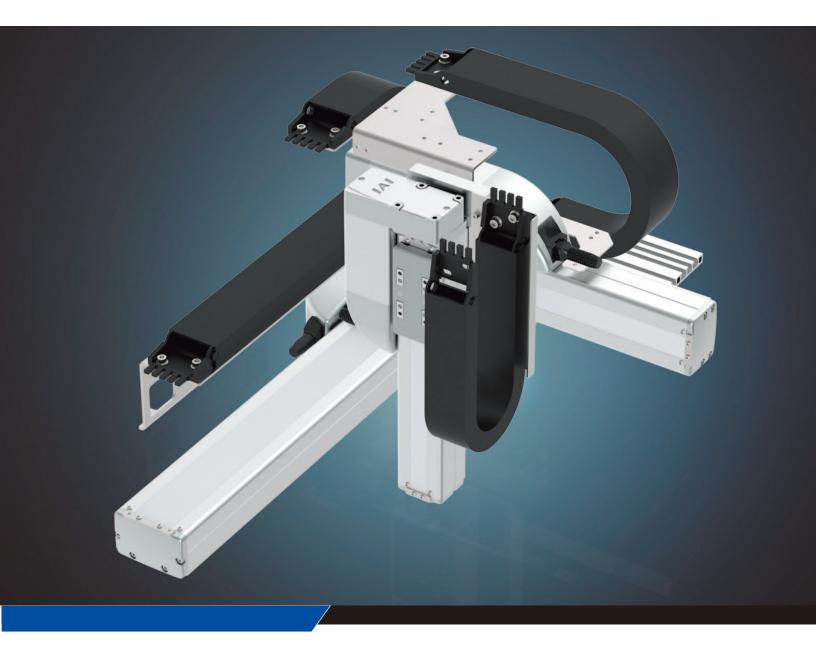




## ROBO Cylinder<sup>®</sup> Configurations 3-Axis Cartesian Robot **IK3-P6Series**



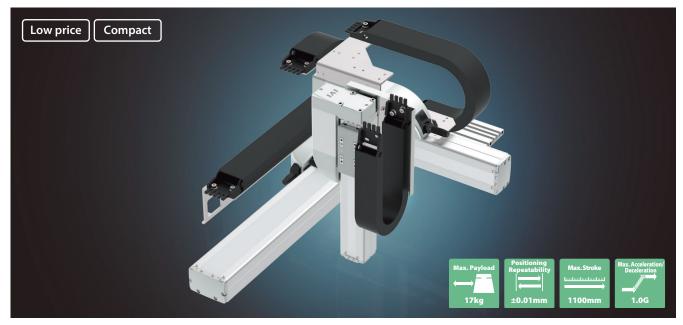
www.intelligentactuator.com

# Cartesian Robots have never been more affordable.

Low price & compact ROBO Cylinder<sup>®</sup> configuration

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



## **Diverse Configurations**

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





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

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

Homing operation is not required at startup or after emergency stop or malfunction. This reduces your operation time, resulting in reduced production costs. 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<sup>®</sup> which is equipped with a high-output driver. The maximum speed has been increased with the use of PowerCON<sup>®</sup>. This can reduce cycle time and help improve productivity.



# 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) + 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

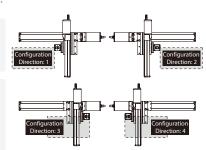
The Z-axis body is fixed and the slider moves vertically.

## 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.

→ 3-axis configurations IK3-P6BB:  $p53 \sim 82$ 

#### **Configuration Direction**





# **Cartesian Robot**

ROBO C	ylinder 3-axis	Config	jurations
	IK3-P6BBC1□□S	53	
	IK3-P6BBC2□□S	55	
	IK3-P6BBC3□□S	57	
	IK3-P6BBB1□□S	59	
	IK3-P6BBB2□□S	61	
IK3	IK3-P6BBB3□□S	63	
Stepper Motor	IK3-P6BBF1□□S	65	
	IK3-P6BBF2□□S	68 🧠	
	IK3-P6BBF3□□S	71	
	IK3-P6BBE1□□S	74	
	IK3-P6BBE2□□S	77	
	IK3-P6BBE3□□S	80	

Options

83

**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	Note 1. All avis standard cable 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		

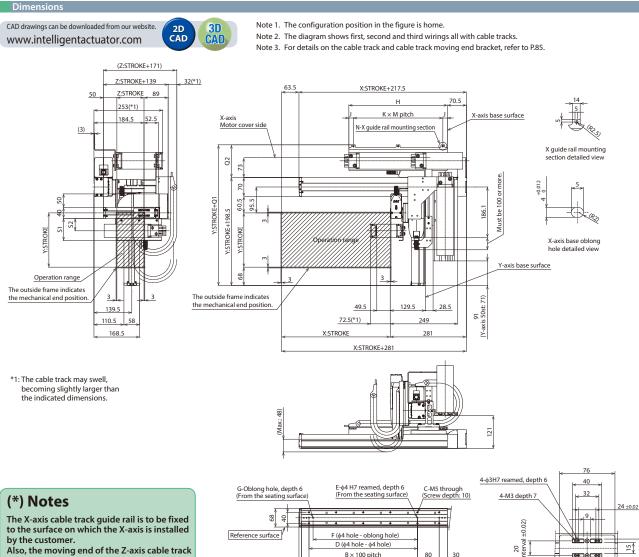
Specificati	0115						
ltem		X-axis	Y-axis	Z-axis			
Axis model		RCP6-SA7R	RCP6-SA6R	RCP6-SA4R			
Stroke (Every 50mm)		50~800mm	50~200mm	50~150mm			
	HHL			150mm/s			
Max an and *	HHM	420mm/s	560mm/s	305mm/s			
Max. speed *	HHH	42011111/5	5001111/5	525mm/s			
	HHS			560mm/s			
Motor size		56 Stepper 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	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	Cann sele	Standard equipment	
Non-motor end specification	NM	See P.84	0	0	0
Slider section roller specification	SR	See P.84	0	0	0

