

Cartesian RCP6 RoboCylinder System IK-P6 Series

**ROBO
CYLINDER**

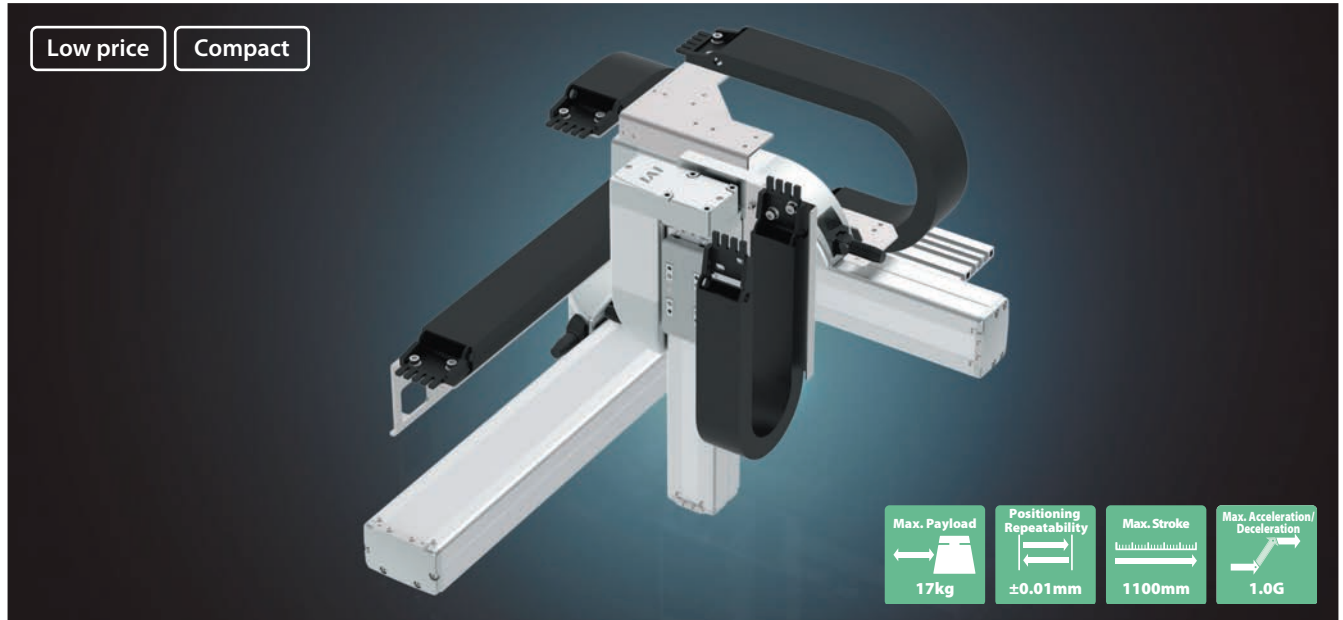


**2-/3-Axis Combinations with
High-res Battery-less Absolute Encoder**

Cartesian RoboCylinder have never been more affordable.

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



1 Diverse Combinations

The available combinations have been greatly expanded from the conventional models, allowing the ideal selection to suit your needs from **396 options**. (7056 options including the cable track selection) New configuration types using the RCP6 wide slider type (WSA) have been added.

2-axis combinations (X-axis/Y-axis)

- SA8 + SA7
- SA7 + SA6
- SA6 + SA4
- WSA16 + SA8
- WSA14 + SA7



2-axis combinations (Y-axis/Z-axis)

- SA8 + SA7
- SA7 + SA6
- SA6 + SA4



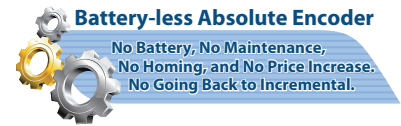
3-axis combinations (X-axis/Y-axis/Z-axis)

- SA8 + SA7 + SA6
- SA7 + SA6 + SA4
- WSA16 + SA8 + SA7
- WSA14 + SA7 + SA6



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

Equipped as standard with Battery-less Absolute Encoder for all configuration axes.
No battery maintenance is required since there is no battery.
Homing operation is not required at startup or after emergency stop or malfunction.
This reduces your operation time, resulting in reduced production costs.

