, S1 and S2 change depending on the size of the cable track.

IK2-P6YBB1 **RCP6 2-axis configurations** Y-axis: SA8R (side-mounted) Z-axis: SA7R (side-mounted)

Model	Jenes	— Туре	— Encoder Type —	_ First axis (Y-axis)	Second axis (Z-axis)	- Controller —	-	Cable	
Specificatio Items	^m IK2 -	- P6YBB1□□S	- WA -	- 무무	_ _ _ B <u>_</u> −	• PM1 –	·	·	
	Configuration Direction	Speed Type HL: Y High Speed/Z Low Speed	Encoder Type WA: Battery-less	Stroke	Options Refer to Options	Controller Refer to	Cable Length	 First Second Wiring Wiring	
	1 to 2 Refer to Robot Type Descriptions on page 3	Hi: 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	Absolute	(Every 50mm)	table below.	Applicable Controllers table below.	1L : 1m 3L : 3m 5L : 5m □L: □m	Refer to Cable Track table below.	

RoHS



HL type: Y high speed Z low speed	1/	
Z-axis stroke Acceleration/ (mm) deceleration (G)	50~300 (Every 50mm)	Ac
0.1	9	
0.3	8	
0.5	7	
SH type: Y ultra high s Z high speed	speed/	
Z-axis stroke Acceleration/ (mm) deceleration (G)	50~300 (Every 50mm)	Ac de

Payload by Acceleration

HM type: Y high 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

SH type: Y ultra high: Z high speed	speed/	SS type: Y ultra high speed/ Z ultra high speed				
Z-axis stroke (mm) deceleration (G)	50~300 (Every 50mm)	Z-axis stroke Acceleration/ deceleration (G)		250~300 (Every 50mm)		
0.1	3	0.1	1	.5		
0.3	2	0.3	1	.5		
0.5	1.5	0.5	1.5	1		

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.

0.5	1.5		0.5	1.5	
			on/deceleration. When there is celeration as required.	significar	٦t

7-axis st	roke (mm)	50	100	150	200	250	300
	50	0	0	0	0	0	0
	100	Ō	0	0	0	0	Ō
	150	0	0	0	0	0	0
	200	0	0	0	0	0	0
	250	0	0	0	0	0	0
	300	0	0	0	0	0	0
	350	0	0	0	0	0	0
~	400	0	0	0	0	0	0
stroke (mm)	450	0	0	0	0	0	0
e E	500	0	0	0	0	0	0
Ş 🗌	550	0	0	0	0	0	0
str	600	0	0	0	0	0	0
xis	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
	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

Applicable Controllers

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

□ Y-axis: SA8R

Type	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	S 14 01
MCON-LC/LCG	See 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

Туре	Cable code	Length
Chan dead to a c	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.

Specifications						
ltem		Y-axis	Z-axis			
Axis model		RCP6-SA8R	RCP6-SA7R			
Stroke (Every 50m	าm)	50~1100mm	50~300mm			
	HL	400mm/s	105mm/s			
Max an and *	HM	400mm/s	280mm/s			
Max. speed *	SH	650mm/s	560mm/s			
	SS	050(11)(1)/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 ϕ 16mm rolled C10	Ball screw			
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. IK2-P6YBB1□□S

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)	СТ		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 Ort

Options							
Туре	Option code	Reference page	Y-axis	Z-axis			
Brake	В	See P.83	0	Standard equipment *			
Cable exit direction (Outside)	CIO	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			

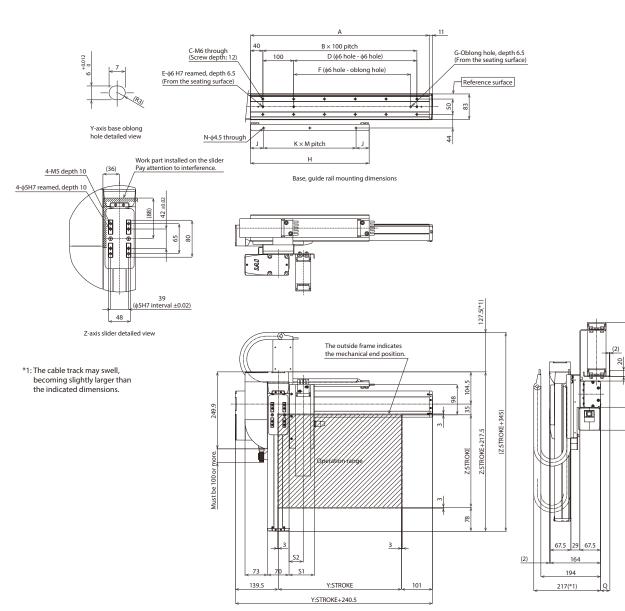
14.5

74.5



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.

Dimensions by Stroke

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
К	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	-																		

IK2-P6YBB2 RCP6 2-axis configurations Y-axis: SA8C (straight) Z-axis: SA7R (side-mounted)

Model	Series -	— Туре	— Encoder Type —	 First axis (Y-axis) 	Second axis (Z-axis)	Controller —	-	Cable	
Specification Items	ⁿ IK2 -	– P6YBB2 <u></u> __S	— WA -	- 무무	— B —	PM1 -	·		
	Configuration Direction	Speed Type HL:Y High Speed/Z Low Speed	Encoder Type WA: Battery-less	Stroke	Options Refer to Options	Controller Refer to	Cable Length	First Second Wiring Wiring	
F	1 to 2 Refer to Robot Type Descriptions on page 3	HM: Y High Speed/Z Medium Speed SH: Y Ultra High Speed/Z High Speed SS: Y Ultra High Speed/Z Ultra High Speed	Absolute	(Every 50mm)	table below.	Applicable Controllers table below.	1L : 1m 3L : 3m 5L : 5m □L: □m	Refer to Cable Track table below.	



Z low speed	
Z-axis stroke Acceleration/ (mm) deceleration (G)	50~300 (Every 50mm)
0.1	9
0.3	8
0.5	7
	maad/

HM type: Y high 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

SH type: Y ultra high speed/

Payload by Acceleration

HL type: Y high speed/

SH type: Y ultra high: Z high speed	speed/	SS type: Y ultra high speed/ Z ultra high speed					
Z-axis stroke Acceleration/ (mm) deceleration (G)	50~300 (Every 50mm)	Z-axis stroke Acceleration/ deceleration (G)		250~300 (Every 50mm)			
0.1	3	0.1	1	.5			
0.3	2	0.3	1	.5			
0.5	1.5	0.5	1.5	1			

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.

0.5	1.5	0.5	1.5	
* When both Y and Z axes hav vibration, decrease the spee			significar	۱t

7-avis s	stroke (mm)	50	100	150	200	250	300
		0	0	0	0	230	0
	50						
	100	0	0	0	0	0	0
	150	0	0	0	0	0	0
	200	0	0	0	0	0	0
	250	0	0	0	0	0	0
	300	0	0	0	0	0	0
	350	0	0	0	0	0	0
~	400	0	0	0	0	0	0
Ē	450	0	0	0	0	0	0
5	500	0	0	0	0	0	0
stroke (mm)	550 O		0	0	0	0	0
st	600	0	0	0	0	0	0
Y-axis	650	0	0	0	0	0	0
-a	700	0	0	0	0	0	0
~ –	750	0	0	0	0	0	0
	800	0	0	0	0	0	0
	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

Applicable Controllers

Controllers are sold separately.

Please contact IAI for more information.

□ Y-axis: SA8C

Type	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	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
	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.

Specificati	ons				
ltem		Y-axis	Z-axis		
Axis model		RCP6-SA8C	RCP6-SA7R		
Stroke (Every 50	mm)	50~1100mm	50~300mm		
	HL	100	105mm/s		
Max an and *	HM	400mm/s	280mm/s		
Max. speed *	SH	650mm/a	560mm/s		
	SS	650mm/s	640mm/s		
Motor size		56 High thrust stepper motor	56 Stepper motor		
	HL	20	4mm		
Ball screw	HM	20mm	8mm		
lead	SH	20	16mm		
	SS	30mm	24mm		
Drive system		Ball screw	Ball screw		
Positioning repe	eatability	±0.01mm			
Base material		Aluminum			
Ambient operat temperature, hu		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 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)	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 *

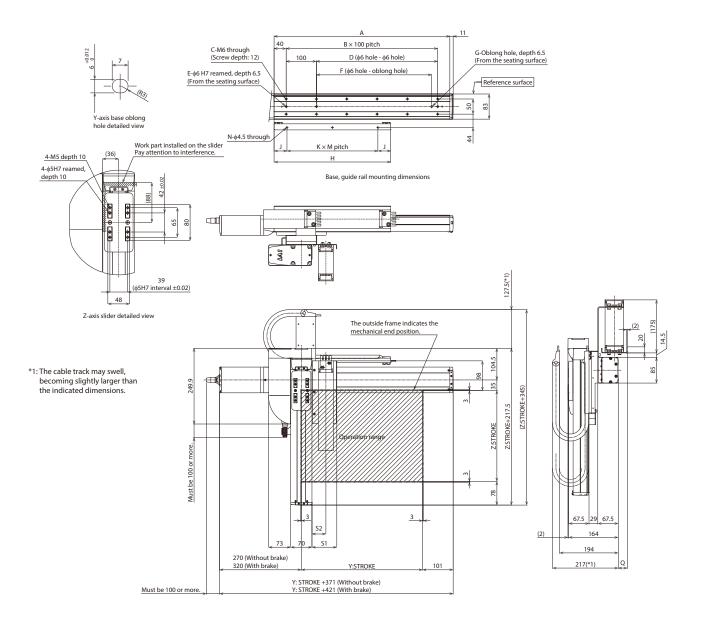
* Only the first wiring can be selected Optic

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



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.

Dimensions by Stroke

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
К	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	-																		

IK2-P6YBB3 **RCP6 2-axis configurations** Y-axis: SA8C (straight) Z-axis: SA7C (straight)

Model	Series -	— Туре	— Encoder Type —	 First axis (Y-axis) 	Second axis (Z-axis)	Controller —	-	Cable	
Specification Items	^{on} IK2 -	- P6YBB3 <u>□</u> <u>□</u> S	- WA -		— □B□ —	PM1 -	·		
	Configuration	Speed Type	Encoder Type	Stroke	Options	Controller	Cable	First Second	
	Direction 1 to 2 Refer to Robot Type	HL: Y High Speed/Z Low Speed HM: Y High Speed/Z Medium Speed SH: Y Ultra High Speed/Z High Speed	WA: Battery-less Absolute	5: 50mm (Every 50mm)	Refer to Options table below.	Refer to Applicable Controllers	Length	Wiring Wiring Refer to	
	Descriptions on page 3	SS: Y Ultra High Speed/Z Ultra High Speed		(creif somm)		table below.	3L : 3m 5L : 5m □L: □m	Cable Track table below.	

A d



HL type: Y high speed/ Z low speed								
Z-axis stroke Acceleration/ (mm) deceleration (G)	50~300 (Every 50mm)							
0.1	9							
0.3	8							
0.5	7							
SH type: Vultra high cpood/								

HM type: Y high 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

Payload by Acceleration

SH type: Y ultra high: Z high speed	speed/	SS type: Y ultra high speed/ Z ultra high speed					
Z-axis stroke (mm) deceleration (G)	50~300 (Every 50mm)	Z-axis stroke Acceleration/ deceleration (G)		250~300 (Every 50mm)			
0.1	3	0.1	1	.5			
0.3	2	0.3	1	.5			
0.5	1.5	0.5	1.5	1			

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.

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

5	troke						
Z-ax	is stroke (mm)	50	100	150	200	250	300
	50	0	0	0	0	0	0
	100	0	0	0	0	0	0
	150	0	0	0	0	0	0
	200	0	0	0	0	0	0
	250	0	0	0	0	0	0
	300	0	0	0	0	0	0
	350	0	0	0	0	0	0
	400	0	0	0	0	0	0
stroke (mm)	450	0	0	0	0	0	0
e E	500	0	0	0	0	0	0
l Ş	550	0	0	0	0	0	0
l tr	600	0	0	0	0	0	0
Y-axis	650	0	0	0	0	0	0
/-a	700	0	0	0	0	0	0
	750	0	0	0	0	0	0
	800	0	0	0	0	0	0
	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

Applicable Controllers

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

□ Y-axis: SA8C

PCON-CFB/CGFB See M-113	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	See M-91
MCON-LC/LCG	266 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

Туре	Cable code	Length
Standard type	1L	1m
	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.

Specificati	ons				
ltem		Y-axis	Z-axis		
Axis model		RCP6-SA8C	RCP6-SA7C		
Stroke (Every 50	mm)	50~1100mm	50~300mm		
	HL	400mm/s	105mm/s		
Max. speed *	HM	4001111/5	280mm/s		
SH SS		650mm/s	560mm/s		
		0301111/5	640mm/s		
Motor size		56 High thrust stepper motor	56 Stepper motor		
HL		20mm	4mm		
Ball screw	HM	zomm	8mm		
lead	SH	30mm	16mm		
	SS	somm	24mm		
Drive system		Ball screw	Ball screw		
Positioning repeatability		±0.01mm			
Base material		Aluminum			
Ambient operat temperature, hu		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.

IK2-P6YBB3□□S

Cable Track

Туре	Model	Reference page	First wiring (Y-axis lateral)	Second wiring (Z-axis lateral)
ithout cable track (cable only) N			0	0
Cable track S size (inner width: 38mm)	СТ		0	0
Cable track M size (inner width: 50mm)	СТМ	See P.85	0	0
Cable track L size (inner width: 63mm)	CTL	Jee P.85	0	0
Cable track XL size (inner width: 80mm) *	CTXL		0	Cannot be selected *

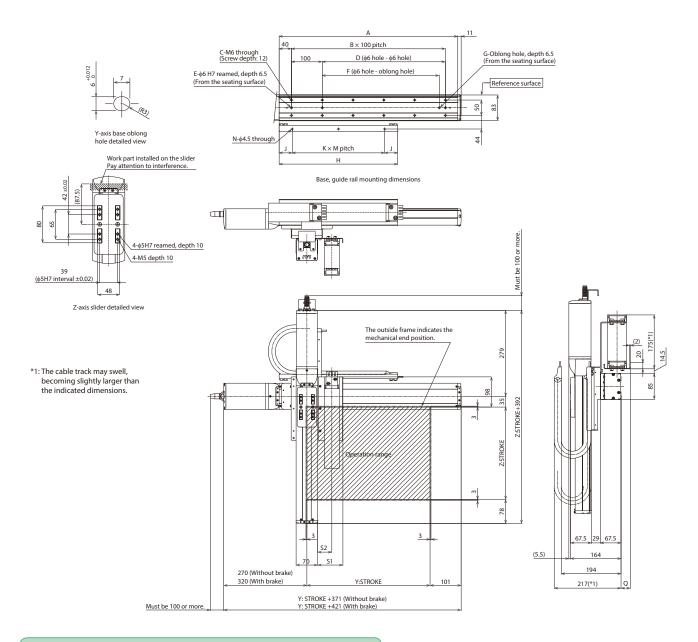
* Only the first wiring can be selected Ontion

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



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.

Dimensions by Stroke

Y: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
T: SUFOKE		100						400	450	500			650							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
К	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	-																		

* Dimensions Q, S1 and S2 change depending on the size of the cable track.

IK3 Cartesian Robot -

RCP6 3-axis XYB + Z-axis base mount configurations BB D 6 X-axis: SA7R (side-mounted) Third Axis (Z-axis) ____ Second Axis ____ (Y-axis) Encoder Type — First Axis (X-axis) — Controller — Cable Model Series Туре Specification Items WA $\Box \Box -$ T TĻ Speed Type Configuration Direction First Encoder Type Stroke Options Controller Cable Third Refer to HHL: X High Speed/Y High Speed/Z Low Speed HHM: X High Speed/Y High Speed/Z Medium Speed HHH: X High Speed/Y High Speed/Z High Speed HHS: X High Speed/Y High Speed/Z Ultra High Speed Refer to Options table on the next page. Length Wiring Wiring 5: 50mm WA: Battery-less Absolute 1 to 4 Refer to Robot Type Second Wiring 1L : 1m 3L : 3m 5L : 5m □L: □m ond (Every 50mm) Descriptions on page 3 Refer to Cable Track table below Payload by Acceleration



- HHL type: X high speed/Y high speed/Z low speed
- HHM type: X high speed/Y high speed/Z medium speed
- HHH type: X high speed/Y high speed/Z high speed
- HHS type: X high speed/Y high speed/Z ultra high speed (Unit: kg)

Speed Type Acceleration/ deceleration (G)	HHL	ННМ	ННН	HHS
0.1	3	2	1	0.5
0.3	3	2	1	0.5
0.5	-	-	1	0.5

* When X. Y and Z axes all have the same acceleration/deceleration.

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

The photograph above shows the configuration direction "1" where all axes have cable tracks. Please refer to P.3 for other configuration directions

Stroko

	гоке												
Y-a:	xis stroke (mm)		50			100			150			200	
Z-a:	xis stroke (mm)	50	100	150	50	100	150	50	100	150	50	100	150
	50	0	0	0	0	0	0	0	0	0	0	0	0
	100	0	0	0	0	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	0	0	0	0	0	0	0
	200	0	0	0	0	0	0	0	0	0	0	0	0
	250	0	0	0	0	0	0	0	0	0	0	0	0
(mm)	300	0	0	0	0	0	0	0	0	0	0	0	0
E a	350	0	0	0	0	0	0	0	0	0	0	0	0
stroke	400	0	0	0	0	0	0	0	0	0	0	0	0
str	450	0	0	0	0	0	0	0	0	0	0	0	0
axis	500	0	0	0	0	0	0	0	0	0	0	0	0
×	550	0	0	0	0	0	0	0	0	0	0	0	0
	600	0	0	0	0	0	0	0	0	0	0	0	0
	650	0	0	0	0	0	0	0	0	0	0	0	0
	700	0	0	0	0	0	0	0	0	0	0	0	0
	750	0	0	0	0	0	0	0	0	0	0	0	0
	800	0	0	0	0	0	0	0	0	0	0	0	0

Cable Length

Туре	Cable code	Length
	1L	1m
Standard	3L	3m
type	5L	5m
	□L	Specified length (15m max.)
Noto 1 All	avic standard cab	la is used

Note 1. All-axis standard cable is used. Note 2. The length of the second and third 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)	Third wiring (Z-axis lateral)
Without cable track (cable only)	N		0	0	0
Cable track S size (inner width: 38mm)	СТ		0	0	0
Cable track M size (inner width: 50mm)	СТМ	See P.85	0	0	0
Cable track L size (inner width: 63mm)	CTL	See P.05	0	0	Cannot be selected *1
Cable track XL size (inner width: 80mm)	CTXL		0	Cannot be	selected *2

*1 Only the first and second wiring can be selected *2 Only the first wiring can be selected

Applicable Controllers

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

🗆 X-axis: SA7R, Y-axis: SA6R, Z-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	366 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.