<sup>•</sup> 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

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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	-	-

ക്രം

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
	1L	1m
Standard	3L	3m
type	5L	5m
	ΠL	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		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.

# - IK3 Cartesian Robot

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 croad *	HHM	420mm/s	560mm/s	305mm/s
wax. speed	HHH	4201111/5	5001111/5	525mm/s
	HHS			560mm/s
Motor size		56 Stepper motor	42 Stepper motor	35 Stepper motor
	HHL			525mm/s 560mm/s
Max. speed * Motor size Ball screw lead	HHM	16mm	12mm	5mm
lead	HHH	Tomm	12mm	SA6R         RCP6-SA4R           0mm         50~150mm           150mm/s         305mm/s           525mm/s         560mm/s           tepper motor         35□ Stepper motor           2.5mm         50mm           10mm         10mm           10mm         10mm           10mm         10mm           10m         10mm           10m         10mm
	HHS			16mm
Drive system		Ball screw \u00f612mm rolled C10	Ball screw \u00f610mm rolled C10	
Positioning repe	eatability	±0.01mm		
Base material		Aluminum		
Ambient opera temperature, h		0~40°C, 85% RH or les	s (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	sele	cted
Cable exit direction (Bottom)	CJB	See P.83	0		
Cable exit direction (Outside)	cio	See P.83	Cannot be selected Standa		
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

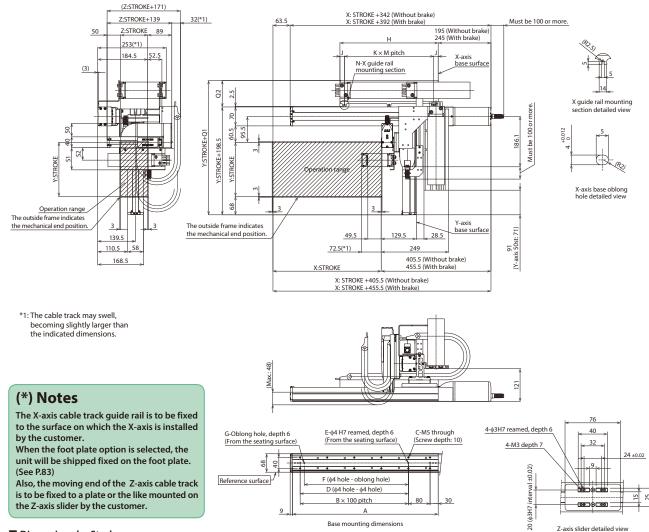
\* The maximum speed may not be reached if the travel distance is short or acceleration is low. Maximum speed may change depending on the stroke. For details, refer to the Maximum Speed by Stroke table on P.86.

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	<b>S</b>	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	roke												
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					
1L		1m					
Standard	3L	3m					
type	5L	5m					
L 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	See M-91			
MCON-LC/LCG	3ee W-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	Specifications							
		× ·						
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				
мах. эреец	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	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

\* Outside as standard. Be sure to specify

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

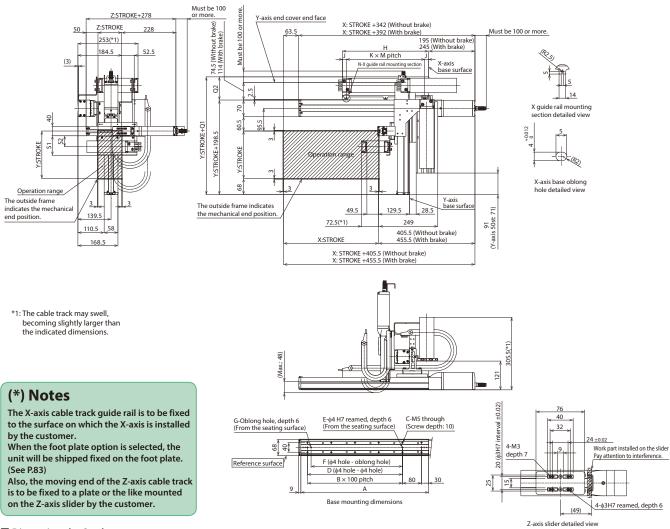
\* The maximum speed may not be reached if the travel distance is short or acceleration is low. Maximum speed may change depending on the stroke. For details, refer to the Maximum Speed by Stroke table on P.86.

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 –													
750         0	12													
750         0	s st													
750         0	axi													
800         0	× -													
850         O														
900         0														
950         0														
1000         0														
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			50			200	50			200				
100         0	Z-dX										Controll	ers are sold	separately	
150         0											Please c	ontact IAI fo	or more info	ormation.
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-	LC/LCG	5	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			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	e selected Pleas	e contact IAI
		1100	0	0	0	0	0	0	0	0				

#### Cable Length

Туре	Cable code	Length
	1L	1m
Standard	3L	3m
type	e <b>5L</b>	5m
		Specified length (15m max.)
	ما مع المعرفة مع مع مع م	In in use of

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	a first wiring can b	a 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 operating temperature, humidity		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.

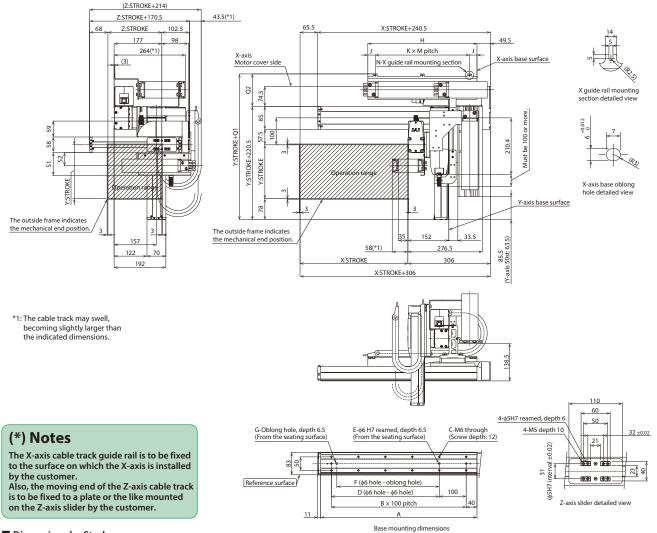
#### Dimensions

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 -

<b>IK3-</b>	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	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					-	-		-	-		-	-	-	
unit         isio         o </td <td></td>														
Y-axis stroke (mm)         ZO         Column (mm)         ZO         Solution (mm)         Control lers         <	-													
Y-axis stroke (mm)         ZO         Column (mm)         ZO         Solution (mm)         Control lers         <	Ē.													
Y-axis stroke (mm)         ZO         Column (mm)         ZO         Solution (mm)         Control lers         <	ê –													
Y-axis stroke (mm)         ZO         Column (mm)         ZO         Solution (mm)         Control lers         <	힘													
Y-axis stroke (mm)         ZO         Column (mm)         ZO         Solution (mm)         Control lers         <	sst													
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													
800         0	-× –													
isio         O														
900         0														
950         0												0		
1000         0												-		
1050         0	_													
1100         0														
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	
S0         O	Z-axi										Control	ers are sold	separately	
150         0														
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300         0	_							-				S: SA8C		
300         0												-	Referen	ce page in the
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													Se	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
	1L	1m
Standard	3L	3m
type	5L	5m
<i>.</i>		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

## - IK3 Cartesian Robot

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.
Matavaina		56 High thrust			Cable exit direction (Bottom)	C
Motor size		stepper motor	56 Stepper motor	42 Stepper motor	Cable suit direction (Outside)	
	HSL			3mm	Cable exit direction (Outside)	C
Ball screw	HSM	- 20mm	24mm	6mm	Non-motor end specification	N
lead	HSH	_ 20mm	24mm	12mm	Slider section roller specification	S
	HSS			20mm	* Be sure to specify.	
Drive system		Ball screw \u00f616mm rolled C10	Ball screw	Ball screw \u00f610mm rolled C10		
Positioning repeatability ±		±0.01mm			Options (2)	
Base material Alum		Aluminum				
Ambient opera	ating	0 40%C 050/ DU en la	ee (men een densine)		Туре	
temperature, h	numidity	0~40°C, 85% RH or le	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	-	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			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

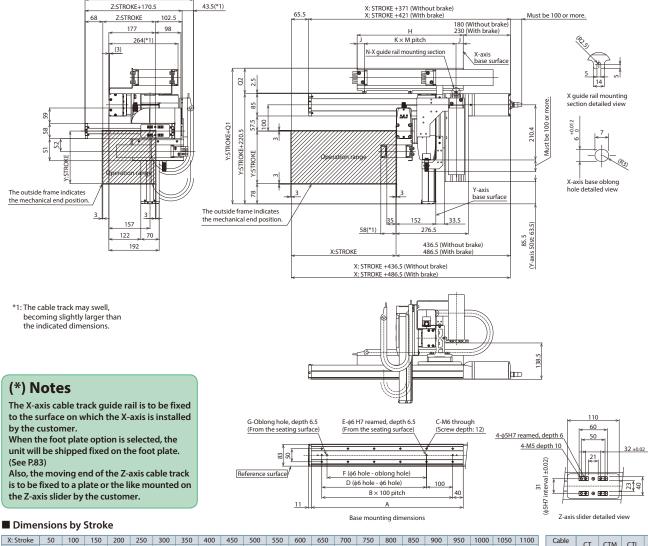
CAD drawings can be downloaded from our website. www.intelligentactuator.com

(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 –

<b>IK3-</b>	P6BBB3	3	<b>_S</b>	X-axis: SA8C (st	raight)	ise mount configuration is: SA6C (straight)	s
Model Specification Items IK Configuration Direction 1 to 4 Refer to Robot Type Descriptions on page 3	ies Type 3 - P6BBB3 - S Speed Type HSL: X High Speed/Y Ultra High Speed/Z High Speed HSS: X High Speed/Y Ultra High Speed/Z High Speed HSS: X High Speed/Y Ultra High Speed/Z Ultra High Speed/Y Ultra	Encoder Type WA: Battery-less Absolute	- First Axis _ S (X-axis) _ S  Stroke 5: 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 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.