IK3	Cartesian	Robot		

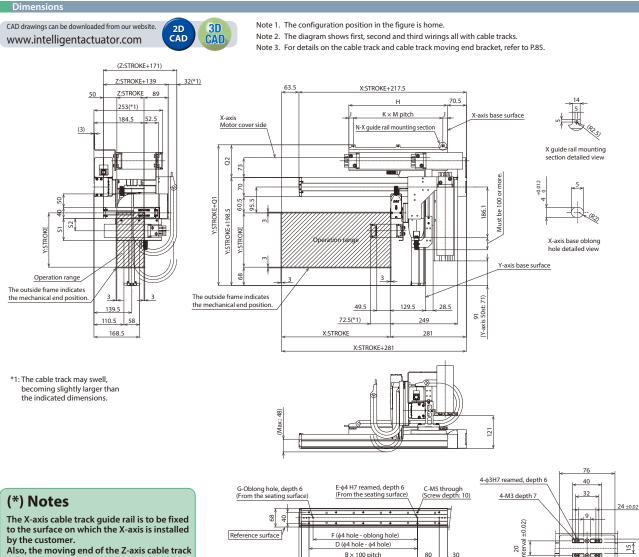
Specificati	0115						
ltem		X-axis	Y-axis	Z-axis			
Axis model		RCP6-SA7R	RCP6-SA6R	RCP6-SA4R			
Stroke (Every 50)mm)	50~800mm	50~200mm	50~150mm			
	HHL			150mm/s			
Max. speed *	HHM	420mm/s	560mm/s	305mm/s			
Max. speed	HHH	42011111/5	5001111/5	525mm/s			
	HHS			560mm/s			
Motor size		56 Stepper motor	42 Stepper motor	35 Stepper motor			
	HHL			2.5mm			
Ball screw	HHM	16.000	12	5mm			
lead	HHH	16mm	12mm	10mm			
	HHS			16mm			
Drive evetere		Ball screw \u00f612mm	Ball screw \u00f610mm	Ball screw			
Drive system		rolled C10	rolled C10	rolled C10			
Positioning repe	atability	±0.01mm					
Base material		Aluminum					
Ambient operative, h		0~40°C, 85% RH or less (non-condensing)					

Specifications

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

[•] Be sure to specify.

* 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.



B×100 pitch

A

Base mounting dimensions

80

30

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

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
М	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

9

Cable track size	CT	CTM	CTL	CTXL
Q1	306	319	332	349
Q2	107.5	120.5	133.5	150.5
S1	82	94	-	-
S2	46	52.5	-	-

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Z-axis slider detailed view

(\$3H7

* Dimensions Q1, Q2, S1 and S2 change depending on the size of the cable track.

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IK3 Cartesian Robot -

RCP6 3-axis XYB + Z-axis base mount configurations BB 6 X-axis: SA7C (straight) Third Axis (Z-axis) ____ Second Axis ____ (Y-axis) Encoder Type First Axis (X-axis) — Controller — Cable Options Model Series Туре Specification Items WA PM1 − □-IK3 $\Box \Box -$ - 🗆 -Ļ Speed Type Configuration Direction First Encoder Type Stroke Options Controller Cable Third Options Refer to HHL: X High Speed/Y High Speed/Z Low Speed HHM: X High Speed/Y High Speed/Z Medium Speed HHH: X High Speed/Y High Speed/Z High Speed HHS: X High Speed/Y High Speed/Z Ultra High Speed Refer to Options table (1) on the next page. Length Wiring Wiring Refer to Options table (2) on the next page. 5: 50mm WA: Battery-less Absolute 1 to 4 Refer to Robot Type Second Wiring 1L : 1m 3L : 3m 5L : 5m □L: □m (Every 50mm) Descriptions on page 3 Refer to Cable Track table below.



Payload by Acceleration

- HHL type: X high speed/Y high speed/Z low speed
- HHM type: X high speed/Y high speed/Z medium speed
- HHH type: X high speed/Y high speed/Z high speed
- HHS type: X high speed/Y high speed/Z ultra high speed

Speed Type Acceleration/ deceleration (G)	HHL	ННМ	ННН	HHS
0.1	3	2	1	0.5
0.3	3	2	1	0.5
0.5	-	-	1	0.5

(Unit: kg)

* When X. Y and Z axes all have the same acceleration/deceleration.

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

The photograph above shows the configuration direction "1" where all axes have cable tracks. Please refer to P.3 for other configuration directions.

Steake

	гоке												
Y-a:	kis stroke (mm)		50			100			150		200		
Z-a	kis stroke (mm)	50	100	150	50	100	150	50	100	150	50	100	150
	50	0	0	0	0	0	0	0	0	0	0	0	0
[100	0	0	0	0	0	0	0	0	0	0	0	0
[150	0	0	0	0	0	0	0	0	0	0	0	0
[200	0	0	0	0	0	0	0	0	0	0	0	0
[250	0	0	0	0	0	0	0	0	0	0	0	0
(mm)	300	0	0	0	0	0	0	0	0	0	0	0	0
E	350	0	0	0	0	0	0	0	0	0	0	0	0
stroke	400	0	0	0	0	0	0	0	0	0	0	0	0
str	450	0	0	0	0	0	0	0	0	0	0	0	0
axis	500	0	0	0	0	0	0	0	0	0	0	0	0
×	550	0	0	0	0	0	0	0	0	0	0	0	0
ĺ	600	0	0	0	0	0	0	0	0	0	0	0	0
	650	0	0	0	0	0	0	0	0	0	0	0	0
	700	0	0	0	0	0	0	0	0	0	0	0	0
[750	0	0	0	0	0	0	0	0	0	0	0	0
	800	0	0	0	0	0	0	0	0	0	0	0	0

Cable Length

Туре	Cable code	Length				
Standard	1L	1m				
	3L	3m				
type	5L	5m				
	□L	Specified length (15m max.)				
Noto 1 All	avic standard cab					

Note 1. All-axis standard cable is used. Note 2. The length of the second and third 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)	Third wiring (Z-axis lateral)
Without cable track (cable only)	N		0	0	0
Cable track S size (inner width: 38mm)	СТ		0	0	0
Cable track M size (inner width: 50mm)	СТМ	See P.85	0	0	0
Cable track L size (inner width: 63mm)	CTL	See P.05	0	0	Cannot be selected *1
Cable track XL size (inner width: 80mm)	CTXL		0	Cannot be	selected *2

*1 Only the first and second wiring can be selected *2 Only the first wiring can be selected

Applicable Controllers

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

🗆 X-axis: SA7C, Y-axis: SA6R, Z-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.

Specificat	ions				
ltem		X-axis	Y-axis	Z-axis	
Axis model		RCP6-SA7C	RCP6-SA6R	RCP6-SA4R	
Stroke (Every 5	0mm)	50~800mm	50~200mm	50~150mm	
	HHL			150mm/s	
Max. speed *	HHM	420mm/s	560mm/s	305mm/s	
	HHH	4201111/5	5001111/5	525mm/s	
	HHS			560mm/s	
Motor size		56 Stepper motor	42 Stepper motor	35 Stepper motor	
	HHL			2.5mm	
Ball screw	HHM	16mm	10	5mm	
lead	HHH	Tomm	12mm	10mm	
	HHS			16mm	
Drive system		Ball screw \u00f612mm rolled C10	Ball screw \u00f610mm rolled C10	Ball screw ø8mm rolled C10	
Positioning repe	eatability	±0.01mm			
Base material		Aluminum			
Ambient operating temperature, humidity 0~40°C, 85% RH or less (non-condensing)					

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

ure to specify.

otions (2)

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

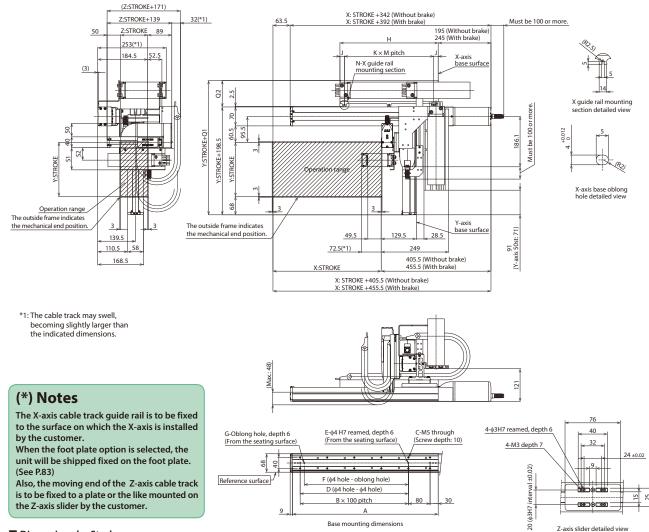
* The maximum speed may not be reached if the travel distance is short or acceleration is low. Maximum speed may change depending on the stroke. For details, refer to the Maximum Speed by Stroke table on P.86.

Dimensions

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 first, second and third wirings all with cable tracks. Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.



Z-axis slider detailed view

	Cable track size	CT	CTM	CTL	CTXL
	Q1	283	296	309	326
	Q2	84.5	97.5	110.5	127.5
	S1	82	94	-	-
	S2	46	52.5	-	-

* Dimensions Q1, Q2, S1 and S2 change depending on the size of the cable track.

Dimensions by Stroke

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
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	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
М	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

IK3 Cartesian Robot –

IK3-F	P6BBC3	3	S	X-axis: SA7C (st	traight)	ise mount config is: SA4C (straight		
Model Specification Items Configuration Direction 1 to 4 Refer to Robot Type Descriptions on page 3		Encoder Type	First Axis	Second AxisThird Axi (Y-axis)Taxis) B B Options Refer to Options table (1) on the next page.	S — Controller — PM1 — Controller Refer to Applicable Controllers table below.	Cable Cable	ng	Options Options Options Refer to Options table (2) on the next page.
RoHS				oad by Acceleration type: X high spee		ed/Z low speed		



- HHL type: X high speed/Y high speed/Z low speed

- HHM type: X high speed/Y high speed/Z medium speed
 HHM type: X high speed/Y high speed/Z high speed
 HHS type: X high speed/Y high speed/Z ultra high speed

Speed Type Acceleration/ deceleration (G)	HHL	ННМ	ННН	HHS
0.1	3	2	1	0.5
0.3	3	2	1	0.5
0.5	-	-	1	0.5

(Unit: kg)

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

The photograph above shows the configuration direction "1" where all axes have cable tracks. Please refer to P.3 for other configuration directions.

Strake

50	Stroke												
Y-ax	kis stroke (mm)	50				100			150			200	
Z-ax	kis stroke (mm)	50	100	150	50	100	150	50	100	150	50	100	150
	50	0	0	0	0	0	0	0	0	0	0	0	0
	100	0	0	0	0	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	0	0	0	0	0	0	0
	200	0	0	0	0	0	0	0	0	0	0	0	0
	250	0	0	0	0	0	0	0	0	0	0	0	0
(mm)	300	0	0	0	0	0	0	0	0	0	0	0	0
E a	350	0	0	0	0	0	0	0	0	0	0	0	0
stroke	400	0	0	0	0	0	0	0	0	0	0	0	0
str	450	0	0	0	0	0	0	0	0	0	0	0	0
axis	500	0	0	0	0	0	0	0	0	0	0	0	0
×	550	0	0	0	0	0	0	0	0	0	0	0	0
	600	0	0	0	0	0	0	0	0	0	0	0	0
	650	0	0	0	0	0	0	0	0	0	0	0	0
	700	0	0	0	0	0	0	0	0	0	0	0	0
	750	0	0	0	0	0	0	0	0	0	0	0	0
	800	0	0	0	0	0	0	0	0	0	0	0	0

Cable Length

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

Note 1. All-axis standard cable is used.
 Note 2. The length of the second and third 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 Price List (Standard price)

	Туре	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)	Third wiring (Z-axis lateral)
	Without cable track (cable only)	N		0	0	0
	Cable track S size (inner width: 38mm)	СТ		0	0	0
	Cable track M size (inner width: 50mm)	СТМ	See P.85	0	0	0
it	Cable track L size (inner width: 63mm)	CTL	See P.05	0	0	Cannot be selected *1
5	Cable track XL size (inner width: 80mm)	CTXL		0	Cannot be	selected *2

*1 Only the first and second wiring can be selected *2 Only the first wiring can be selected

Applicable Controllers

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

□ X-axis: SA7C, 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	6 - M 01				
MCON-LC/LCG	See 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.

Specificati	ons						
ltem		X-axis	Y-axis	Z-axis			
Axis model		RCP6-SA7C	RCP6-SA6C	RCP6-SA4C			
Stroke (Every 50)mm)	50~800mm	50~200mm	50~150mm			
	HHL			150mm/s			
Max. speed *	HHM	420mm/s	560mm/s	305mm/s			
Max. speed	HHH	42011111/5	5001111/5	525mm/s			
	HHS			560mm/s			
Motor size		56 Stepper motor	42 Stepper motor	35 Stepper motor			
	HHL			2.5mm			
Ball screw	HHM	16mm	12mm	5mm			
lead	HHH	Tomm	12mm	10mm			
	HHS			16mm			
Drive system		Ball screw \u00f612mm	Ball screw \u00f610mm	Ball screw ø8mm			
Drive system		rolled C10	rolled C10	rolled C10			
Positioning repe	atability	±0.01mm					
Base material		Aluminum					
Ambient operat temperature, hi		0~40°C, 85% RH or less (non-condensing)					

Options (1)

Туре	Option code	Reference page	X-axis	Y-axis	Z-axis	
Brake	В	See P.83	0	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	sele	cted	
Cable exit direction (Bottom)	CJB	See P.83	0			
Non-motor end specification	NM	See P.84	0	0	0	
Slider section roller specification	SR	See P.84	0	0	0	

* Outside as standard. Be sure to specify

Options (2)		
Туре	Option code	Reference page
Foot plate	FTP	See P.83

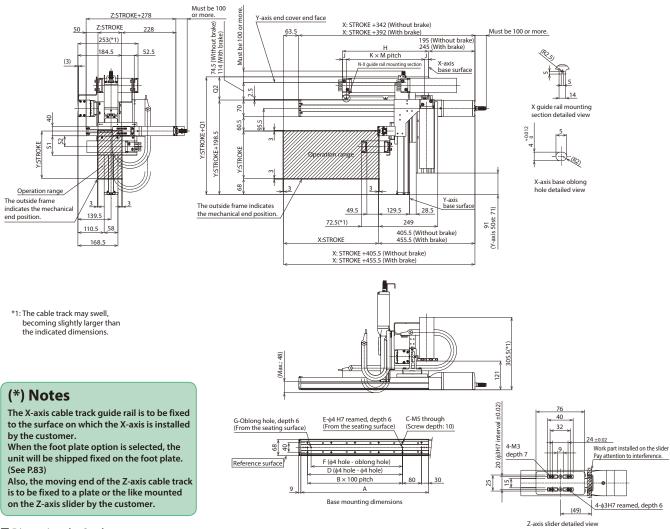
* The maximum speed may not be reached if the travel distance is short or acceleration is low. Maximum speed may change depending on the stroke. For details, refer to the Maximum Speed by Stroke table on P.86.

Dimensions

CAD drawings can be downloaded from our website.



Note 1. The configuration position in the figure is home. Note 2. The diagram shows first, second and third wirings all with cable tracks. Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.



Dimensions by Stroke

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
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	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
М	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	
S1	82	94	-	-	
S2	46	52.5 -		-	

* Dimensions Q1, Q2, S1 and S2 change depending on the size of the cable track.

IK3 Cartesian Robot -

RCP6 3-axis XYB + Z-axis base mount configurations BB D 6 X-axis: SA8R (side-mounted) Y-axis: SA7R (side-mounted) Z-axis: SA6R (side-mounted) ____ First Axis ____ Second Axis ____ (X-axis) (Y-axis) Third Axis (Z-axis) Encoder Type — Controller — Cable Model Series Туре Specification Items WA – PM1 – 🗆 – 🛄 – 🛄 _ _ F \square Configuration Direction Speed Type Cable First Encoder Type Stroke Options Controller Third HSL: X High Speed/Y Ultra High Speed/Z Low Speed HSM: X High Speed/Y Ultra High Speed/Z Medium Speed HSH: X High Speed/Y Ultra High Speed/Z High Speed HSS: X High Speed/Y Ultra High Speed/Z Ultra High Speed Refer to Applicable Controllers table below. Length Wiring Wiring Refer to Options table on the next page. 5: 50mm WA: Battery-less Absolute 1 to 4 Refer to Robot Type Descriptions on page 3 Second Wiring Refer to Cable Track table below. 1L : 1m 3L : 3m 5L : 5m □L: □m (Every 50mm) Payload by Acceleration RoHS



- HSL type: X high speed/Y ultra high speed/Z low speed
- HSM type: X high speed/Y ultra high speed/Z medium speed
- HSH type: X high speed/Y ultra high speed/Z high speed
- HSS type: X high speed/Y ultra high speed/Z ultra high speed (Unit: kg)

Speed Type Acceleration/ deceleration (G)	HSL	HSM	HSH	HSS
0.1	4	2	1	0.5
0.3	4	2	1	0.5
0.5	4	2	1	0.5

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

The photograph above shows the configuration direction "1" where all axes have cable tracks. Please refer to P.3 for other configuration directions.