	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		Applicable Controllers			
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	nination.
	150	0	0	0	0	0	0	0	0	□ X-axis: SA8C			
	200	0											
	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 Second Statist SAGC Referen General Second	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.)						
Note 1 All-axis standard cable 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 first wiring can be selected					

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

## - IK3 Cartesian Robot

Specificat	ions						
ltem		X-axis	Y-axis	Z-axis			
Axis model		RCP6-SA8C	RCP6-SA8C RCP6-SA7C				
Stroke (Every 50mm)		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 less (non-condensing)					

Options (1)

Туре	Option code	Reference page	X-axis	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	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 

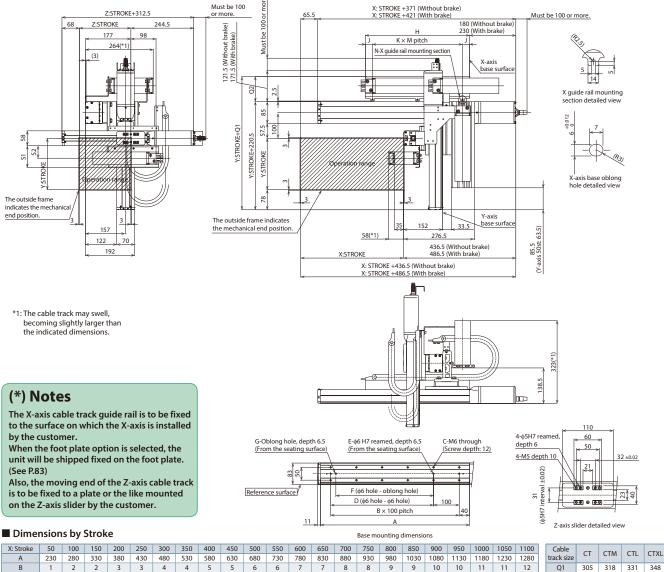
200 200

180 180

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

3D CAD

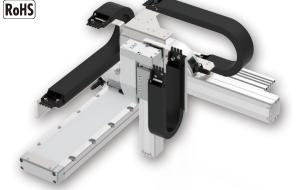
Note 1. The configuration position in the figure is home. Note 2. The diagram shows first, second and third wirings all with cable tracks. Note 3. For details on the cable track and cable track moving end bracket, refer to P.85.



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	* Dimen	sions (	01.02	S1 an	d S2
1	1	1	1	1	change				
655	680	705	730	755	of the		5	on the	5120
27.5	775	22.5		275	orther	cable t	IdCK.		



<b>IK3-</b>	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) - <b>BCJO</b> 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			1:	50			
-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
sstr	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.

#### 🗆 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. speed *	HSM	280mm/s	640mm/s	340mm/s		
wax. 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	2411111	12mm		
	HSS			20mm		
Drive system		Ball screw \phi12mm rolled C10	Ball screw \u00f812mm rolled C10	Ball screw $\phi$ 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

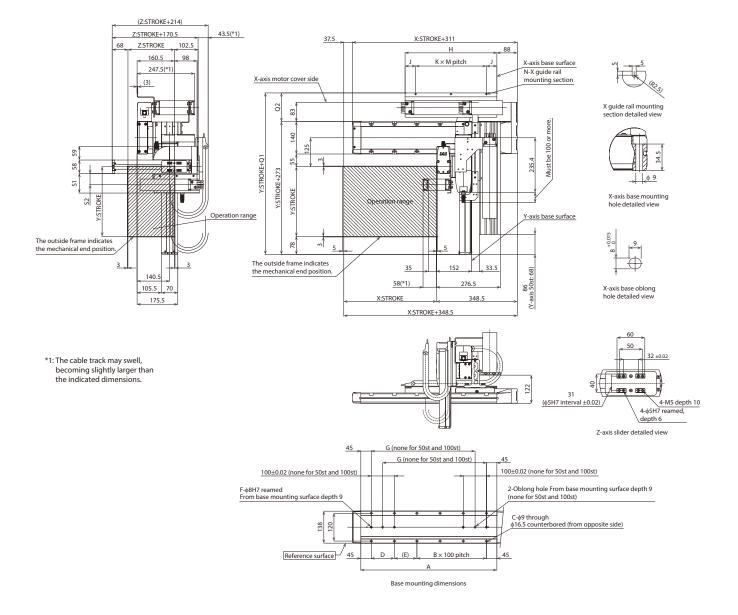
\* Be sure to specify.