Y-add stroke mm 50 100 19 20 dd stroke mm 50 0	Sti	roke													
50 0	Y-ax	is stroke (mm)		5	0			10	00			15	0		
100 ○	Z-ax	is stroke (mm)	50	100	150	200	50	100	150	200	50	100	150	200	
150 ○															
200 O															
250 O															
300 ○															
100 0															
stop 0															
450 0								-			-				
750 0	2														
750 0	E -														
750 0	e –														
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1050 ○ <td></td> <td>-</td> <td></td> <td></td> <td></td>											-				
1100 0						-					-			-	
Y-axis stroke (mm) 200 250 Zaxis stroke (mm) 50 100 150 200 0 100<															
Z-axis stroke (mm) 50 100 150 200 Controllers are sold separately. Please contact IAI for more information. 50 0			-	-		-	-		-	-	_	_			
50 0															
100 0	Z-dX										Controll	ers are sold	separately		
150 0															
200 0	-														
250 0	-											·· SA8R			
300 0	-											S. SAON			
350 0												Tuno			
400 O												Type	Genera	l Catalog 2016	
450 0											PCON-C	FB/CGFB	Se	e M-113	
750 0	Ê														
750 0	<u>ل</u>										🛛 🗌 Y-axis	s: SA7R, Z-a	xis: SA6R		
750 0	×				0								Poforon	co pago in tho	
750 0	str											Туре			
750 0 0 0 0 0 0 0 356 356 MCON-L/C/LG See M-129 800 0<	¢is			0	0	0	0	0	0	0		201000		3	
750 0 0 0 0 0 0 0 0 350 350 350 0	(-a)		0	0	0	0	0	0	0	0					
850 O O O O O O See M-91 900 O O O O O O O MCON-LC/LCG See M-91 950 O O O O O O MSEL-PC/PG See M-245 1000 O O O O O O When connecting to the MCON controller, "High output setting specification." When connecting to the MCON controller, "High output setting specification" must be selected. 1050 O O O O O Setting specification" must be selected. Net Setting specification" must be selected.		750											Se	e M-129	
850 0		800		0	0	0			0	0	MCON-	C/CG		aa M 01	
950 0											MCON-	MCON-LC/LCG See		26 141-91	
950 O O O O O O * Operation is possible with the high output setting specification. 1000 O O O O O O When connecting to the MCON controller, "High-output setting specification" must be selected. Please contact IAI									-		MSEL-P	C/PG	Se	e M-245	
1000 0															
1000 0 0 0 0 0 0 0 0 0 setting specification" must be selected. Please contact IAI											When con	is possible with th necting to the MC	ON controller "	ting specification.	
											setting spe	cification" must h	selected Please contact IAI		
					0	0	0	0	0	0					

Cable Length

Туре	Cable code	Length						
Standard type	1L	1m						
	3L	3m						
	5L	5m						
		Specified length (15m max.)						
Nata 1. All avia standard salala is used								

Cable Track

Туре	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)	Third wiring (Z-axis lateral)	
Without cable track (cable only)	N		0	0	0	
Cable track S size (inner width: 38mm)	СТ	See	0	0	0	
Cable track M size (inner width: 50mm)	СТМ	P.85	0	0	0	
Cable track L size (inner width: 63mm)	CTL	P.85	0	0	Cannot be selected *1	
Cable track XL size (inner width: 80mm)	CTXL		0	Cannot be selected *2		
*1 Only the first and second wiring can be	soloctod	*2 Only the first wiring can be selected				

Note 1. All-axis standard cable is used. Note 2. The length of the second and third 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. IK3-P6BBB1□□S

1 Only the first and second wiring can be selected *2 Only the first wiring can be selected

IK3	Cartesian	Robot	A	

ltem		X-axis	Y-axis	Z-axis			
Axis model		RCP6-SA8R	RCP6-SA7R	RCP6-SA6R			
Stroke (Every 50	mm)	50~1100mm	50~250mm	50~200mm			
	HSL			170mm/s			
Max coood *	HSM	300mm/s	640mm/s	340mm/s			
Max. speed *	HSH	S00mm/s	040mm/s	680mm/s			
	HSS			800mm/s			
Motor size		56 High thrust stepper motor	56 Stepper motor	42 Stepper motor			
	HSL			3mm			
Ball screw	HSM	20mm	24mm	6mm			
lead	HSH	2011111	2411111	12mm			
	HSS			20mm			
Drive system		Ball screw ∳16mm rolled C10	Ball screw \u00f612mm rolled C10	Ball screw \u00f610mm rolled C10			
Positioning repe	atability	±0.01mm					
Base material		Aluminum					
Ambient operat temperature, hu		0~40°C, 85% RH or less (non-condensing)					

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

* Be sure to specify.

* 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.

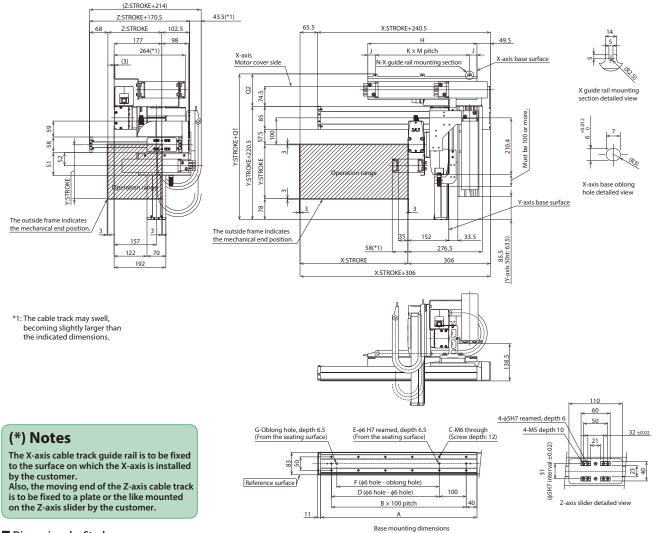
Dimensions

Specifications

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 first, second and third wirings all with cable tracks. Note 3. For details on the cable track and cable track moving end bracket, refer to 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	ti
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	
К	1	1	1	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	4	4	4	
М	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	СТ	СТМ	CTL	CTXL					
Q1	328	341	354	371					
Q2	107.5	120.5	133.5	150.5					
S1 84.5 96.5									
S2	48.5	55	-	-					
* Dimensions Q1, Q2, S1 and S2									
change depending on the size									
of the	cable t	rack.							



IK3 Cartesian Robot -

IK3-	P6BBB2		RCP6 3-axis XYB + Z X-axis: SA8C (straigh Y-axis: SA7R (side-mo	t)	nt configurations : SA6R (side-mounted)
Model Specification Items Configuration Direction 1 to 4 Refer to Robot Type Descriptions on page 3	HSL: X High Speed/Y Ultra High Speed/Z Low Speed WA: Batte	(X-axis) A	Second Axis Third Axis (Y-axis) BCJO BCJO Options Refer to Options table (1) on the next page.	Refer to L Applicable Controllers 1 table below. 3 5	Cable — Options Cable — Options Cable First Cable First L : Im Second Wiring Refer to Cable Track table below. L : Sm Refer to Cable Track table below.

RoHS



Payload by Acceleration

- HSL type: X high speed/Y ultra high speed/Z low speed
 HSM type: X high speed/Y ultra high speed/Z medium speed
 HSH type: X high speed/Y ultra high speed/Z high speed
 HSS type: X high speed/Y ultra high speed/Z ultra high speed

HSS type: X high speed/Y ultra high speed/Z ultra high speed (Unit: kg)										
Speed Type Acceleration/ deceleration (G)	HSL	HSM	HSH	HSS						
0.1	4	2	1	0.5						
0.3	4	2	1	0.5						
0.5	4	2	1	0.5						

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

The photograph above shows the configuration direction "1" where all axes have cable tracks.
Please refer to P.3 for other configuration directions.

Y-statisticke (mm) 50 100 150 200 Zaxis stroke (mm) 0	Str	oke												
50 0	Y-axi	s stroke (mm)		5	0			10	00			15	0	
100 0	Z-axi	s stroke (mm)	50	100	150	200	50	100	150	200	50	100	150	200
150 O														
200 ○								-						
250 O														
300 0														
SS0 O														
ioo O					-	-		-	-		-	-	-	
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Y-axis stroke (mm) Z0 Controllers Applicable Controllers Y-axis stroke (mm) 200 0 <t< td=""><td>axi</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	axi													
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Y-axis stroke (mm) 200 250 Z-axis stroke (mm) 50 100 150 200 0<														
Z-axis stroke (mm) 50 100 150 200 50 100 150 200 Controllers are sold separately. Please contact IAI for more information. 150 0 <td< th=""><th></th><th></th><th>0</th><th><u> </u></th><th>-</th><th>Ŭ</th><th>0</th><th><u> </u></th><th>-</th><th>Ŭ</th><th>0</th><th>Ŭ</th><th></th><th>U</th></td<>			0	<u> </u>	-	Ŭ	0	<u> </u>	-	Ŭ	0	Ŭ		U
50 0											Appl	icable Contı	ollers	
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330 0												Type		
Type Reference page in th General Catalog 201 550 0 </td <td></td> <td>PCON-</td> <td>FR/CGER</td> <td></td> <td></td>											PCON-	FR/CGER		
750 0	Ê –													C 101 11 J
750 0	<u> </u>										🗌 🗆 Y-axi	s: SA7R, Z-a	xis: SA6R	
750 0	e –													and the second second
750 0	tro											Туре		
750 0	S S1													
750 0	axi													
800 O	×										PCON-0	CYB/PLB/POB	Se	e M-129
850 O O O O O O See M-91 900 O O O O O O MCON-LC/LCG See M-91 900 O O O O O O MSEL-PC/PG See M-245 950 O O O O O O O MseL-PC/PG See M-245 1000 O O O O O O O Nen connecting torigon worth web with the high output setting specificat when connecting to the MCON controller, "High-output setting specificat or web web web setted, becare ontact [All											MCON-	C/CG		
900 0														ee M-91
950 O O O O O O See W1243 1000 O O O O O O See W1243 * Operation is possible with the high output setting specificat 1050 O O O O O O See W1243 * Operation is possible with the high output setting specificat 1050 O O O O O O See W1243 * Operation is possible with the high output setting specificat 1050 O O O O O O See W1243 * Operation is possible with the high output setting specificat 1050 O O O O O See W1243 * Operation is possible with the high output setting specificat setting specification* Wasset See W1243 See W1243 See W1243 * Operation is possible with the high output setting specificat													5.0	o M-245
1000 O O O O O Poperation is possible with the high output settings-pucificat When connecting to the MCOb controller, "High-pound when connecting to the MCOb controller," High-pound when connecting to the MCOb controller, "High-pound when connecting to the MCOb controller, "High-pound when connecting to the MCOb controller," High-pound when connecting to the MCOb controller, "High-pound when connecting to the MCOb controller," High-pound when connecting to the MCOb controller, "High-pound when connecting to the MCOb controller," High-pound when connecting to the MCOb controller, "High-pound when connecting to the MCOb controller," High-pound when connecting to the MCOb controller, "High-pound when connecting to the MCOb controller," High-pound when connecting to the MCOb controller, "High-pound when connecting to the MCOb controller," High-pound when connecting to the MCOb controller, "High-pound when connecting to the MCOb controller," High-pound when connecting to the MCOb controller, "High-pound when connecting to the MCOb controller," High-pound when connecting to the MCOb controller, "High-pound when connecting to the MCOb controller," High-pound when connecting to the MCOb controller, "High-pound when connecting to the MCOb controller," High-pound when controller, "High-pound when controller, "High-pound when controller, "High-pound when controller," High-pound when controller, "High-pound when controller, "High-pound when controller, "High-pound when controller, "High-pound when controller," High-pound when controller, "High-pound when controler, "High-pound when controller, "High-pound when contr				0	0		0	0						1
setting specification" must be selected. Please contact IAI											* Operation	is possible with th	e high output se	tting specification
1100 O O O O O O O O O Setting specification must be selected. Please contact IAI			0	0	0	0	0	0	0		When cor	necting to the MC	.UN controller, "H	ligh-output
		1100					0	0			setting sp	ecification" must b	e selected. Please	e contact IAI icabled

Cable Length

6

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

Cable Track

Туре	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)	Third wiring (Z-axis lateral)	
Without cable track (cable only)	N		0	0	0	
Cable track S size (inner width: 38mm)	СТ		0	0	0	
Cable track M size (inner width: 50mm)	СТМ	See P.85	0	0	0	
Cable track L size (inner width: 63mm)	CTL		0	0	Cannot be selected *1	
Cable track XL size (inner width: 80mm)	CTXL		0	Cannot be	selected *2	
*1 Only the first and second wiring can be	soloctod	*2 Only the first wiring can be selected				

Note 1. All-axis standard cable is used. Note 2. The length of the second and third 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. IK3-P6BBB2□□S

1 Only the first and second wiring can be selected *2 Only the first wiring can be selected

Specificat	tions				Options (1)		
ltem		X-axis	Y-axis	Z-axis	Time	Opt	
Axis model		RCP6-SA8C	RCP6-SA7R	RCP6-SA6R	Туре	co	
Stroke (Every 5	i0mm)	50~1100mm	50~250mm	50~200mm	Busha		
	HSL			170mm/s	Brake		
Max an and *	HSM	200 mm /a	CAOmente la	340mm/s	Cable exit direction (Top)	C.	
Max. speed ^	HSH	- 300mm/s	640mm/s	680mm/s	Cable exit direction (Right)	C.	
	HSS	1		800mm/s	Cable exit direction (Left)	С.	
Mada		56 High thrust			Cable exit direction (Bottom)	C	
wotor size		stepper motor	So Stepper motor	42⊡ Stepper motor	Cable suit direction (Outside)		
	HSL			3mm	Cable exit direction (Outside)	C	
Stroke (Every 50m Max. speed * H Motor size Ball screw lead Drive system	HSM	20		6mm	Non-motor end specification	N	
	HSH	_ 20mm	24mm	12mm	Slider section roller specification	S	
	$\begin{array}{c c c c c c } \hline & X-axis & Y-axis & Z-axis \\ \hline X-axis & RCP6-SA8C & RCP6-SA7R & RCP6-SA6R \\ \hline RCP6-SA8C & RCP6-SA7R & RCP6-SA6R \\ \hline RCP6-SA8C & S0-250mm & 50-200mm \\ \hline 50~1100mm & 50~250mm & 50-200mm \\ \hline S0~1100mm & 50~250mm & 50-200mm \\ \hline S0~100mm & 50~200mm & 50-200mm \\ \hline S0~100mm & 50~20m$	* Be sure to specify.					
Drive system							
Positioning repeatability ±0		±0.01mm			Options (2)		
Base material		Aluminum					
Ambient opera	ating	0 40%C 050/ DU en la	ee (men een densine)	Туре			
temperature, ł	numidity	U~40 C, 85% KH OF IE	ss (non-condensing)	Foot plate			

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

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

* 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.

Dimensions

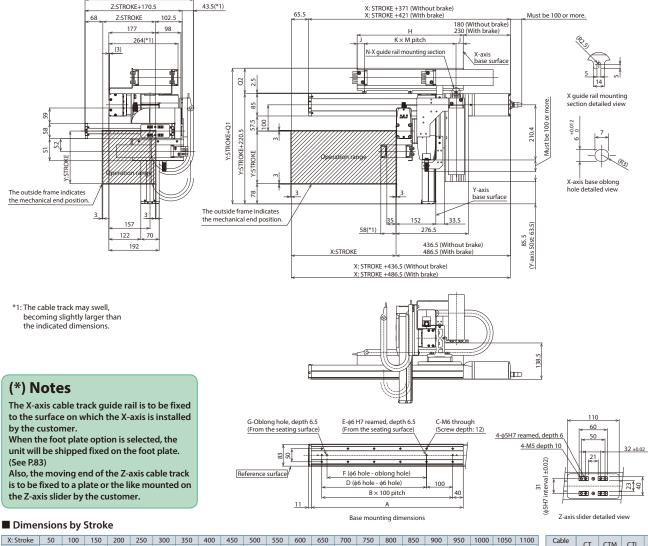
CAD drawings can be downloaded from our website. www.intelligentactuator.com

(Z:STROKE+214)



Note 1. The configuration position in the figure is home. Note 2. The diagram shows first, second and third wirings all with cable tracks.

Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.

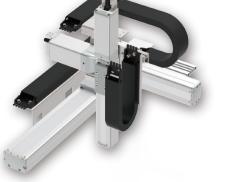


X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
A	230	280	330	380	430	480	530	580	630	680	730	780	830	880	930	980	1030	1080	1130	1180	1230	1280
В	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12
C	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	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
М	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	СТ	СТМ	CTL	CTXL					
1	Q1	305	318	331	348					
	Q2	84.5	97.5	110.5	127.5					
	S1	84.5	96.5	-	-					
1	S2	48.5	55	-	-					
	* Dimensions Q1, Q2, S1 and S2 change depending on the size									
	of the			on the	5120					

IK3 Cartesian Robot –

IK3-	P6BBB3	3	_S	X-axis: SA8C (st	raight)	ise mount configuration is: SA6C (straight)	s
Model Specification Items Configuration Direction 1 to 4 Refer to Robot Type Descriptions on page 3	tes Type Type Speed Type Speed Type Speed Type Speed Y Ultra High Speed Z Ultra High Speed Z High Speed HSH: X High Speed Y Ultra High Speed Z High Speed HSH: X High Speed Y Ultra High Speed Z Ultra High Speed X High Speed Y Ultra High Speed Z Ultra High Speed Y Ultra High Speed Z Ultra High Speed Y Ultra High Speed	Encoder Type WA: Battery-less Absolute	- First Axis Stroke \$: 50mm (Every 50mm)	Second Axis Third Axis (Y-axis) Third Axis (Z-axis) Definition Options Refer to Options table (1) on the next page.	Controller Controller Refer to Applicable Controllers table below.	Cable First Third	Options Options Options Refer to Options table (2) on the next page.
RoHS	1 L			oad by Acceleratio ype: X high speed		speed/Z low speed	



- HSL type: X high speed/Y ultra high speed/Z low speed
 HSM type: X high speed/Y ultra high speed/Z medium speed
 HSH type: X high speed/Y ultra high speed/Z high speed
 HSS type: X high speed/Y ultra high speed/Z ultra high speed

HSS type: X high	speed/Y ultra l	high speed/Z ul	tra high speed	(Unit: kg)
Speed Type Acceleration/ deceleration (G)	HSL	HSM	HSH	HSS
0.1	4	2	1	0.5
0.3	4	2	1	0.5
0.5	4	2	1	0.5

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

The photograph above shows the configuration direction "1" where all axes have cable tracks.
Please refer to P.3 for other configuration directions.