#### 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

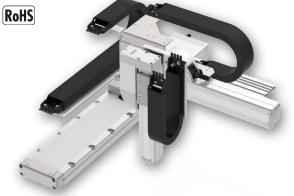
X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
A	237	287	337	387	437	487	537	587	637	687	737	787	837	887	937	987
В	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
C	4	4	8	8	10	10	12	12	14	14	16	16	18	18	20	20
D	-	-	100	100	100	100	100	100	100	100	100	100	100	100	100	100
E	147	197	47	97	47	97	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
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	, , , , , , , , , , , , , , , , , , ,	- 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			1!	50	
Z-a	Z-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

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	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

specification	Ulis			
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	2411111	12mm
	HSS			20mm
Drive system		Ball screw ¢12mm rolled C10	Ball screw \u00f612mm rolled C10	Ball screw $\phi$ 10mm rolled C10
Positioning repe	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 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

\* Be sure to specify.

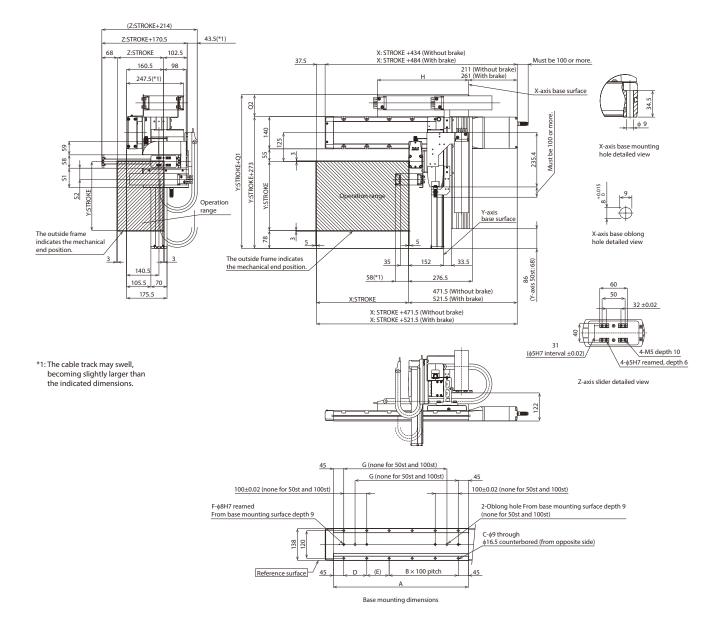
CAD drawings can be downloaded from our website. www.intelligentactuator.com



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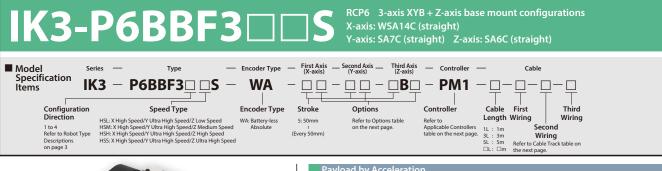
The moving end of the Z-axis cable track is to be fixed to a plate or the like mounted on the Z-axis slider by the customer.

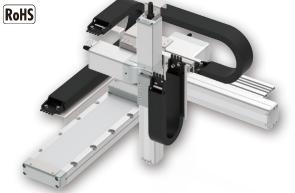
#### Dimensions by Stroke

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	-	-

 $^{\ast}$  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
   HSS 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-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		
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-a	xis 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
	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		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		
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					
Standard	1L	1m					
	3L	<b>3L</b> 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.

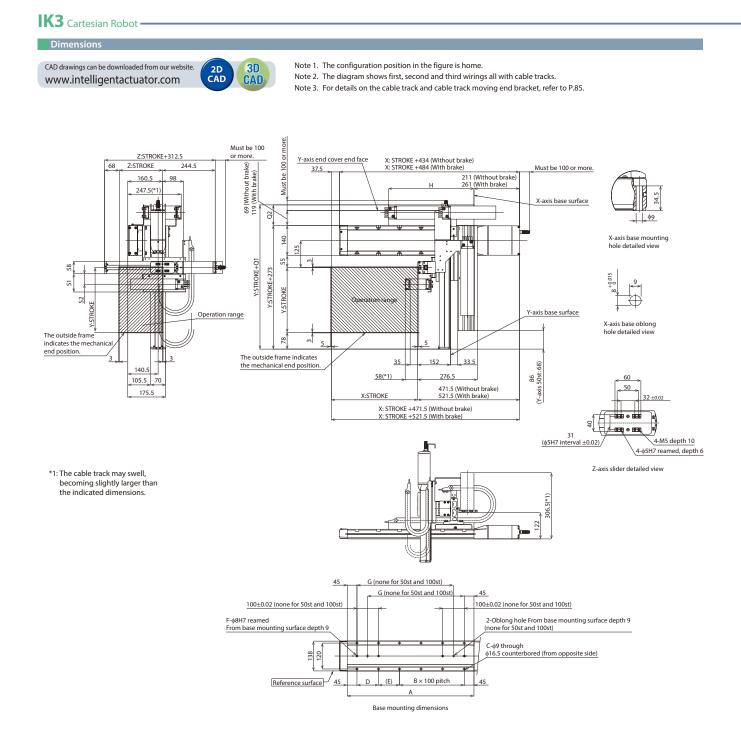
#### Specifications

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	290mm/c	640mm/c	340mm/s				
Max. speed	HSH	20011111/5	0401111/5	680mm/s				
Motor size	HSS			800mm/s				
Motor size		56 Stepper motor	56 Stepper motor	42 Stepper motor				
	HSL			3mm				
	HSM	16mm	24mm	6mm				
lead	HSH	TOTITI	24000	12mm				
	HSS	RCP6-WSA14C         RCP6-SA7C           50~800mm         50~400mm           280mm/s         640mm/s           56⊡ Stepper motor         56⊡ Stepper           16mm         24mm           Ball screw ¢12mm         Ball screw ¢10mm           rolled C10         ±0.01mm           Aluminum         5000 mm		20mm				
Drive system		· · ·	Ball screw ø12mm rolled C10	Ball screw $\phi$ 10mm 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.