	roke													
Y-ax	kis stroke (mm)		5	0			10	00			15	50		
Z-ax	kis stroke (mm)	50	100	150	200	50	100	150	200	50	100	150	200	
	50	0	0	0	0	0	0	0	0	0	0	0	0	
	100	0	0	0	0	0	0	0	0	0	0	0	0	
	150	0	0	0	0	0	0	0	0	0	0	0	0	
	200	0	0	0	0	0	0	0	0	0	0	0	0	
	250	0	0	0	0	0	0	0	0	0	0	0	0	
	300	0	0	0	0	0	0	0	0	0	0	0	0	
	350	0	0	0	0	0	0	0	0	0	0	0	0	
2	400	0	0	0	0	0	0	0	0	0	0	0	0	
Ē	450	0	0	0	0	0	0	0	0	0	0	0	0	
e	500	0	0	0	0	0	0	0	0	0	0	0	0	
1 Ż	550	0	0	0	0	0	0	0	0	0	0	0	0	
X-axis stroke (mm)	600	0	0	0	0	0	0	0	0	0	0	0	0	
xis	650	0	0	0	0	0	0	0	0	0	0	0	0	
×	700	0	0	0	0	0	0	0	0	0	0	0	0	
	750	0	0	0	0	0	0	0	0	0	0	0	0	
	800	0	0	0	0	0	0	0	0	0	0	0	0	
	850	0	0	0	0	0	0	0	0	0	0	0	0	
	900	0	0	0	0	0	0	0	0	0	0	0	0	
	950	0	0	0	0	0	0	0	0	0	0	0	0	
	1000	0	0	0	0	0	0	0	0	0	0	0	0	
1 6	1050	0	0	0	0	0	0	0	0	0	0	0	0	
	1100	0	0	0	0	0	0	0	0	0	0	0	0	
	kis stroke (mm)			00				50		Appl	icable Cont	rollers		
Z-ax	kis stroke (mm)	50	100	150	200	50	100	150	200	Controll	ers are sold	senarately		
	50	0	0	0	0	0	0	0	0		ontact IAI fo			
	100	0	0	0	0	0	0	0	0	Flease C		Ji more mit	re information.	
	150	0	0	0	0	0	0	0	0					
	200	0								🗆 X-axis: SA8C				
	250		0	0	0	0	0	0	0	🗆 X-axi	s: SA8C			
		0	0	0	0	0	0	0	0	🗆 X-axi		Referen	ce page in the	
	300	Ō	0	0	0	0	0	0	0	🗆 X-axi	s: SA8C		ce page in the	
	300 350	0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0		Туре	Genera	Catalog 2016	
ĉ	300 350 400	0	0 0 0	0 0 0	0 0 0 0	0 0 0	0 0 0	0 0 0 0	0 0 0 0			Genera		
(mm)	300 350 400 450	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	PCON-0	Type CFB/CGFB	General Se	Catalog 2016	
ke (mm)	300 350 400 450 500	0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	PCON-0	Туре	General Se axis: SA6C	Catalog 2016 e M-113	
roke (mm)	300 350 400 450 500 550		0 0 0 0 0 0	0 0 0 0 0 0						PCON-0	Type CFB/CGFB s: SA7C, Z-a	General Se exis: SA6C Referen	Catalog 2016 e M-113 ce page in the	
s stroke (mm)	300 350 400 450 500 550 600	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0			0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	PCON-0	Type CFB/CGFB	General Se exis: SA6C Referen	Catalog 2016 e M-113	
axis stroke (mm)	300 350 400 450 500 550 600 650									PCON-0	Type CFB/CGFB s: SA7C, Z-a Type	General Se axis: SA6C Referen General	Catalog 2016 e M-113 ce page in the	
X-axis stroke (mm)	300 350 400 500 550 600 650 700									PCON-C	Type CFB/CGFB s: SA7C, Z-a Type CB/CGB	General Se axis: SA6C Referen General Se	Catalog 2016 e M-113 ce page in the Catalog 2016 e M-113	
X-axis stroke (mm)	300 350 400 500 550 600 650 700 750									PCON-C	Type CFB/CGFB s: SA7C, Z-a Type CB/CGB CYB/PLB/POB	General Se axis: SA6C Referen General Se	Catalog 2016 e M-113 ce page in the Catalog 2016	
X-axis stroke (mm)	300 350 400 450 500 550 600 650 700 750 800									PCON-C	Type CFB/CGFB s: SA7C, Z-a Type CB/CGB CYB/PLB/POB C/CG	General Se axis: SAGC Referen General Se Se	Catalog 2016 e M-113 ce page in the Catalog 2016 e M-113	
X-axis stroke (mm)	300 350 400 500 550 600 650 700 750 800 850									PCON-C	Type CFB/CGFB s: SA7C, Z-a Type CB/CGB C/B/PLB/POB C/CG LC/LCG	General Se Exis: SA6C Referen General Se Se Se	Catalog 2016 e M-113 ce page in the Catalog 2016 e M-113 e M-129 ee M-91	
X-axis stroke (mm)	300 350 400 550 550 600 650 700 750 800 850 900									PCON-C	Type CFB/CGFB s: SA7C, Z-a Type CB/CGB C/B/PLB/POB C/CG LC/LCG	General Se Exis: SA6C Referen General Se Se Se	Catalog 2016 e M-113 ce page in the Catalog 2016 e M-113 e M-129	
X-axis stroke (mm)	300 350 400 450 550 600 650 700 750 800 850 900 950									PCON-C	Type CFB/CGFB s: SA7C, Z-a Type CB/CGB C/B/LB/POB C/CG LC/LCG C/PG	General Se axis: SAGC Referen General Se Se Se	Catalog 2016 e M-113 ce page in the Catalog 2016 e M-113 e M-129 ee M-91 e M-245	
X-axis stroke (mm)	300 350 400 450 500 550 600 650 700 750 750 800 850 900 950 1000									PCON-C PCON-C PCON-C PCON-C MCON- MCON- MSEL-P * Operation	Type CFB/CGFB s: SA7C, Z-a Type CB/CGB C/B/PLB/POB C/CG LC/LCG	General Se Exist: SAGC Referen General Se Se Se Se Se Se Se Se Se Se Se Se Se	Catalog 2016 e M-113 cce page in the Catalog 2016 e M-113 e M-129 ee M-91 e M-245 tting specification	
X-axis stroke (mm)	300 350 400 450 550 600 650 700 750 800 850 900 950									PCON-C PCON-C PCON-C PCON-C MCON- MCON- MCON- MSEL-P * Operation When cor setting sp	Type CFB/CGFB s: SA7C, Z-a Type CB/CGB CYB/PLB/POB C/CG LC/LCG C/PG is possible with th	General General Se Statist SAGC Referen General Se	Catalog 2016 e M-113 cc page in the Catalog 2016 e M-113 e M-129 ec M-91 e M-91 e M-245 tting specification ligh-output e contact IAI	

Cable Length

6

Type	Cable code	Length
	1L	1m
Standard	3L	3m
type	5L	5m
		Specified length (15m max.)
Noto 1 All	-avic standard cab	le is used

Note 1. All-axis standard cable is used. Note 2. The length of the second and third 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. IK3-P6BBB3□□S

Cable Track

Туре	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)	Third wiring (Z-axis lateral)
Without cable track (cable only)	N		0	0	0
Cable track S size (inner width: 38mm)	СТ		0	0	0
Cable track M size (inner width: 50mm)	СТМ	See P.85	0	0	0
Cable track L size (inner width: 63mm)	CTL		0	0	Cannot be selected *1
Cable track XL size (inner width: 80mm)	CTXL		0	Cannot be	selected *2
*1 Only the first and second wiring can be	coloctod	*2 Only the	a first wiring can b	a coloctod	

1 Only the first and second wiring can be selected *2 Only the first wiring can be selected

Specificat	ions							
ltem		X-axis	Y-axis	Z-axis				
Axis model		RCP6-SA8C RCP6-SA7C		RCP6-SA6C				
Stroke (Every 5	0mm)	50~1100mm	50~250mm	50~200mm				
	HSL			170mm/s				
Max an and *	HSM	300mm/s	640mm/s	340mm/s				
Max. speed *	HSH	Suumm/s	040mm/s	680mm/s				
	HSS			800mm/s				
Motor size		56 High thrust stepper motor	56 Stepper motor	42 Stepper motor				
	HSL			3mm				
Ball screw	HSM	- 20mm	24mm	6mm				
lead	HSH	20mm	24mm	12mm				
	HSS			20mm				
Drive system		Ball screw \u00f616mm rolled C10	Ball screw \u00f612mm rolled C10	Ball screw ø10mm rolled C10				
Positioning rep	eatability	±0.01mm						
Base material		Aluminum						
Ambient opera temperature, h	5	0~40°C, 85% RH or le	0~40°C, 85% RH or less (non-condensing)					

Options (1)

Туре	Option code	Reference page	X-axis	Y-axis	Z-axis
Brake	В	See P.83	0	0	Standard equipment *
Cable exit direction (Top)	CJT	See P.83	0		
Cable exit direction (Right)	CJR	See P.83	0	Cann	ot be
Cable exit direction (Left)	CJL	See P.83	0	sele	cted
Cable exit direction (Bottom)	CJB	See P.83	0		
Non-motor end specification	NM	See P.84	0	0	0
Slider section roller specification	SR	See P.84	0	0	0

Options (2)		
Туре	Option code	Reference page
Foot plate	FTP	See P.83

* 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.

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 77.5 52.5 27.5 77.5 22.5 27.5

137.5

Μ

Ν

230 255

280 380

162.5

187.5

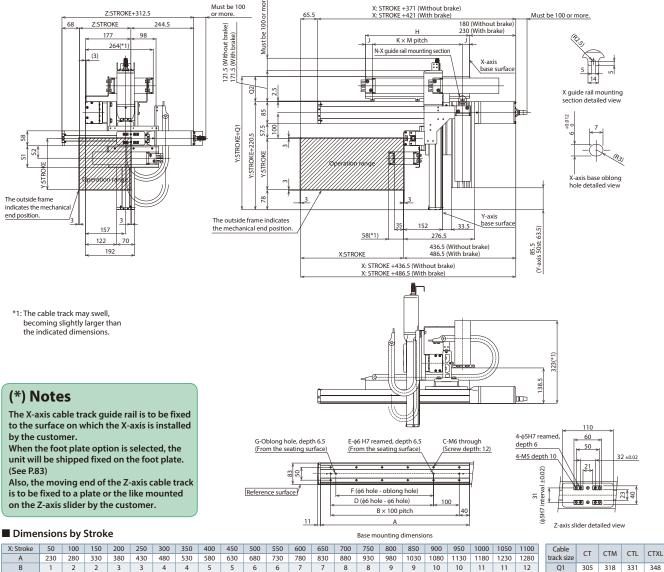
200 200

180 180

CAD drawings can be downloaded from our website. 2D CAD www.intelligentactuator.com

3D CAD

Note 1. The configuration position in the figure is home. Note 2. The diagram shows first, second and third wirings all with cable tracks. Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.



1080	1130	1180	1230	1280	track size	CI	CIM	CIL	CIXL			
10	10	11	11	12	Q1	305	318	331	348			
22	22	24	24	26	Q2	84.5	97.5	110.5	127.5			
900	900	1000	1000	1100	S1	84.5	96.5	-	-			
3	3	3	3	3	S2	48.5	55	-	-			
880	880	980	980	1080	* Dimensions Q1, Q2, S1 and S							
1	1	1	1	1	change depending on the size							
655	680	705	730	755	of the cable track.							
27.5	775	22.5		275	orther	cable t	IdCK.					



IK3-	P6BBF1	S	RCP6 3-axis XYB + Z X-axis: WSA14R (side Y-axis: SA7R (side-mo	-mounted)		d)
Model Specification Items Configuration Direction 1 to 4 Refer to Robot Type Descriptions on page 3	ies Type	First Axis (X-axis) - (X-axis)	- Second Axis - Third Axis (Y-axis) - BCJO Options Refer to Options table on the next page.	Controller Controller Controller Refer to Applicable Controllers table on the next page	Length Wiring Wir	ird ing
	-	Pay	load by Acceleration			



- HSL type: X high speed/Y ultra high speed/Z low speed
 HSM type: X high speed/Y ultra high speed/Z medium speed
 HSH type: X high speed/Y ultra high speed/Z high speed
 HSS type: X high speed/Y ultra high speed/Z ultra high speed (Unit: kg)

Speed Type Acceleration/ deceleration (G)	HSL	HSM	HSH	HSS
0.1	4	2	1	0.5
0.3	-	2	1	0.5
0.5	-	2	1	0.5

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

The photograph above shows the configuration direction "1" where all axes have cable tracks. Please refer to P.3 for other configuration directions.

'-axis stroke (mm)		5	0			10	00	150					
-axis stroke (mm)	50	100	150	200	50	100	150	200	50	100	150	200	
50	0	0	0	0	0	0	0	0	0	0	0	0	
100	0	0	0	0	0	0	0	0	0	0	0	0	
150	0	0	0	0	0	0	0	0	0	0	0	0	
200	0	0	0	0	0	0	0	0	0	0	0	0	
250	0	0	0	0	0	0	0	0	0	0	0	0	
300	0	0	0	0	0	0	0	0	0	0	0	0	
350	0	0	0	0	0	0	0	0	0	0	0	0	
400 450	0	0	0	0	0	0	0	0	0	0	0	0	
450	0	0	0	0	0	0	0	0	0	0	0	0	
500	0	0	0	0	0	0	0	0	0	0	0	0	
550	0	0	0	0	0	0	0	0	0	0	0	0	
600	0	0	0	0	0	0	0	0	0	0	0	0	
650	0	0	0	0	0	0	0	0	0	0	0	0	
700	0	0	0	0	0	0	0	0	0	0	0	0	
750	0	0	0	0	0	0	0	0	0	0	0	0	
800	0	0	0	0	0	0	0	0	0	0	0	0	

Y-a	ixis stroke (mm)		20	00			2	50	-		3	00	
Z-a	xis stroke (mm)	50	100	150	200	50	100	150	200	50	100	150	200
	50	0	0	0	0	0	0	0	0	0	0	0	0
	100	0	0	0	0	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	0	0	0	0	0	0	0
	200	0	0	0	0	0	0	0	0	0	0	0	0
	250	0	0	0	0	0	0	0	0	0	0	0	0
2	300	0	0	0	0	0	0	0	0	0	0	0	0
ш ш	350	0	0	0	0	0	0	0	0	0	0	0	0
stroke (mm)	400	0	0	0	0	0	0	0	0	0	0	0	0
s str	450	0	0	0	0	0	0	0	0	0	0	0	0
X-axis	500	0	0	0	0	0	0	0	0	0	0	0	0
×	550	0	0	0	0	0	0	0	0	0	0	0	0
	600	0	0	0	0	0	0	0	0	0	0	0	0
	650	0	0	0	0	0	0	0	0	0	0	0	0
	700	0	0	0	0	0	0	0	0	0	0	0	0
	750	0	0	0	0	0	0	0	0	0	0	0	0
	800	0	0	0	0	0	0	0	0	0	0	0	0

Y-a	xis stroke (mm)		3	50			4(00	
Z-a	xis stroke (mm)	50	100	150	200	50	100	150	200
	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
	300	0	0	0	0	0	0	0	0
stroke (mm)	350	0	0	0	0	0	0	0	0
oke	400	0	0	0	0	0	0	0	0
s str	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

Cable Length

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

Note 1. All-axis standard cable is used. Note 2. The length of the second and third 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)	Third wiring (Z-axis lateral)
Without cable track (cable only)	N		0	0	0
Cable track S size (inner width: 38mm)	СТ		0	0	0
Cable track M size (inner width: 50mm)	СТМ	See P.85	0	0	0
Cable track L size (inner width: 63mm)	CTL		0	0	Cannot be selected *1
Cable track XL size (inner width: 80mm)	CTXL		0	Cannot be	selected *2

*1 Only the first and second wiring can be selected *2 Only the first wiring can be selected

Applicable Controllers

Controllers are sold separately.

Please contact IAI for more information.

🗆 X-axis: WSA14R, Y-axis: SA7R, 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	See 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.

Specifications

ltem		X-axis	Y-axis	Z-axis
Axis model		RCP6-WSA14R	RCP6-SA7R	RCP6-SA6R
Stroke (Every 50	mm)	50~800mm	50~400mm	50~200mm
	HSL			170mm/s
Max coord *	e (Every 50mm) 50~800m speed * HSL HSM HSH HSS r size FSE HSL	280mm/c	640mm/s	340mm/s
wax. speed	50mm) 50~800mm HSL HSM HSG HSS 56□ Stepper m HSL HSM HSH HSM HSH HSM	20011111/5	0401111/5	680mm/s
	HSH HSS or size 56 Stepper			800mm/s
Motor size		56 Stepper motor	56 Stepper motor	42 Stepper motor
	HSL			3mm
Ball screw	ize 56 Ste HSL HSM HSM HSH	16mm	24mm	6mm
lead	HSH	TOITIIT	2411111	12mm
Ball screw	HSS			20mm
Drive system		Ball screw \phi12mm rolled C10	Ball screw \u00f812mm rolled C10	Ball screw ϕ 10mm rolled C10
Positioning repea	atability	±0.01mm		
Base material		Aluminum		
Ambient operat temperature, hu		0~40°C, 85% RH or les	s (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.

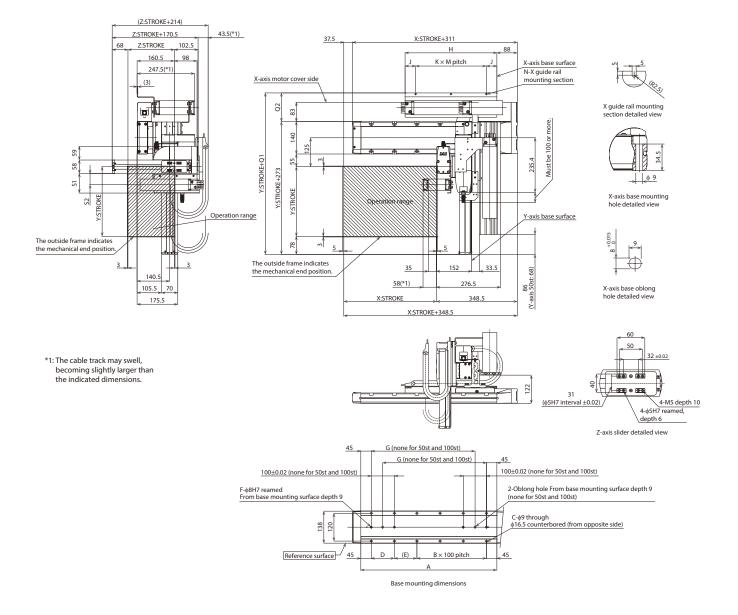
Options Option Reference Type X-axis Y-axis Z-axis code page Standard equipment 0 0 Brake В See P.83 Cannot be Standard Cable exit direction (Outside) CJO See P.83 selected quipment Non-motor end specification NM See P.84 0 Slider section roller specification SR See P.84 Ο 0 Ο

Dimensions

CAD drawings can be downloaded from our website. 2D CAD www.intelligentactuator.com

3D CAD

Note 1. The configuration position in the figure is home. Note 2. The diagram shows first, second and third wirings all with 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 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

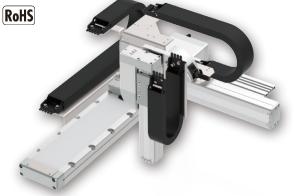
X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
A	237	287	337	387	437	487	537	587	637	687	737	787	837	887	937	987
В	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
С	4	4	8	8	10	10	12	12	14	14	16	16	18	18	20	20
D	-	-	100	100	100	100	100	100	100	100	100	100	100	100	100	100
E	147	197	47	97	47	97	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
М	130	155	90	102.5	115	127.5	140	152.5	110	120	125	135	145	115	120	127.5
Ν	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
S1	84.5	96.5	-	-
S2	48.5	55	-	-

* Dimensions Q1, Q2, S1 and S2 change depending on the size of the cable track.

- IK3 Cartesian Robot IK3-P6BBF2 RCP6 3-axis XYB + Z-axis base mount configurations X-axis: WSA14C (straight) Y-axis: SA7R (side-mounted) Z-axis: SA6R (side-mounted)

■ Model Seri Specification Items IK	, , , , , , , , , , , , , , , , , , ,	- Encoder Type - WA	First Axis (X-axis)	- Second Axis - Third Axis (Y-axis) - BCJO	- Controller -	- - ᄆ-	Cable	
Configuration Direction 1 to 4 Refer to Robot Type Descriptions on page 3	Speed Type HSL: X High Speed/V Ultra High Speed/Z Low Sped HSM: X High Speed/V Ultra High Speed/Z Medium Spe HSH: X High Speed/V Ultra High Speed/Z High Speed HSS: X High Speed/V Ultra High Speed/Z Ultra High Spe		Stroke 5: 50mm 2 (Every 50mm)	Options Refer to Options table on the next page.	Controller Refer to Applicable Controllers table on the next page.	Cable Length 1L : 1m 3L : 3m 5L : 5m □L: □m	Secor	ig



Payload by Acceleration

0.5

- HSL type: X high speed/Y ultra high speed/Z low speed
- HSM type: X high speed/Y ultra high speed/Z medium speed HSH type: X high speed/Y ultra high speed/Z high speed HSS type: X high speed/Y ultra high speed/Z ultra high speed

_

I ISS type. A high	speeu/i uitiai	ingii speeu/z ui	tia myn speeu	(Unit: kg)		
Speed Type Acceleration/ deceleration (G)	HSL	HSM	HSH	HSS		
0.1	4	2	1	0.5		
0.3	_	2	1	0.5		

2

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

0.5

1

The photograph above shows the configuration direction "1" where all axes have cable tracks.

Please refer to P.3 for other configuration directions.

S	troke													
Y-a	xis stroke (mm)		5	0			1(00		150				
Z-a	xis stroke (mm)	50	100	150	200	50	100	150	200	50	100	150	200	
	50	0	0	0	0	0	0	0	0	0	0	0	0	
	100	0	0	0	0	0	0	0	0	0	0	0	0	
	150	0	0	0	0	0	0	0	0	0	0	0	0	
	200	0	0	0	0	0	0	0	0	0	0	0	0	
	250	0	0	0	0	0	0	0	0	0	0	0	0	
	300	0	0	0	0	0	0	0	0	0	0	0	0	
(mm)	350	0	0	0	0	0	0	0	0	0	0	0	0	
stroke	400	0	0	0	0	0	0	0	0	0	0	0	0	
s str	450	0	0	0	0	0	0	0	0	0	0	0	0	
X-axis	500	0	0	0	0	0	0	0	0	0	0	0	0	
×	550	0	0	0	0	0	0	0	0	0	0	0	0	
	600	0	0	0	0	0	0	0	0	0	0	0	0	
	650	0	0	0	0	0	0	0	0	0	0	0	0	
	700	0	0	0	0	0	0	0	0	0	0	0	0	
	750	0	0	0	0	0	0	0	0	0	0	0	0	
	800	0	0	0	0	0	0	0	0	0	0	0	0	

Y-a	axis stroke (mm)		2	00			2	50			30	00	
Z-a	axis stroke (mm)	50	100	150	200	50	100	150	200	50	100	150	200
	50	0	0	0	0	0	0	0	0	0	0	0	0
	100	0	0	0	0	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	0	0	0	0	0	0	0
	200	0	0	0	0	0	0	0	0	0	0	0	0
	250	0	0	0	0	0	0	0	0	0	0	0	0
	300	0	0	0	0	0	0	0	0	0	0	0	0
(mm)	350	0	0	0	0	0	0	0	0	0	0	0	0
stroke	400	0	0	0	0	0	0	0	0	0	0	0	0
s str	450	0	0	0	0	0	0	0	0	0	0	0	0
X-axis	500	0	0	0	0	0	0	0	0	0	0	0	0
×	550	0	0	0	0	0	0	0	0	0	0	0	0
	600	0	0	0	0	0	0	0	0	0	0	0	0
	650	0	0	0	0	0	0	0	0	0	0	0	0
	700	0	0	0	0	0	0	0	0	0	0	0	0
	750	0	0	0	0	0	0	0	0	0	0	0	0
	800	0	0	0	0	0	0	0	0	0	0	0	0

IK3 Cartesian Robot -

Y-a	xis stroke (mm)		3	50		400					
Z-a	xis stroke (mm)	50	100	150	200	50	100	150	200		
	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		
	300	0	0	0	0	0	0	0	0		
stroke (mm)	350	0	0	0	0	0	0	0	0		
oke	400	0	0	0	0	0	0	0	0		
s str	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		

Cable Length

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

Note 1. All-axis standard cable is used. Note 2. The length of the second and third 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)	Third wiring (Z-axis lateral)
Without cable track (cable only)	N		0	0	0
Cable track S size (inner width: 38mm)	СТ		0	0	0
Cable track M size (inner width: 50mm)	СТМ	See P.85	0	0	0
Cable track L size (inner width: 63mm)	CTL		0	0	Cannot be selected *1
Cable track XL size (inner width: 80mm)	CTXL		0	Cannot be	selected *2

*1 Only the first and second wiring can be selected *2 Only the first wiring can be selected

Applicable Controllers

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

C X-axis: WSA14C, Y-axis: SA7R, 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	386 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.

Specifications

specification	ons			
ltem		X-axis	Y-axis	Z-axis
Axis model		RCP6-WSA14C	RCP6-SA7R	RCP6-SA6R
Stroke (Every 50	mm)	50~800mm	50~400mm	50~200mm
	HSL			170mm/s
Max. speed *	HSM	280mm/s	640mm/s	340mm/s
Max. speed	HSH	20011111/5	0401111/5	680mm/s
	HSS			800mm/s
Motor size		56 Stepper motor	56 Stepper motor	42 Stepper motor
	HSL			3mm
Ball screw	HSM	16mm	24mm	6mm
lead	HSH	TOITIIT	24000	12mm
	HSS			20mm
Drive system		Ball screw ø12mm rolled C10	Ball screw \u00f812mm rolled C10	Ball screw ϕ 10mm rolled C10
Positioning repe	atability	±0.01mm		
Base material		Aluminum		
Ambient operat temperature, hu	5	0~40°C, 85% RH or less	s (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 Standard Price Option Reference Type code page X-axis Y-axis Z-axis Standard equipment 0 Brake В See P.83 Cable exit direction (Top) See P.83 Ο CJT Cable exit direction (Right) CJR See P.83 Cannot be Cable exit direction (Left) CJL See P.83 selected Cable exit direction (Bottom) CJB See P.83 Cannot be Standard equipment Cable exit direction (Outside) сJО See P.83 selected Non-motor end specification NM See P.84 Slider section roller specification SR See P.84 0 0 0

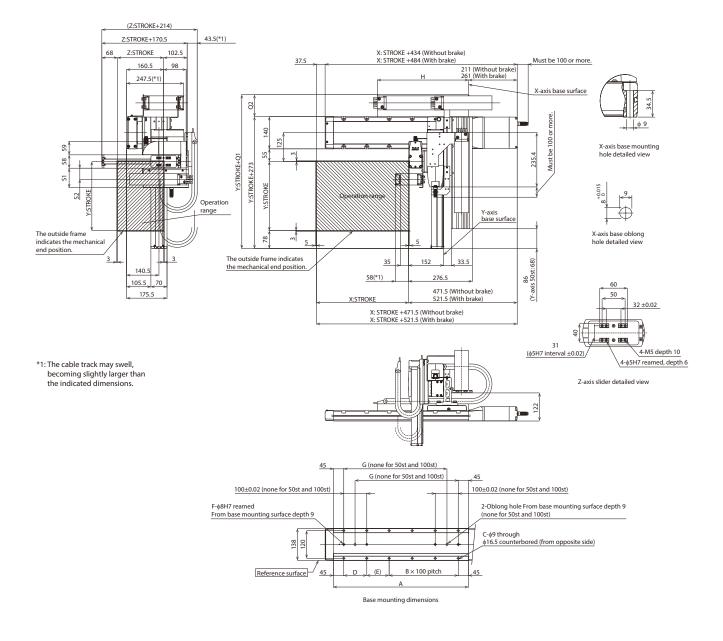
CAD drawings can be downloaded from our website. www.intelligentactuator.com



Note 1. The configuration position in the figure is home.

Note 2. The diagram shows first, second and third wirings all with cable tracks.

Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.



(*)	Notes
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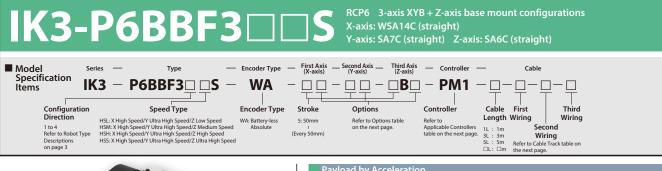
The moving end of the Z-axis cable track is to be fixed to a plate or the like mounted on the Z-axis slider by the customer.

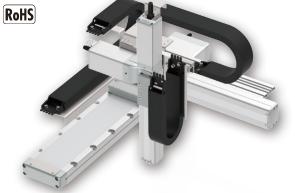
Dimensions by Stroke

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
C	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												

Cable track size	CT	CTM	CTL	CTXL
Q1	356	368	383	401
Q2	83	95	110	128
S1	84.5	96.5	-	-
S2	48.5	55	-	-

 * Dimensions Q1, Q2, S1 and S2 change depending on the size of the cable track.





Payload by Acceleration

- HSL type: X high speed/Y ultra high speed/Z low speed

- HSM type: X high speed/Y ultra high speed/Z medium speed
 HSM type: X high speed/Y ultra high speed/Z high speed
 HSL type: X high speed/Y ultra high speed/Z ultra high speed

				. 5.
Speed Type Acceleration/ deceleration (G)	HSL	HSM	HSH	HSS
0.1	4	2	1	0.5
0.3	-	2	1	0.5
0.5	-	2	1	0.5

(Unit: kg)

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

The photograph above shows the configuration direction "1" where all axes have cable tracks.
Please refer to P.3 for other configuration directions.

S	troke												
Y-axis stroke (mm) 50							1	00		150			
Z-a	xis stroke (mm)	50	100	150	200	50	100	150	200	50	100	150	200
	50	0	0	0	0	0	0	0	0	0	0	0	0
	100	0	0	0	0	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	0	0	0	0	0	0	0
	200	0	0	0	0	0	0	0	0	0	0	0	0
	250	0	0	0	0	0	0	0	0	0	0	0	0
2	300	0	0	0	0	0	0	0	0	0	0	0	0
(mm)	350	0	0	0	0	0	0	0	0	0	0	0	0
stroke	400	0	0	0	0	0	0	0	0	0	0	0	0
s str	450	0	0	0	0	0	0	0	0	0	0	0	0
X-axis	500	0	0	0	0	0	0	0	0	0	0	0	0
×	550	0	0	0	0	0	0	0	0	0	0	0	0
	600	0	0	0	0	0	0	0	0	0	0	0	0
	650	0	0	0	0	0	0	0	0	0	0	0	0
	700	0	0	0	0	0	0	0	0	0	0	0	0
	750	0	0	0	0	0	0	0	0	0	0	0	0
	800	0	0	0	0	0	0	0	0	0	0	0	0

Y-axis stroke (mm)			20	00			2:	50			300			
Z-a	xis stroke (mm)	50	100	150	200	50	100	150	200	50	100	150	200	
	50	0	0	0	0	0	0	0	0	0	0	0	0	
	100	0	0	0	0	0	0	0	0	0	0	0	0	
	150	0	0	0	0	0	0	0	0	0	0	0	0	
	200	0	0	0	0	0	0	0	0	0	0	0	0	
	250	0	0	0	0	0	0	0	0	0	0	0	0	
	300	0	0	0	0	0	0	0	0	0	0	0	0	
(mm)	350	0	0	0	0	0	0	0	0	0	0	0	0	
stroke	400	0	0	0	0	0	0	0	0	0	0	0	0	
s str	450	0	0	0	0	0	0	0	0	0	0	0	0	
X-axis	500	0	0	0	0	0	0	0	0	0	0	0	0	
×	550	0	0	0	0	0	0	0	0	0	0	0	0	
	600	0	0	0	0	0	0	0	0	0	0	0	0	
	650	0	0	0	0	0	0	0	0	0	0	0	0	
	700	0	0	0	0	0	0	0	0	0	0	0	0	
	750	0	0	0	0	0	0	0	0	0	0	0	0	
	800	0	0	0	0	0	0	0	0	0	0	0	0	

Y-a	xis stroke (mm)		3	50			4(00	
Z-a	xis stroke (mm)	50	100	150	200	50	100	150	200
	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
2	300	0	0	0	0	0	0	0	0
(mm)	350	0	0	0	0	0	0	0	0
stroke (400	0	0	0	0	0	0	0	0
str	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

Cable Length (Standard price)

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

Note 1. All-axis standard cable is used. Note 2. The length of the second and third 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)	Third wiring (Z-axis lateral)
Without cable track (cable only)	N		0	0	0
Cable track S size (inner width: 38mm)	СТ		0	0	0
Cable track M size (inner width: 50mm)	СТМ	See P.85	0	0	0
Cable track L size (inner width: 63mm)	CTL		0	0	Cannot be selected *1
Cable track XL size (inner width: 80mm)	CTXL		0	Cannot be	selected *2

*1 Only the first and second wiring can be selected *2 Only the first wiring can be selected

Applicable Controllers

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

□ X-axis: WSA14C, Y-axis: SA7C, Z-axis: SA6C

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						

* 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.

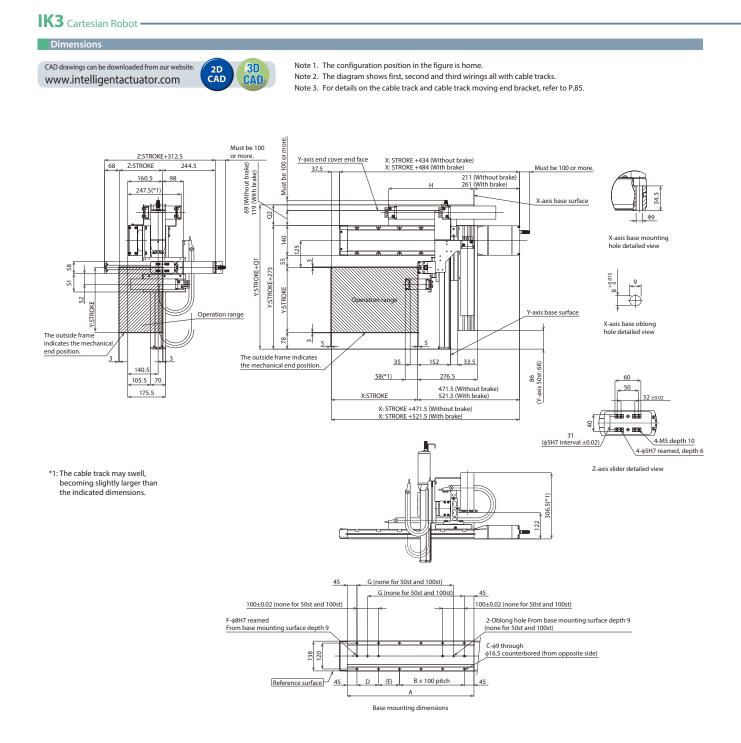
Specifications

Item		X-axis	Y-axis	Z-axis					
Axis model		RCP6-WSA14C	RCP6-SA7C	RCP6-SA6C					
Stroke (Every 50	mm)	50~800mm	50~400mm	50~200mm					
HSL				170mm/s					
Max. speed *	HSM	280mm/s	640mm/s	340mm/s					
Max. speed	HSH	20011111/5	0401111/5	680mm/s					
	HSS			800mm/s					
Motor size		56 Stepper motor	56 Stepper motor	42 Stepper motor					
	HSL			3mm					
Ball screw	HSM	16mm	24mm	6mm					
lead	HSH	TOTITI	24000	12mm					
	HSS			20mm					
Drive system		Ball screw \u00f612mm rolled C10	Ball screw ø12mm rolled C10	Ball screw ϕ 10mm rolled C10					
Positioning repe	atability	±0.01mm							
Base material		Aluminum							
Ambient operat temperature, hu		0~40°C, 85% RH or less	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							
Туре	Option code	Reference page	X-axis	Y-axis	Z-axis		
Brake	В	See P.83	0	0	Standard equipment *		
Cable exit direction (Top)	CJT	See P.83	0				
Cable exit direction (Right)	CJR	See P.83	0	Cann	ot be		
Cable exit direction (Left)	CJL	See P.83	0	sele	cted		
Cable exit direction (Bottom)	CJB	See P.83	0				
Non-motor end specification	NM	See P.84	0	0	0		
Slider section roller specification	SR	See P.84	0	0	0		
* Outstalls and standard Decourse to a							

* Outside as standard. Be sure to specify.

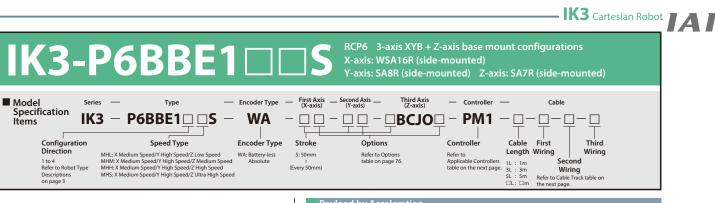


Dimensions by Stroke

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
Calala Ana als airea	CT	CTM	CTI	CTVI												

Cable track size	CT	CTM	CTL	CTXL
Q1	356	368	383	401
Q2	83	95	110	128
S1	84.5	96.5	-	-
S2	48.5	55	-	-

* Dimensions Q1, Q2, S1 and S2 change depending on the size of the cable track.





Payload by Acceleration

MHL type: X medium speed/Y high speed/Z low speed

- MHM type: X medium speed/Y high speed/Z medium speed
- MHH type: X medium speed/Y high speed/Z high speed
 MHS type: X medium speed/Y high speed/Z ultra high speed

	in speet	a, i mgi	spece		i ingii s	peca		(Unit: kg)	
Y-axis stroke (mm)	50	~400 (Ev	ery 50m	im)	450~500 (Every 50mm)				
Speed Type Acceleration/ deceleration (G)	MHL	МНМ	MHH	MHS	MHL	МНМ	MHH	MHS	
0.1	6	4	2	1	6	4	2	1	
0.3	-	4	2	1	-	-	2	1	

* When X, Y and Z axes all have the same acceleration/deceleration.

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

The photograph above shows the configuration direction "1" where all axes have cable tracks.
Please refer to P.3 for other configuration directions.