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			
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.

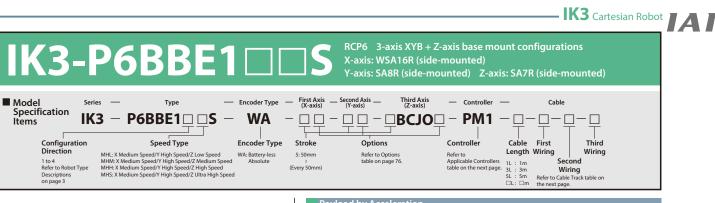


#### Dimensions by Stroke

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

								(Unit: kg)
Y-axis stroke (mm)	50~400 (Every 50mm)				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
		<b>50</b>					<b>300</b>	50				<b>250</b>	
	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	<b>50</b>	<b>100</b> O	1! 150 O	50 200 O	<b>250</b>	<b>300</b>	<b>50</b> O	<b>100</b> O	20 150 O	00 200 O	<b>250</b>	<b>300</b> O
	xis stroke (mm) xis stroke (mm) 50 100	<b>50</b> O	<b>100</b> O	1! 150 0	50 200 0	<b>250</b> 〇	<b>300</b> 〇 〇	<b>50</b> O	<b>100</b> O	20 150 0	00 200 0	<b>250</b> 〇	<b>300</b> O O
	xis stroke (mm) xis stroke (mm) 50 100 150	<b>50</b> O O	<b>100</b> O O O	1! 150 0 0 0	50 200 0 0	<b>250</b> O O O	<b>300</b> O O O	<b>50</b> O O O	<b>100</b> O O O	20 150 0 0	00 200 0 0	<b>250</b> O O O	<b>300</b> O O O
	xis stroke (mm) xis stroke (mm) 50 100 150 200	<b>50</b> O O O O	100 0 0 0 0	1! 150 0 0 0 0 0	50 200 0 0 0 0 0	<b>250</b> O O O O	300 0 0 0 0	<b>50</b> 0 0 0 0	100 0 0 0 0	20 150 0 0 0 0	00 200 0 0 0	<b>250</b> O O O O	<b>300</b> 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	250 0 0 0 0 0 0 0 0 0 0	<b>300</b> O O O O O O O O O	<b>50</b> 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	<b>50</b> 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	<b>50</b> 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	<b>50</b> 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	<b>50</b> 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	<b>50</b> 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	<b>50</b> 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	<b>50</b> 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	<b>50</b> 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	<b>50</b> 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	<b>50</b> 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	<b>50</b> 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	<b>50</b> 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	<b>50</b> 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	<b>50</b> 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		300 0 0 0 0 0 0 0 0 0 0 0 0	<b>50</b> 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	<b>50</b> 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   550   665   700   750   800   850   950   1000	<b>50</b> 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	<b>50</b> 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	<b>50</b> 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	0	0	Ő	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
X-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.)					
Note 1 All-avis standard cable 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)
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.

	<b>K3</b> (	Cartesia	n Robot	IA	
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opeemean								
Item		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	Cable exit direction (Outside)			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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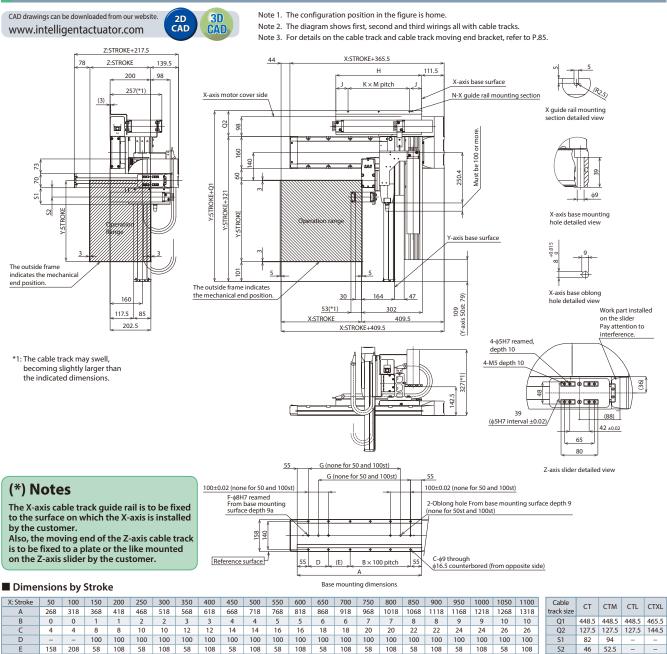
Κ