S	troke												
Y-a	xis stroke (mm)			5	0					1	00		
	xis stroke (mm)	50	100	150	200	250	300	50	100	150	200	250	300
	50	0	0	0	0	0	0	0	0	0	0	0	0
	100	0	0	0	0	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	0	0	0	0	0	0	0
	200	0	0	0	0	0	0	0	0	0	0	0	0
	250	0	0	0	0	0	0	0	0	0	0	0	0
	300	0	0	0	0	0	0	0	0	0	0	0	0
	350	0	0	0	0	0	0	0	0	0	0	0	0
	400	0	0	0	0	0	0	0	0	0	0	0	0
Ę	450	0	0	0	0	0	0	0	0	0	0	0	0
e e	500	0	0	0	0	0	0	0	0	0	0	0	0
- Š	550	0	0	0	0	0	0	0	0	0	0	0	0
sti	600	0	0	0	0	0	0	0	0	0	0	0	0
xis	650	0	0	0	0	0	0	0	0	0	0	0	0
X-axis stroke (mm)	700	0	0	0	0	0	0	0	0	0	0	0	0
	750	0	0	0	0	0	0	0	0	0	0	0	0
	800	0	0	0	0	0	0	0	0	0	0	0	0
	850	0	0	0	0	0	0	0	0	0	0	0	0
	900	0	0	0	0	0	0	0	0	0	0	0	0
	950	0	0	0	0	0	0	0	0	0	0	0	0
	1000	0	0	0	0	0	0	0	0	0	0	0	0
	1050	0	0	0	0	0	0	0	0	0	0	0	0
	1100	0	0	0	0	0	0	0	0	0	0	0	
	1100		V	0	U U	U U		0	U U	0	0	0	0
V-2		0	0										0
	xis stroke (mm)		100	1!	50	250		50	100	2	00		300
		50					300	50				250	
	xis stroke (mm) xis stroke (mm)	50	100	1: 150	50 200	250	300		100	20 150	00 200	250	300
	xis stroke (mm) xis stroke (mm) 50	50	100 O	1! 150 O	50 200 O	250	300 O	50 O	100 O	20 150 O	00 200 O	250	300 O
	xis stroke (mm) xis stroke (mm) 50 100	50 O	100 O	1! 150 0	50 200 0	250 〇	300 〇 〇	50 O	100 O	20 150 0	00 200 0	250 〇	300 O O
	xis stroke (mm) xis stroke (mm) 50 100 150	50 O O	100 O O O	1! 150 0 0 0	50 200 0 0	250 O O O	300 O O O	50 O O O	100 O O O	20 150 0 0	00 200 0 0	250 O O O	300 O O O
	xis stroke (mm) xis stroke (mm) 50 100 150 200	50 O O O O	100 0 0 0 0	1! 150 0 0 0 0 0	50 200 0 0 0 0 0	250 O O O O	300 O O O O	50 0 0 0 0	100 0 0 0 0	20 150 0 0 0 0	00 200 0 0 0	250 O O O O	300 O O O O
	xis stroke (mm) xis stroke (mm) 50 100 150 200 250	50 0 0 0 0 0 0 0 0	100 0 0 0 0 0 0 0 0 0 0 0	1! 150 0 0 0 0 0 0 0 0 0 0	50 200 0 0 0 0 0 0 0 0 0 0 0	250 0 0 0 0 0 0 0 0 0 0	300 O O O O O O O O O	50 0 0 0 0 0 0 0 0 0	100 0 0 0 0 0 0 0 0 0 0	20 150 0 0 0 0 0 0 0 0 0 0 0 0 0	00 200 0 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
Z-a	xis stroke (mm)) xis stroke (mm) 50 100 150 200 250 300 350 400	50 0 0 0 0 0 0 0 0 0 0	100 0 0 0 0 0 0 0 0 0 0 0	1! 150 0 0 0 0 0 0 0 0 0 0 0 0 0	50 200 0 0 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	50 0 0 0 0 0 0 0 0 0 0	100 0 0 0 0 0 0 0 0 0 0 0	20 150 0 0 0 0 0 0 0 0 0 0 0 0 0	00 200 0 0 0 0 0 0 0 0 0 0 0 0	250 0 0 0 0 0 0 0 0 0 0 0	300 0 0 0 0 0 0 0 0 0 0 0
Z-a	xis stroke (mm) xis stroke (mm) 50 100 150 200 250 300 350 400 450	50 0 0 0 0 0 0 0 0 0 0 0 0 0	100 0 0 0 0 0 0 0 0 0 0 0	19 150 0 0 0 0 0 0 0 0 0 0 0 0 0	50 200 0 0 0 0 0 0 0 0 0 0 0 0	250 0 0 0 0 0 0 0 0 0 0 0 0 0	300 0 0 0 0 0 0 0 0 0 0 0 0	50 0 0 0 0 0 0 0 0 0 0 0 0 0	100 0 0 0 0 0 0 0 0 0 0 0 0	21 150 0 0 0 0 0 0 0 0 0 0 0 0 0	00 200 0 0 0 0 0 0 0 0 0 0 0 0	250 0 0 0 0 0 0 0 0 0 0 0 0 0	300 0 0 0 0 0 0 0 0 0 0 0 0
Z-a	xis stroke (mm)) xis stroke (mm) 50 150 200 250 300 350 400 450 500	50 0 0 0 0 0 0 0 0 0 0 0 0 0	100 0 0 0 0 0 0 0 0 0 0 0 0	1: 50 0 0 0 0 0 0 0 0 0 0 0 0 0	50 200 0 0 0 0 0 0 0 0 0 0 0 0	250 0 0 0 0 0 0 0 0 0 0 0 0 0	300 0 0 0 0 0 0 0 0 0 0 0 0	50 0 0 0 0 0 0 0 0 0 0 0 0 0	100 0 0 0 0 0 0 0 0 0 0 0 0	20 150 0 0 0 0 0 0 0 0 0 0 0 0 0	00 200 0 0 0 0 0 0 0 0 0 0 0 0	250 0 0 0 0 0 0 0 0 0 0 0 0 0	300 0 0 0 0 0 0 0 0 0 0 0 0
Z-a	xis stroke (mm) xis stroke (mm) 50 100 150 200 250 300 350 400 450 500 550	50 0 0 0 0 0 0 0 0 0 0 0 0 0		150 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	50 200 0 0 0 0 0 0 0 0 0 0 0 0	250 0 0 0 0 0 0 0 0 0 0 0 0 0	300 0 0 0 0 0 0 0 0 0 0 0 0	50 0 0 0 0 0 0 0 0 0 0 0 0 0		20 150 0 0 0 0 0 0 0 0 0 0 0 0 0	00 200 0 0 0 0 0 0 0 0 0 0 0 0	250 0 0 0 0 0 0 0 0 0 0 0 0 0	300 0 0 0 0 0 0 0 0 0 0 0 0
Z-a	xis stroke (mm)) xis stroke (mm)) 50 100 150 200 250 300 350 400 450 550 600	50 0 0 0 0 0 0 0 0 0 0 0 0 0	100 0 0 0 0 0 0 0 0 0 0 0 0	1: 150 0 0 0 0 0 0 0 0 0 0 0 0 0	50 200 0 0 0 0 0 0 0 0 0 0 0 0	250 0 0 0 0 0 0 0 0 0 0 0 0 0	300 0 0 0 0 0 0 0 0 0 0 0 0	50 0 0 0 0 0 0 0 0 0 0 0 0 0		21 150 0 0 0 0 0 0 0 0 0 0 0 0 0	00 200 0 0 0 0 0 0 0 0 0 0 0 0	250 0 0 0 0 0 0 0 0 0 0 0 0 0	300 0 0 0 0 0 0 0 0 0 0 0 0
Z-a	xis stroke (mm)) xis stroke (mm) 50 100 200 250 300 350 400 450 500 550 600 650	50 0 0 0 0 0 0 0 0 0 0 0 0 0		15 150 0 0 0 0 0 0 0 0 0 0 0 0 0	50 200 0 0 0 0 0 0 0 0 0 0 0 0	250 0 0 0 0 0 0 0 0 0 0 0 0 0	300 0 0 0 0 0 0 0 0 0 0 0 0	50 0 0 0 0 0 0 0 0 0 0 0 0 0		20 150 0 0 0 0 0 0 0 0 0 0 0 0 0	00 200 0 0 0 0 0 0 0 0 0 0 0 0	250 0 0 0 0 0 0 0 0 0 0 0 0 0	300 0 0 0 0 0 0 0 0 0 0 0 0
Z-a	xis stroke (mm) xis stroke (mm) 50 100 150 200 250 300 350 400 450 500 550 600 650 700	50 0 0 0 0 0 0 0 0 0 0 0 0 0	100 0 0 0 0 0 0 0 0 0 0 0 0	150 0 0 0 0 0 0 0 0 0 0 0 0 0	50 200 0 0 0 0 0 0 0 0 0 0 0 0	250 0 0 0 0 0 0 0 0 0 0 0 0 0	300 0 0 0 0 0 0 0 0 0 0 0 0	50 0 0 0 0 0 0 0 0 0 0 0 0 0		20 150 0 0 0 0 0 0 0 0 0 0 0 0 0	00 200 0 0 0 0 0 0 0 0 0 0 0 0	250 0 0 0 0 0 0 0 0 0 0 0 0 0	300 0 0 0 0 0 0 0 0 0 0 0 0
	xis stroke (mm)) xis stroke (mm)) 50 100 150 200 250 300 350 400 450 550 600 650 700 750	50 0 0 0 0 0 0 0 0 0 0 0 0 0	100 0 0 0 0 0 0 0 0 0 0 0 0	150 0 0 0 0 0 0 0 0 0 0 0 0 0	50 200 0 0 0 0 0 0 0 0 0 0 0 0	250 0 0 0 0 0 0 0 0 0 0 0 0 0	300 0 0 0 0 0 0 0 0 0 0 0 0	50 0 0 0 0 0 0 0 0 0 0 0 0 0		20 150 0 0 0 0 0 0 0 0 0 0 0 0 0	00 200 0 0 0 0 0 0 0 0 0 0 0 0	250 0 0 0 0 0 0 0 0 0 0 0 0 0	300 0 0 0 0 0 0 0 0 0 0 0 0
Z-a	xis stroke (mm)) xis stroke (mm) 50 100 200 250 300 350 400 450 500 550 600 650 700 750 800	50 0 0 0 0 0 0 0 0 0 0 0 0 0	100 0 0 0 0 0 0 0 0 0 0 0 0	15 150 0 0 0 0 0 0 0 0 0 0 0 0 0	50 200 0 0 0 0 0 0 0 0 0 0 0 0	250 0 0 0 0 0 0 0 0 0 0 0 0 0	300 0 0 0 0 0 0 0 0 0 0 0 0	50 0 0 0 0 0 0 0 0 0 0 0 0 0		20 150 0 0 0 0 0 0 0 0 0 0 0 0 0		250 0 0 0 0 0 0 0 0 0 0 0 0 0	300 0 0 0 0 0 0 0 0 0 0 0 0
Z-a	xis stroke (mm) xis stroke (mm) 50 100 150 200 250 300 350 400 450 550 660 650 700 750 800 850	50 0 0 0 0 0 0 0 0 0 0 0 0 0		150 0 0 0 0 0 0 0 0 0 0 0 0 0	50 200 0 0 0 0 0 0 0 0 0 0 0 0	250 0 0 0 0 0 0 0 0 0 0 0 0 0	300 0 0 0 0 0 0 0 0 0 0 0 0	50 0 0 0 0 0 0 0 0 0 0 0 0 0		20 150 0 0 0 0 0 0 0 0 0 0 0 0 0		250 0 0 0 0 0 0 0 0 0 0 0 0 0	300 0 0 0 0 0 0 0 0 0 0 0 0
Z-a	xis stroke (mm) xis stroke (mm) 50 100 150 200 250 300 350 400 450 550 600 650 600 650 700 750 800 850 900	50 0 0 0 0 0 0 0 0 0 0 0 0 0		150 0 0 0 0 0 0 0 0 0 0 0 0 0	50 200 0 0 0 0 0 0 0 0 0 0 0 0	250 0 0 0 0 0 0 0 0 0 0 0 0 0	300 0 0 0 0 0 0 0 0 0 0 0 0	50 0 0 0 0 0 0 0 0 0 0 0 0 0		20 150 0 0 0 0 0 0 0 0 0 0 0 0 0			
Z-a	xis stroke (mm) xis stroke (mm) 50 100 150 200 250 300 350 400 450 550 600 650 700 750 800 850 900 950	50 0 0 0 0 0 0 0 0 0 0 0 0 0			50 200 0 0 0 0 0 0 0 0 0 0 0 0	250 0 0 0 0 0 0 0 0 0 0 0 0 0	300 0 0 0 0 0 0 0 0 0 0 0 0	50 0 0 0 0 0 0 0 0 0 0 0 0 0		20 150 0 0 0 0 0 0 0 0 0 0 0 0 0		250 0 0 0 0 0 0 0 0 0 0 0 0 0	300 0 0 0 0 0 0 0 0 0 0 0 0
Z-a	xis stroke (mm) xis stroke (mm) 50 100 150 200 250 300 350 400 450 550 600 550 650 700 750 800 850 950 1000	50 0 0 0 0 0 0 0 0 0 0 0 0 0		150 0 0 0 0 0 0 0 0 0 0 0 0 0	50 200 0 0 0 0 0 0 0 0 0 0 0 0		300 0 0 0 0 0 0 0 0 0 0 0 0	50 0 0 0 0 0 0 0 0 0 0 0 0 0		22 150 0 0 0 0 0 0 0 0 0 0 0 0 0			300 0 0 0 0 0 0 0 0 0 0 0 0
Z-a	xis stroke (mm) xis stroke (mm) 50 100 150 200 250 300 350 400 450 550 600 650 700 750 800 850 900 950	50 0 0 0 0 0 0 0 0 0 0 0 0 0			50 200 0 0 0 0 0 0 0 0 0 0 0 0	250 0 0 0 0 0 0 0 0 0 0 0 0 0	300 0 0 0 0 0 0 0 0 0 0 0 0	50 0 0 0 0 0 0 0 0 0 0 0 0 0		20 150 0 0 0 0 0 0 0 0 0 0 0 0 0		250 0 0 0 0 0 0 0 0 0 0 0 0 0	300 0 0 0 0 0 0 0 0 0 0 0 0

S	itroke												
Y-a	axis stroke (mm)				50						00		
Z-a	axis stroke (mm)	50	100	150	200	250	300	50	100	150	200	250	300
	50	0	0	0	0	0	0	0	0	0	0	0	0
	100 150	0	0	0	0	0	0	0	0	0	0	0	0
	200	ŏ	Ő	0	Ö	Ö	Ő	Õ	ŏ	Õ	Ö	Ő	0
	250	Ō	0	0	0	0	0	0	0	0	0	0	0
	300	0	0	0	0	0	0	0	0	0	0	0	0
	350	0	0	0	0	0	0	0	0	0	0	0	0
ĉ	400	0	0	0	0	0	0	0	0	0	0	0	0
X-axis stroke (mm)	450	0	0	0	0	0	0	0	0	0	0	0	0
ke	500 550	0	0	0	0	0	0	0	0	0	0	0	0
tro	600	Ő	0	0	ŏ	0	0	ŏ	0	ŏ	0	ŏ	0
cis s	650	0	0	0	0	0	0	0	0	0	0	0	0
(-a)	700	0	0	0	0	0	0	0	0	0	0	0	0
	750	0	0	0	0	0	0	0	0	0	0	0	0
	800	0	0	0	0	0	0	0	0	0	0	0	0
	850	0	0	0	0	0	0	0	0	0	0	0	0
	900	0	0	0	0	0	0	0	0	0	0	0	0
	950 1000	0	0	0	0	0	0	0	0	0	0	0	0
	1050	0	0	0	0	0	0	0	0	0	0	0	0
	1100	Ő	0	0	0	0	0	Ő	0	Ő	0	ŏ	0
	axis stroke (mm)	50	100	3. 150	50 200	250	300	50	100	4 150	00 200	250	300
2-0	50	0	0	0	200	250	0	0	0	0	200	250	0
	100	0	0	0	0	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	0	0	0	0	0	0	0
	200	0	0	0	0	0	0	0	0	0	0	0	0
	250	0	0	0	0	0	0	0	0	0	0	0	0
	300	0	0	0	0	0	0	0	0	0	0	0	0
	350 400	0	0	0	0	0	0	0	0	0	0	0	0
Ê	400	0	0	0	0	0	0	0	0	0	0	0	0
E,	500	ŏ	Ö	0	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	Ö	Ő	0
X-axis stroke (mm)	550	0	0	0	0	0	0	0	0	0	0	0	0
str	600	0	0	0	0	0	0	0	0	0	0	0	0
xis	650	0	0	0	0	0	0	0	0	0	0	0	0
×-a	700	0	0	0	0	0	0	0	0	0	0	0	0
	750	0	0	0	0	0	0	0	0	0	0	0	0
	800 850	0	0	0	0	0	0	0	0	0	0	0	0
	900	0	0	0	0	0	0	0	0	0	0	0	0
	950	Õ	0	0	0	0	0	0	0	Õ	0	0	0
	1000	0	0	0	0	0	0	0	0	0	0	0	0
	1050	0	0	0	0	0	0	0	0	0	0	0	0
	1100	0	0	0	0	0	0	0	0	0	0	0	0
V -	axis stroke (mm)				50					5	00		
	axis stroke (mm)	50	100	150	200	250	300	50	100	150	200	250	300
	50	0	0	0	0	0	0	0	0	0	0	0	0
	100	0	0	0	0	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	0	0	0	0	0	0	0
	200 250	0	0	0	0	0	0	0	0	0	0	0	0
	300	0	0	0	0	0	0	0	0	0	0	0	0
	350	0	0	0	0	0	0	0	0	0	0	ŏ	0
~	400	Õ	0	Õ	0	0	Õ	Õ	0	Õ	0	0	0
(mm	450	0	0	0	0	0	0	0	0	0	0	0	0
e (500	0	0	0	0	0	0	0	0	0	0	0	0
to to	550	0	0	0	0	0	0	0	0	0	0	0	0
X-axis stroke (n	600	0	0	0	0	0	0	0	0	0	0	0	0
axi	650 700	0	0	0	0	0	0	0	0	0	0	0	0
×	750	0	0	0	0	0	0	0	0	0	0	0	0
	800	0	0	0	0	0	0	0	0	0	0	0	0
	850	0	0	0	0	0	0	0	0	0	0	0	0
	900	0	0	0	0	0	0	0	0	0	0	0	0
	950	0	0	0	0	0	0	0	0	0	0	0	0
	1000	0	0	0	0	0	0	0	0	0	0	0	0
	1050 1100	0	0	0	0	0	0	0	0	0	0	0	0
	1100	0		0				0		0			

Cable Length

Туре	Cable code	Length
	1L	1m
Standard	3L	3m
type	5L	5m
		Specified length (15m max.)
Noto 1 All	-avis standard cab	

Note 1. All-axis standard cable is used. Note 2. The length of the second and third 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)	Third wiring (Z-axis lateral)
W	Vithout cable track (cable only)	N		0	0	0
C	Cable track S size (inner width: 38mm)	СТ		0	0	0
C	Cable track M size (inner width: 50mm)	СТМ	See P.85	0	0	0
C	Cable track L size (inner width: 63mm)	CTL		0	0	Cannot be selected *1
C	able track XL size (inner width: 80mm)	CTXL		0	Cannot be	selected *2

*1 Only the first and second wiring can be selected *2 Only the first wiring can be selected

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

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	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 highoutput setting disabled.