М

251 276

130 155

2 2 2 2 2 2 2



1058 1108

145 120 125 130

127.5 132.5 140

726 751

<b>IK3-</b>	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 First Cable	
			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)	100 150 200 250 350 400 450 500 550 600 650 700												
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	Õ	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	<b>50</b>	<b>100</b>	<b>150</b>	<b>200</b>	<b>250</b>	<b>300</b>	<b>50</b>	<b>100</b>	<b>150</b>	<b>200</b>	<b>250</b>	300
	100	ŏ	Ő	Ö	ŏ	Ő	ŏ	Õ	ŏ	Ő	Ő	0	0
- F	150	Õ	0	0	0	0	0	0	Ő	0	0	0	0
	200	Ő	Ö	0	Ő	0	Ő	Ő	Ő	0	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 a send while many		*2 0 t. th	. Curto data a com		Scieccia Z

\*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.



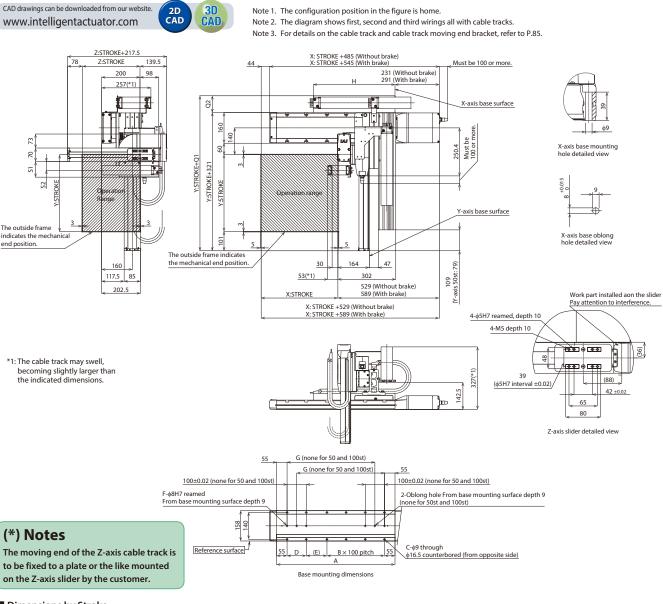
Specificati	ons					
ltem		X-axis	Y-axis	Z-axis		
Axis model		RCP6-WSA16C	RCP6-SA8R	RCP6-SA7R		
Stroke (Every 50	mm)	50~1100mm	50~500mm	50~300mm		
	MHL			105mm/s		
May an and *	MHM	210mm/s	400mm/s	210mm/s		
Max. speed *	MHH	210mm/s	400mm/s	420mm/s		
	MHS			640mm/s		
Motor size		56 High thrust	56 High 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 \u00f816mm rolled C10	Ball screw $\phi$ 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	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		
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	-	-
* Dimen change		- / - /		

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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)	Y-axis stroke (mm) 50~400			m)	450~500 (Every 50mm)			nm)
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 <b>550</b>	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
<b>650</b>	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	0	0	200	250	0		0	0	200	250	0
							$\cap$					
							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
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
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	0 0 0 0 0
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
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 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0
150 200 250 300 350 400												0 0 0 0 0 0 0 0 0
150 200 250 300 350 400												0 0 0 0 0 0 0 0 0 0
150 200 250 300 350 400												0 0 0 0 0 0 0 0 0 0 0
150 200 250 300 350 400												
150 200 250 300 350 400 450 550 550 600 650 700												
150 200 250 300 400 450 550 600 650 750												
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												
150 200 250 300 400 450 550 550 550 650 700 750 800 850 900 950												

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
X-axis stroke (mm)	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	0	0	0	0	0	0	0	0	0	0	0
	850	0	0	0	0	0	0	0	0	Õ	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		Ū.	0			Ų	0	Ų	0		0
	xis stroke (mm)				50						00		
Z-a:	xis stroke (mm)	50	100	150	<b>200</b>	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
X-axis stroke (mm)	500	ŏ	0	Ő	0	Ő	Õ	0	0	Ő	0	- O	0
- Ke	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
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	0	0	0	0	0	0	0	0	0	0	0
	850	0	0	0	0	0	0	0	0	Õ	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	0	0	0		0
	xis stroke (mm)				50						00		
Z-a:	xis stroke (mm) 50	<b>50</b>	<b>100</b>	<b>150</b>	<b>200</b>	<b>250</b>	<b>300</b>	<b>50</b>	<b>100</b>	<b>150</b>	<b>200</b>	<b>250</b>	<b>300</b>
	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
	300 350	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	Õ	0	Ő	0	0	0	0	0	Ő	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			
	MHL			4mm			
Ball screw	MHM	10mm	20mm	8mm			
lead	MHH	TUMM	20mm	16mm			
	MHS			24mm			
Drive system		Ball screw \016mm rolled C10	Ball screw \u00f616mm rolled C10	Ball screw \u00f812mm rolled C10			
Positioning repe	atability	±0.01mm					
Base material		Aluminum					
Ambient opera temperature, h		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		
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.