	K3 (Cartesia	n Robot	IA	
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opeemean					
ltem		X-axis	Y-axis	Z-axis	
Axis model		RCP6-WSA16R RCP6-SA8R		RCP6-SA7R	
Stroke (Every 50	mm)	50~1100mm 50~500mm		50~300mm	
	MHL			105mm/s	
Max an and *	MHM	210mm/s	400mm/s	210mm/s	
Max. speed *	MHH	210mm/s	400mm/s	420mm/s	
	MHS			640mm/s	
Motor size		56 High thrust	56 High thrust		
wotor size		stepper motor	stepper motor	56 Stepper motor	
	MHL			4mm	
Ball screw	MHM	10mm	20mm	8mm	
lead	MHH	TOITIIT	2011111	16mm	
	MHS			24mm	
Drive system		Ball screw ¢16mm rolled C10	Ball screw ¢16mm rolled C10	Ball screw ø12mm rolled C10	
Positioning repea	atability	±0.01mm			
Base material		Aluminum			
Ambient operat temperature, hu		0~40°C, 85% RH or les	s (non-condensing)		

Specifications

Options

Туן	De	Option code	Reference page	X-axis	Y-axis	Z-axis
Brake		В	See P.83	-	-	Standard equipment *
Cable exit direction	on (Outside)	CIO	See P.83	Cann sele	ot be cted	Standard equipment *
Non-motor end s	pecification	NM	See P.84	-	-	-
Slider section roll	er specification	SR	See P.84	-	-	-
* Be sure to speci	fy.					

* 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.

3 3

102.5 115 127.5 140 152.5 110 120

3 4 4 4 4 4 4 5 5

135 145 115 120

Dimensions

60.5 60.5 60.5 60.5 60.5 60.5 60.5 60.5 60.5 60.5 60.5 60.5 60.5

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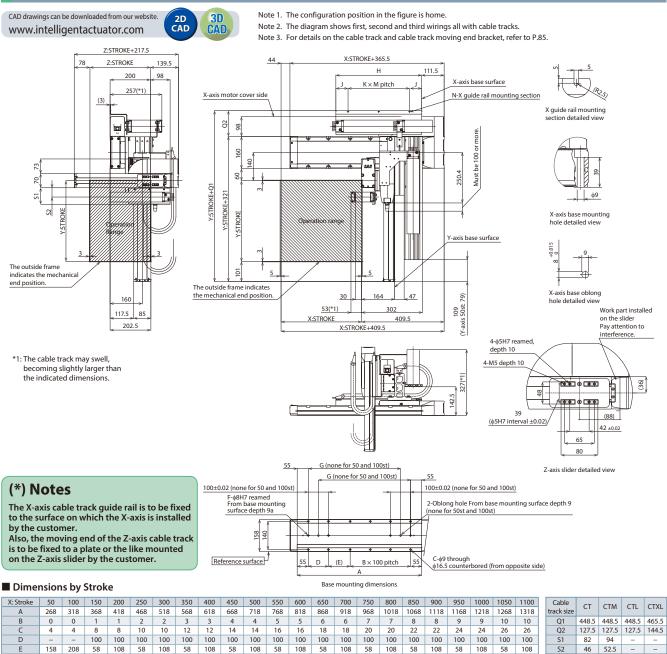
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251 276

130 155

2 2 2 2 2 2 2



1058 1108

145 120 125 130

127.5 132.5 140

726 751

IK3-	P6BBE2	2	<u> </u>	RCP6 3-axis XYB + X-axis: WSA16C (stra Y-axis: SA8R (side-m	ight)	ount configurations xis: SA7R (side-mounted)	
Enecification	ries Type Type Type Type Type Type Type Speed Type MHL: X Medium Speed/Y High Speed/Z Low Speed MHK: X Medium Speed/Y High Speed/Z High Speed MHS: X Medium Speed/Y High Speed/Z Ultra High Speed MHS: X Medium Speed/Y High Speed/Z Ultra High Speed	Encoder Type WA Encoder Type WA: Battery-less Absolute	First Axis (X-axis) Stroke 5: 50mm (Every 50mm)	Second Axis Third Axis (Y-axis) BCJO Options Refer to Options table on page 79.	Controller Ortroller Controller Refer to Applicable Controller table on the next page	Cable Cable Cable Cable Cable First Cable First Cable First Cable First Cable Contract	
			Pay	yload by Acceleration			



- MHL type: X medium speed/Y high speed/Z low speed
 MHM type: X medium speed/Y high speed/Z medium speed
 MHH type: X medium speed/Y high speed/Z high speed
 MHS type: X medium speed/Y high speed/Z ultra high speed (Unit: kg)

Y-axis stroke (mm)	50	~400 (Ev	ery 50m	m)	450~500 (Every 50mm)			
Speed Type Acceleration/ deceleration (G)	MHL	МНМ	MHH	MHS	MHL	МНМ	MHH	MHS
0.1	6	4	2	1	6	4	2	1
0.3	-	4	2	1	-	-	2	1

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

The photograph above shows the configuration direction "1" where all axes have cable tracks. Please refer to P.3 for other configuration directions.

	troke												
Y-a	xis stroke (mm)			5	0					10	00		
	xis stroke (mm)	50	100	150	200	250	300	50	100	150	200	250	300
	50	0	0	0	0	0	0	0	0	0	0	0	0
	100	0	0	0	0	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	0	0	0	0	0	0	0
	200	0	0	0	0	0	0	0	0	0	0	0	0
	250	0	0	0	0	0	0	0	0	0	0	0	0
	300	0	0	0	0	0	0	0	0	0	0	0	0
	350	0	0	0	0	0	0	0	0	0	0	0	0
ē	400	0	0	0	0	0	0	0	0	0	0	0	0
Ē	450	0	0	0	0	0	0	0	0	0	0	0	0
ê	500	0	0	0	0	0	0	0	0	0	0	0	0
rol	550	0	0	0	0	0	0	0	0	0	0	0	0
s st	600	0	0	0	0	0	0	0	0	0	0	0	0
X-axis stroke (mm)	650	0	0	0	0	0	0	0	0	0	0	0	0
×	700 750	0	0	0	0	0	0	0	0	0	0	0	0
		0	0	0	0	0	0	0	0	0	0	0	0
	800 850	0	0	0	0	0	0	0	0	0	0	0	0
	900	0	0	0	0	0	0	0	0	0	0	0	0
	950	0	0	0	0	0	0	0	0	0	0	0	0
	1000	ŏ	0	ŏ	0	ŏ	0	0	0	0	Ö	0	0
	1050	ŏ	ŏ	ŏ	ŏ	0	0	0	0	0	Ö	0	0
	1100	<u> </u>	ŏ	0	ŏ	Ő	0	0	0	0	ŏ	0	<u> </u>
		-	-	-	_	-	_	_	_	_	-	_	-
Y-a	xis stroke (mm)			1:	50					20	00		
Z-a	xis stroke (mm)	50	100	150	200	250	300	50	100	150	200	250	300
	50	0	0	0	0	0	0	0	0	0	0	0	0
	100	0	0	0	Ō	0	0	0	0	0	0	0	0
	100 150	0	0	0	0	0	0	0	0 0 0	0	0	0	0
	100 150 200	0 0 0	0 0 0	0 0 0	0	0 0 0	0 0 0	0 0 0 0	0 0 0	0 0 0 0	0 0 0	0 0 0	0 0 0 0
	100 150 200 250	0 0 0 0	0 0 0 0	0 0 0	0 0 0 0	0 0 0 0		0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0 0
	100 150 200 250 300	0 0 0 0 0	0 0 0 0 0	0 0 0 0	0 0 0 0 0	0 0 0 0			0 0 0 0 0				0 0 0 0 0
	100 150 200 250 300 350	0 0 0 0 0 0		0 0 0 0 0		0 0 0 0 0		0 0 0 0 0 0					0 0 0 0 0 0
(m	100 150 200 250 300 350 400		0 0 0 0 0 0 0	0 0 0 0 0 0			0 0 0 0 0 0 0		0 0 0 0 0 0 0		0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0
(mm)	100 150 200 250 300 350 400 450			0 0 0 0 0 0 0									
oke (mm)	100 150 200 250 300 350 400 450 500												
stroke (mm)	100 150 200 250 300 350 400 450 500 550												
is stroke (mm)	100 150 200 250 300 350 400 450 550 550 600												
-axis stroke (mm)	100 150 200 250 300 350 400 450 550 550 600 650												
X-axis stroke (mm)	100 150 200 250 350 400 450 550 550 600 650 700												
X-axis stroke (mm)	100 150 200 250 300 400 450 550 600 650 700 750												
X-axis stroke (mm)	100 150 200 250 300 350 400 450 550 600 650 750 800												
X-axis stroke (mm)	100 150 200 250 300 400 450 550 600 650 700 750												
X-axis stroke (mm)	100 150 200 250 350 400 450 550 600 650 700 750 800 850												
X-axis stroke (mm)	100 150 200 250 300 350 400 450 550 600 650 700 750 800 850 900												
X-axis stroke (mm)	100 150 200 250 300 350 400 450 550 600 650 700 750 800 850 900 950												

- IK3 Cartesian Robot

300

	tis stroke (mm)			2	50					3	00		
	(is stroke (mm)	50	100	150	200	250	300	50	100	150	200	250	300
	50	0	0	0	0	0	0	0	0	0	0	0	0
	100	0	0	0	0	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	0	0	0	0	0	0	0
	200	0	0	0	0	0	0	0	0	0	0	0	0
	250	0	0	0	0	0	0	0	0	0	0	0	0
	300	0	0	0	0	0	0	0	0	0	0	0	0
	350	0	0	0	0	0	0	0	0	0	0	0	0
_	400	0	0	0	0	0	0	0	0	0	0	0	0
Ē	450	0	0	0	0	0	0	0	0	0	0	0	0
e L	500	0	0	0	0	0	0	0	0	0	0	0	0
š	550	0	0	0	0	0	0	0	0	0	0	0	0
str	600	0	0	0	0	0	0	0	0	0	0	0	0
X-axis stroke (mm)	650	0	0	0	0	0	0	0	0	0	0	0	0
- a	700	0	0	0	0	0	0	0	0	0	0	0	0
~	750	0	0	0	0	0	0	0	0	0	0	0	0
	800	0	0	0	0	0	0	0	0	0	0	0	0
	850	0	0	0	0	0	0	0	0	0	0	0	0
	900	0	0	0	0	0	0	0	0	0	0	0	0
	950	0	0	0	0	0	0	0	0	0	0	0	0
	1000	0	0	0	0	0	0	0	0	0	0	0	0
	1050	Ō	0	0	Ō	0	Ō	0	Ō	0	0	0	Ō
	1100	0	0	0	0	0	0	0	0	0	0	0	0
	tis stroke (mm) tis stroke (mm)	50	100	3 150	50 200	250	300	50	100	4	200	250	300
Z-ax	50	0	0	0	0	0	0	0	0	0	0	0	0
	100	Ő	0	0	Ö	0	Ö	0	Õ	0	0	0	0
	150	ŏ	0	0	0	0	0	0	0	0	0	0	0
	200	0	0	0	0	0	0	0	Ö	0	0	0	0
	250	0	0	0	0	0	0	0	ŏ	0	0	0	0
	300	ŏ	0	0	0	0	Ö	0	Ö	0	0	0	0
	350	0	0	0	0	0	0	0	ŏ	0	0	0	0
-	400	ŏ	0	0	0	0	0	0	0	0	0	0	0
Ê	450	<u> </u>	0	0	0	0	ŏ	0	ŏ	0	0	0	0
<u>ع</u>	500	0	0	0	0	0	0	0	ŏ	0	0	0	0
- ke	550	0	0	0	0	0	0	0	ŏ	0	0	0	0
X-axis stroke (mm)	600	0	0	0	0	0	0	0	0	0	0	0	0
is s	650	0	0	0	0	0	0	0	0	0	0	0	0
-ax	700	0	0	0	0	0	0	0	0	0	0	0	0
×	750	0	0	0	0	0	0	0	0	0	0	0	0
	800	ŏ	0	0	0	0	ŏ	0	Ö	0	0	0	0
	850	Õ	0	0	0	Ö	0	0	Ö	0	0	0	0
	900	ŏ	0	0	Ö	0	Ö	0	Ő	0	0	0	0
	950	<u> </u>	0	0	0	0	ŏ	0	ŏ	0	0	0	0
	1000	0	0	0	0	0	0	0	ŏ	0	0	0	0
H	1050	0	0	0	0	0	0	0	ŏ	0	0	0	0
	1100	0	0	0	0	0	0	0	0	0	0	0	0
			_	_		_	_	_		_	_	_	
	(is stroke (mm)				50						00		
Z-ax	tis stroke (mm) 50	50	100	150	200	250	300	50	100	150	200	250	300
	100	ŏ	Ő	0	ŏ	Ő	ŏ	Õ	ŏ	Ő	Ő	0	0
- F	150	ŏ	0	0	0	0	0	0	Ő	0	0	0	0
	200	Ő	Ö	0	Ő	0	Ő	Ő	Ő	Ö	Õ	Ő	0
	250	ŏ	0	0	0	0	Ö	0	0	0	0	0	0
	300	ŏ	Ö	0	Ö	Ö	Ö	0	Ő	0	Ö	Ö	0
	350	0	0	0	0	0	0	0	0	0	0	0	0
	400	0	0	0	0	0	0	0	Ö	0	0	0	0
Ē		0	0	0	0	0	0	0	0	0	0	0	0
(mm)		0	0	0	0	0	0	0	0	0	0	0	0
<u>ب</u>	450 500			0	0	0	ŏ	0	0	0	0	0	0
종	500	-	0			0	0	0	0	0	0	0	0
strok	500 550	0	0		0		U U			<u> </u>		<u> </u>	0
is strok	500 550 600	0	0	0	0		0	0	0	0	0	0	0
-axis strok	500 550 600 650	0 0 0	0	0	0	0	0	0	0	0	0	0	0
X-axis strok	500 550 600 650 700	0 0 0	0 0 0	0 0 0	0	0	0	0	0	0	0	0	0
X-axis strok	500 550 600 650 700 750	0 0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0	0	0	0	0	0	0
X-axis strok	500 550 600 650 700 750 800	0 0 0 0 0	0 0 0 0	0 0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0
X-axis strok	500 550 600 650 700 750 800 850	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0	0 0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
X-axis strok	500 550 600 650 700 750 800 850 900	0 0 0 0 0 0 0	0 0 0 0 0 0 0		0 0 0 0 0	0 0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
X-axis strok	500 550 600 550 700 750 800 850 850 900 950		0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0			0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
X-axis strok	500 550 600 650 700 750 800 850 900 950 1000	0 0 0 0 0 0 0 0 0 0 0			0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	
X-axis strok	500 550 600 550 700 750 800 850 850 900 950		0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0			0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0

Cable Length

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

Note 1. Ani-axis standard cables Used.
 Note 2. The length of the second and third 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)	Third wiring (Z-axis lateral)			
Without cable track (cable only)	N		-	-	-			
Cable track S size (inner width: 38mm)	СТ		-	-	-			
Cable track M size (inner width: 50mm)	СТМ	See P.85	-	-	-			
Cable track L size (inner width: 63mm)	CTL	1	-	-	Cannot be selected *1			
Cable track XL size (inner width: 80mm)	CTXL	1	-	Cannot be	selected *2			

*1 Only the first and second wiring can be selected *2 Only the first wiring can be selected

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

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	266 M-AI
MSEL-PC/PG	See M-245

* Operation is possible with the high output setting specification.

When connecting to the MCON controller, "Highoutput setting specification" must be selected. Please contact IAI regarding use with the highoutput setting disabled.



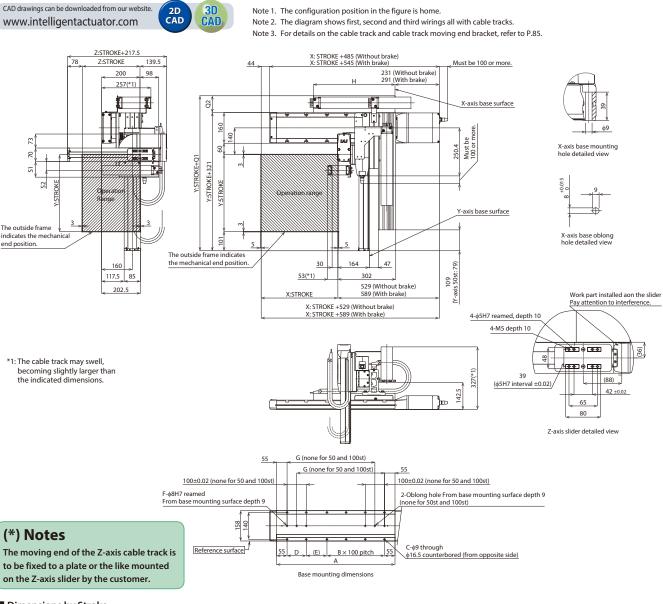
Specificati	ons						
ltem		X-axis	Y-axis	Z-axis			
Axis model		RCP6-WSA16C	RCP6-SA8R	RCP6-SA7R			
Stroke (Every 50	mm)	50~1100mm	50~500mm	50~300mm			
	MHL			105mm/s			
May an and *	MHM	210mm/s	400mm/s	210mm/s			
Max. speed * MHH MHS		210mm/s	400mm/s	420mm/s			
				640mm/s			
Motor size		56 High thrust	56 High thrust	EG Stoppor motor			
MOLOI SIZE		stepper motor	stepper motor	56 Stepper motor			
	MHL			4mm			
Ball screw	MHM	10mm	20mm	8mm			
lead	MHH	TOITIIT	2011111	16mm			
	MHS			24mm			
Drive system		Ball screw \u00f616mm rolled C10	Ball screw \u00f616mm rolled C10	Ball screw ϕ 12mm rolled C10			
Positioning repe	atability	±0.01mm					
Base material		Aluminum					
Ambient operat temperature, hu		0~40°C, 85% RH or less (non-condensing)					

Options							
Туре	Option code	Reference page	X-axis	Y-axis	Z-axis		
Brake	В	See P.83	0	O Standa equipme			
Cable exit direction (Top)	CJT	See P.83	0				
Cable exit direction (Right)	CJR	See P.83	0	Cann	ot be		
Cable exit direction (Left)	CJL	See P.83	0	sele	cted		
Cable exit direction (Bottom)	CJB	See P.83	0				
Cable exit direction (Outside)	cio	See P.83	Cannot b	e selected	Standard equipment *		
Non-motor end specification	NM	See P.84	0	0	0		
Slider section roller specification	SR	See P.84	0	0	0		
* Be sure to specify							

Be sure to specify.

* 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.

Dimensions



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	Cable	СТ	СТМ
A	268	318	368	418	468	518	568	618	668	718	768	818	868	918	968	1018	1068	1118	1168	1218	1268	1318	track size	C	CIM
В	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	Q1	396.5	408.5
C	4	4	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	Q2	75.5	87.5
D	-	-	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	S1	82	94
E	158	208	58	108	58	108	58	108	58	108	58	108	58	108	58	108	58	108	58	108	58	108	S2	46	52.5
F	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	* Dimen	sions (01. 02
G	-	-	208	258	308	358	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158	chang		
Н	251	276	301	326	351	376	401	426	451	476	501	526	551	576	601	626	651	676	701	726	751	776	of the		
	· · · · · · · · · · · · · · · · · · ·	-			-		· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·													or the	cable i	lidCK.

Cable track size	СТ	СТМ	CTL	CTXL					
Q1	396.5	408.5	423.5	441.5					
Q2	75.5	87.5	102.5	120.5					
S1	82	94	-	-					
S2	46	52.5	-	-					
* Dimensions Q1, Q2, S1 and S2 change depending on the size									

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- IK3 Cartesian Robot

RCP6 3-axis XYB + Z-axis base mount configurations 3-P6BBE3 X-axis: WSA16C (straight) Y-axis: SA8C (straight) Z-axis: SA7C (straight) <u>— Second Axis</u> <u>— Third Axis</u> <u>— Controller</u> <u>—</u> Encoder Type First Axis (X-axis) Cable Model Туре Series Specification Items WA _ _ _ Ļ ГΤ

Configuration Direction Speed Type Encoder Type Stroke MHL: X Medium Speed/Y High Speed/Z Low Speed MHM: X Medium Speed/Y High Speed/Z Medium Speed MHH: X Medium Speed/Y High Speed/Z High Speed MHS: X Medium Speed/Y High Speed/Z Ultra High Speed 5: 50mm WA: Battery-less Absolute 1 to 4 Refer to Robot Type Descriptions on page 3 (Every 50mm)

Options

Refer to Options table on page 82.



Payload by Acceleration

MHL type: X medium speed/Y high speed/Z low speed

MHM type: X medium speed/Y high speed/Z medium speed

Controlle

Refer to Applicable Controllers table on the next page.

MHH type: X medium speed/Y high speed/Z high speed

MHS type: X medium speed/Y high speed/Z ultra high speed (Unit: ka)

Cable

First

 IL : Im
 Second

 3L : 3m
 Wiring

 5L : 5m
 Refer to Cable Track table on the next page.

Length Wiring

Third

Wiring

Y-axis stroke (mm)	50	~400 (Ev	ery 50m	m)	450~500 (Every 50mm)			
Speed Type								
Acceleration/ deceleration (G)	MHL	МНМ	MHH	MHS	MHL	МНМ	MHH	MHS
0.1	6	4	2	1	6	4	2	1
0.3	-	4	2	1	-	-	2	1

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

The photograph above shows the configuration direction "1" where all axes have cable tracks. Please refer to P.3 for other configuration directions.

Y-axis stroke (mm)			5	0					10	00		
Z-axis stroke (mm)	50	100	150	200	250	300	50	100	150	200	250	300
50	0	0	0	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0	0	0	0
150	0	0	0	0	0	0	0	0	0	0	0	0
200	0	0	0	0	0	0	0	0	0	0	0	0
250	0	0	0	0	0	0	0	0	0	0	0	0
300	0	0	0	0	0	0	0	0	0	0	0	0
350	0	0	0	0	0	0	0	0	0	0	0	0
400	0	0	0	0	0	0	0	0	0	0	0	0
450 500 550 600 650 650 700	0	0	0	0	0	0	0	0	0	0	0	0
500	0	0	0	0	0	0	0	0	0	0	0	0
ð 550	0	0	0	0	0	0	0	0	0	0	0	0
600	0	0	0	0	0	0	0	0	0	0	0	0
650	0	0	0	0	0	0	0	0	0	0	0	0
700	0	0	0	0	0	0	0	0	0	0	0	0
750	0	0	0	0	0	0	0	0	0	0	0	0
800	0	0	0	0	0	0	0	0	0	0	0	0
850	0	0	0	0	0	0	0	0	0	0	0	0
900	0	0	0	0	0	0	0	0	0	0	0	0
950	0	0	0	0	0	0	0	0	0	0	0	0
1000	0	0	0	0	0	0	0	0	0	0	0	0
1050	0	0	0	0	0	0	0	0	0	0	0	0
1100	0	0	0	0	0	0	0	0	0	0	0	0
									-			
Y-axis stroke (mm) Z-axis stroke (mm)	50	100	150	50 200	250	300	50	100	150	200	250	300
2-axis stroke (mm)	0							100			250	300
								0			0	\cap
		0	0	0	0	0	0	0	0	0	0	0
100	0	0	0	0	0	0	0	0	0	0	0	0
150	0	0	0	0	0	0	0 0 0	0	0	0	0	0
150 200	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	000000000000000000000000000000000000000
150 200 250	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0	0 0 0 0	0 0 0	0 0 0 0	0 0 0
150 200 250 300	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
150 200 250 300 350	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0		0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0
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150 200 250 300 400 450 550 600 650 750 750												
150 200 250 300 350 400 450 500 500 600 650 700 750 800												
150 200 250 300 350 400 450 500 550 600 650 700 750 800 850												
150 200 250 300 400 450 550 600 650 750 800 850 900												
150 200 250 300 400 450 550 600 650 750 800 850 900 950												
(um) 250 300 350 400 400 450 500 550 600 650 650 800 850 900 950 1000												
150 200 250 300 350 400 450 550 550 650 700 750 800 850 900 950												

Si	troke												
	xis stroke (mm)				50						00		
Z-a:	xis stroke (mm)	50	100	150	200	250	300	50	100	150	200	250	300
	50 100	0	0	0	0	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	Õ	0	0	0	0	0	0
	200	0	0	0	0	0	0	0	0	0	0	0	0
	250	0	0	0	0	0	0	0	0	0	0	0	0
	300	0	0	0	0	0	0	0	0	0	0	0	0
	350 400	0	0	0	0	0	0	0	0	0	0	0	0
Ê	450	0	0	0	0	0	0	0	0	0	0	0	0
<u>د</u>	500	Ő	0	Õ	0	Õ	Õ	Ő	0	Õ	0	Ő	Ő
, Š	550	0	0	0	0	0	0	0	0	0	0	0	0
str	600	0	0	0	0	0	0	0	0	0	0	0	0
X-axis stroke (mm)	650	0	0	0	0	0	0	0	0	0	0	0	0
×	700 750	0	0	0	0	0	0	0	0	0	0	0	0
	800	0	0	0	0	0	0	0	0	0	0	0	0
	850	0	0	0	0	0	0	0	0	0	0	0	0
	900	0	0	0	0	0	0	0	0	0	0	0	0
	950	0	0	0	0	0	0	0	0	0	0	0	0
	1000	0	0	0	0	0	0	0	0	0	0	0	0
	1050 1100	0	0	0	0	0	0	0	0	0	0	0	0
	1100	0			0								
	xis stroke (mm)				50						00	-	
Z-a:	xis stroke (mm) 50	50	100	150	200	250	300	50	100	150	200	250	300
	100	0	0	0	0	0	0	0	0	0	0	0	0
	150	Õ	0	0	0	0	0	0	0	0	0	0	0
	200	0	0	0	0	0	0	0	0	0	0	0	0
	250	0	0	0	0	0	0	0	0	0	0	0	0
	300	0	0	0	0	0	0	0	0	0	0	0	0
	350 400	0	0	0	0	0	0	0	0	0	0	0	0
Ê	450	ŏ	0	ŏ	0	ŏ	ŏ	0	0	ŏ	0	ŏ	0
X-axis stroke (mm)	500	0	0	0	0	0	0	0	0	0	0	0	0
Š	550	0	0	0	0	0	0	0	0	0	0	0	0
s sti	600	0	0	0	0	0	0	0	0	0	0	0	0
axis	650	0	0	0	0	0	0	0	0	0	0	0	0
×	700 750	0	0	0	0	0	0	0	0	0	0	0	0
	800		0	ŏ	0	Ö	Ő	Ö	0	ŏ	0	Ö	0
	850	0	0	0	0	0	0	0	0	0	0	0	0
	900	0	0	0	0	0	0	0	0	0	0	0	0
	950	0	0	0	0	0	0	0	0	0	0	0	0
	1000	0	0	0	0	0	0	0	0	0	0	0	0
	1050 1100	0	0	0	0	0	0	0	0	0	0	0	0
	1100	0		0	0		0		0				
	xis stroke (mm)				50						00		
Z-a:	xis stroke (mm) 50	50	100	150	200	250	300	50	100	150	200	250	300
	100	ŏ	0	0	0	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	0	0	0	0	0	0	0
	200	0	0	0	0	0	0	0	0	0	0	0	0
	250	0	0	0	0	0	0	0	0	0	0	0	0
	300 350	0	0	0	0	0	0	0	0	0	0	0	0
	400	0	0	0	0	0	0	0	0	0	0	0	0
(mm	450	0	0	0	0	0	0	0	0	0	0	0	0
e (r	500	0	0	0	0	0	0	0	0	0	0	0	0
X-axis stroke	550	0	0	0	0	0	0	0	0	0	0	0	0
s st	600	0	0	0	0	0	0	0	0	0	0	0	0
-axi	650 700	0	0	0	0	0	0	0	0	0	0	0	0
×	750	0	0	0	0	0	0	0	0	0	0	0	0
	800	Ő	0	Ő	0	0	0	0	0	0	0	0	0
	850	0	0	0	0	0	0	0	0	0	0	0	0
	900	0	0	0	0	0	0	0	0	0	0	0	0
	950	0	0	0	0	0	0	0	0	0	0	0	0
	1000 1050	0	0	0	0	0	0	0	0	0	0	0	0
	1100	0	0	0	0	0	0	0	0	0	0	0	0
		-		_		-	_	_	-	_	-	_	_

Cable Length

Туре	Cable code	Length
	1L	1m
Standard	3L	3m
type	5L	5m
		Specified length (15m max.)
Noto 1 All	-avis standard cab	lo is used

Note 1. All-axis standard cable is used. Note 2. The length of the second and third 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

Z-axis: SA7C

Туре	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)	Third wiring (Z-axis lateral)
Without cable track (cable only)	N		0	0	0
Cable track S size (inner width: 38mm)	СТ		0	0	0
Cable track M size (inner width: 50mm)	СТМ	See P.85	0	0	0
Cable track L size (inner width: 63mm)	CTL		0	0	Cannot be selected *1
Cable track XL size (inner width: 80mm)	CTXL		0	Cannot be	selected *2

*1 Only the first and second wiring can be selected *2 Only the first wiring can be selected

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

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-91
MSEL-PC/PG	See M-245

* Operation is possible with the high output setting specification.

When connecting to the MCON controller, "Highoutput setting specification" must be selected. Please contact IAI regarding use with the high-output setting disabled.

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Item		X-axis	Y-axis	Z-axis
Axis model		RCP6-WSA16C	RCP6-SA8C	RCP6-SA7C
Stroke (Every 5	0mm)	50~1100mm	50~500mm	50~300mm
MHL				105mm/s
Max an and *	MHM	210mm/s	400mm/s	210mm/s
Max. speed *	MHH	210mm/s	400mm/s	420mm/s
	MHS			640mm/s
Motor size		56 High thrust stepper motor	56 High thrust stepper motor	56 Stepper motor
MHI				4mm
Ball screw	MHM	10mm	20mm	8mm
lead	MHH			16mm
	MHS			24mm
Drive system		Ball screw \016mm rolled C10	Ball screw \u00f616mm rolled C10	Ball screw \u00e912mm rolled C10
Positioning repe	eatability	±0.01mm		
Base material		Aluminum		
Ambient operating temperature, humidity 0~40°C, 85% RH or less (non-condensing)				

Options

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

* Outside as standard. Be sure to specify.

* 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.

Dimensions

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

258 308 358 408 458 508 558 608 658 708 758 808 858 908 958

326 351 376 401 426 451 476 501 526

208

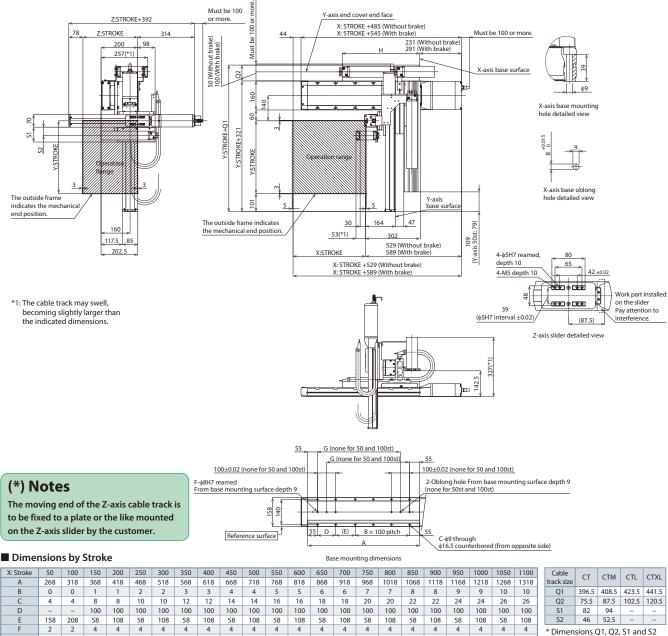
н

251 276 301

Specifications



Note 1. The configuration position in the figure is home. Note 2. The diagram shows first, second and third wirings all with cable tracks. Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.



551 576

601 626

* Dimensions Q1, Q2, S1 and S2 change depending on the size of the cable track. IK3-P6BBE3□□S

1108 1158

1008 1058

651 676 701 726 751 776



Cartesian Robot

Cartesian Robot Options

Brake

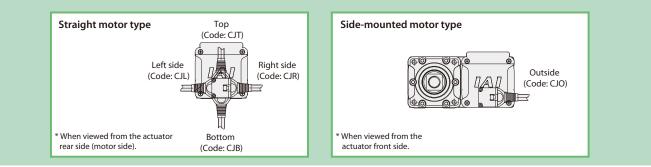
Option Code **B**

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. IK2-P6XBD2 X-axis stroke А В С F IK2-P6XBD3 C-\u00f366 through, \u00f311 counterbored 9.5 depth from X-axis base surface φ4H7 reamed, depth 5 Oblong hole depth 5 (from opposite side) +0.012 Reference surface $B \times 100$ pitch Foot Plate mounting dimensions IK2-P6XBC2□□S X-axis stroke Α В С F IK2-P6XBC3□□S IK3-P6BBC2□□S C-\u00f36.6 through, \u00f311 counterbored 9.5 depth from X-axis base surface (from opposite side) IK3-P6BBC3□□S φ4H7 reamed, depth 5 Oblong hole depth 5 .

42.5

80 30

+0.012

F (ø4 hole - oblong hole)

Foot Plate mounting dimensions

B×100 pitch

Reference surface

638 5 14 545

738 6

838 7 18 745

888 7

938 8

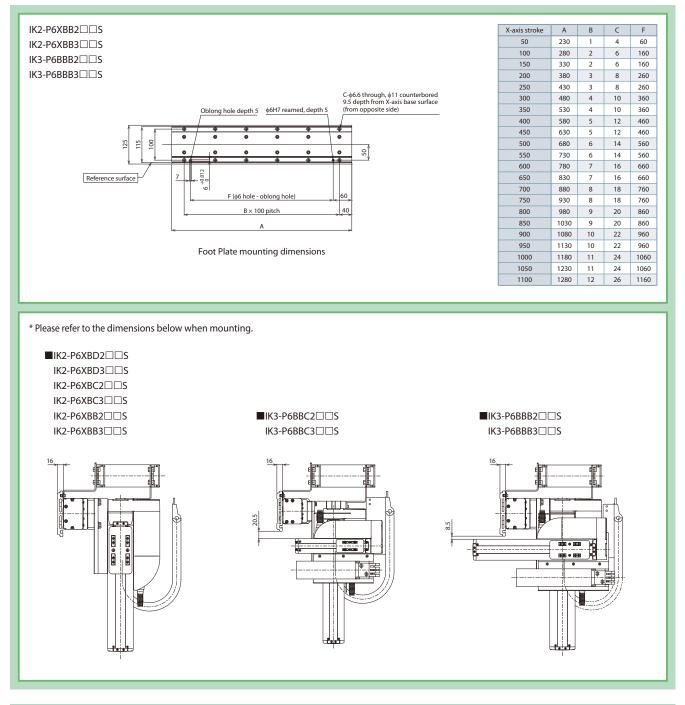
14 545

16 645

6 16

18 745

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

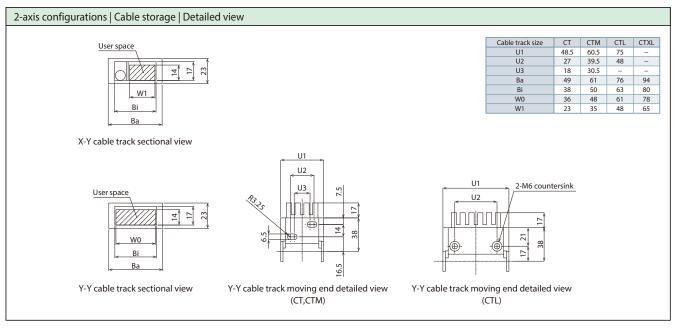
 Description
 The slider of the standard slider type specification is changed to the same roller structure as the cleanroom type. When using the slider roller spec., the appearance and dimensions of the slider cover will be the same as the cleanroom type.

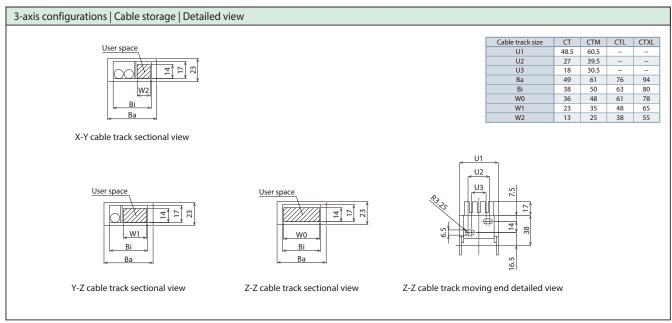
 Changing to roller specification will make the external view and dimensions of the slider cover the same as the cleanroom type.

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

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.

(Unit: mm/s)

(Unit: mm/s)

(Unit: mm/s)

■ IK2-P6XBD1□□S X-axis: SA6R

■ IK2-P6XBD2□□S X-axis: SA6C

■ IK2-P6XBD3□□S X-axis: SA6C

■ IK2-P6XBD3□□S X-axis:	(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

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

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

■ IK2-P6XBE3□□S X-axis: WSA16C (Unit: mr			
Speed type	50~1050 (Every 50mm)	1100 (mm)	
МН	210	205	
HH	365		

■ IK2-P6YBD1□□S Y-axis: SA6R

■ IK2-P6YBD2□□S Y-axis: SA6C

■ IK2-P6YBD3□□S Y-axis: SA6C

Stroke Speed type	50~650 (Every 50mm)	700 (mm)	750 (mm)	800 (mm)
SM	800	725	(50	575
SH	800	735	650	

■ IK3-P6BBE1□□S X-axis: WSA16R

■ IK3-P6BBE2□□S X-axis: WSA16C

■ IK3-P6BBE3□□S X-axis: WSA16C (Unit: mm/s)

Stroke Speed type	50~1050 (Every 50mm)	1100 (mm)	
MHL			
MHM	210	205	
МНН	210	205	
MHS			

- Cartesian Robot

Catalog No. CE0248-1A (0117)

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The information contained in this product brochure may change without prior notice due to product improvements.

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