\* 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

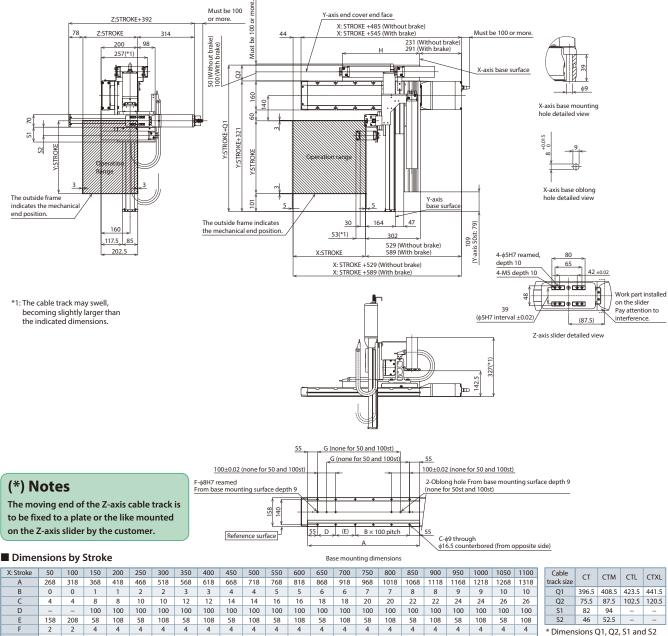
н

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

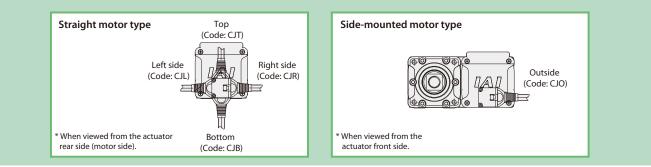
Option Code **B** 

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 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

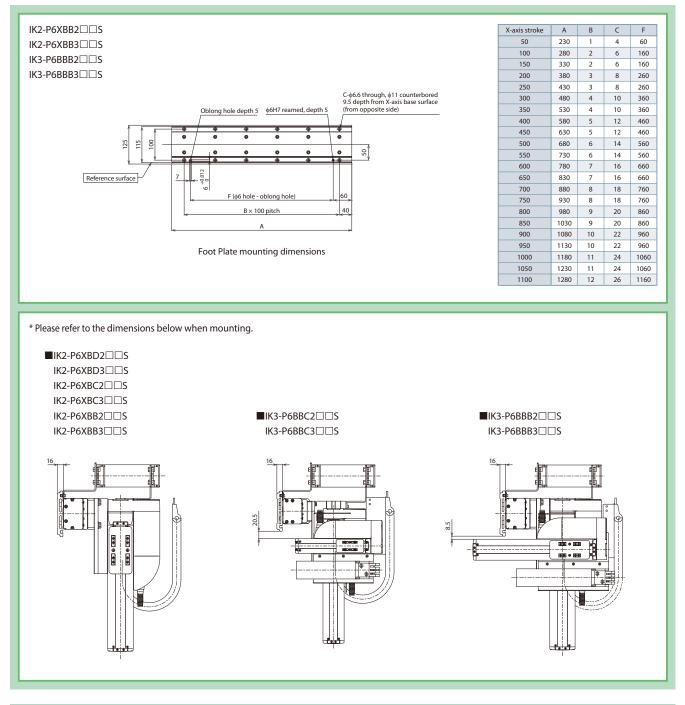
14 545

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

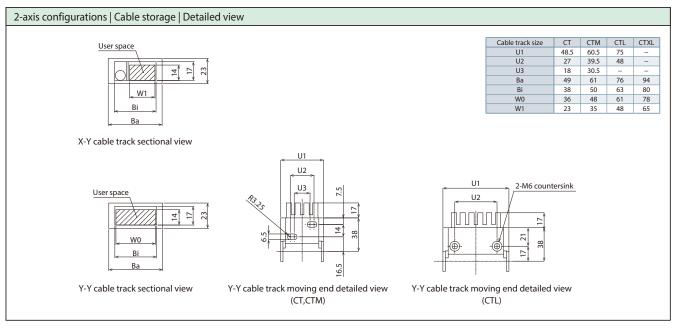
 Description
 The slider of the standard slider type specification is changed to the same roller structure as the cleanroom type. When using the slider roller spec., the appearance and dimensions of the slider cover will be the same as the cleanroom type.

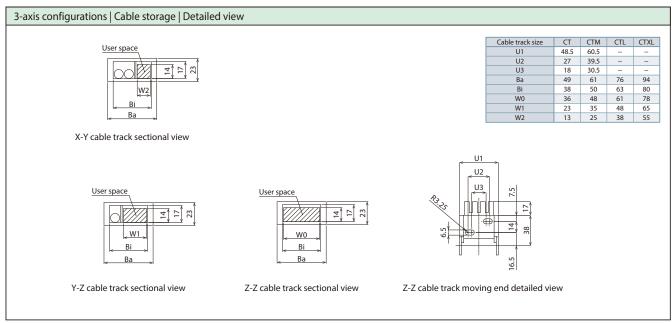
 Changing to roller specification will make the external view and dimensions of the slider cover the same as the cleanroom type.

## **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.

■ IK3-P6BBE1□□S X-axis: WSA16R

■ IK3-P6BBE2□□S X-axis: WSA16C

- 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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