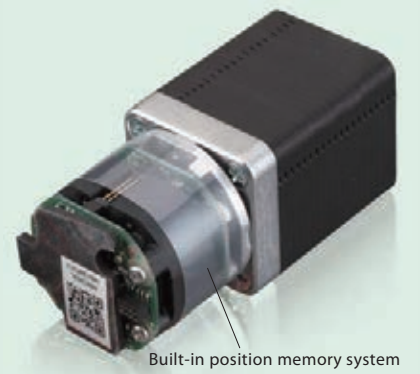


The advantages of using an absolute encoder.

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

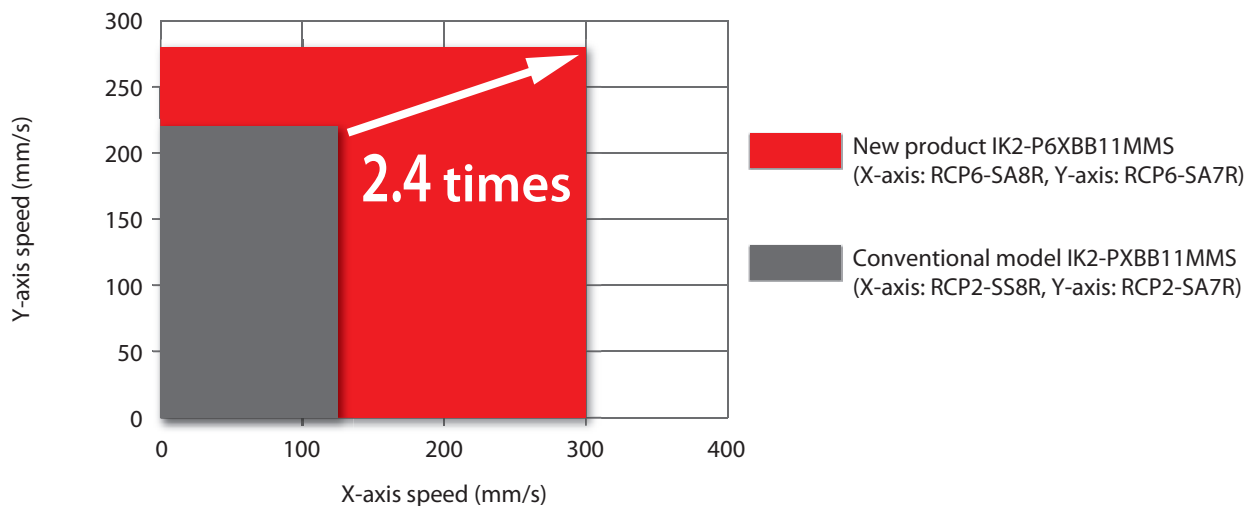
The advantages of battery-less.

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



3 Higher Speed

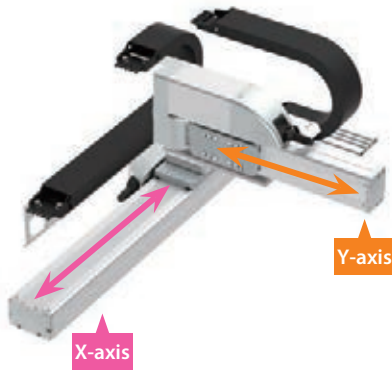
Compatible with PowerCon which is equipped with a high-output driver.
The maximum speed has been increased with the use of PowerCon.
This can reduce cycle time and help improve productivity.



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

XYB (Y-axis base mount) type

→ 2-axis combinations IK2-P6XB:
p5~34



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

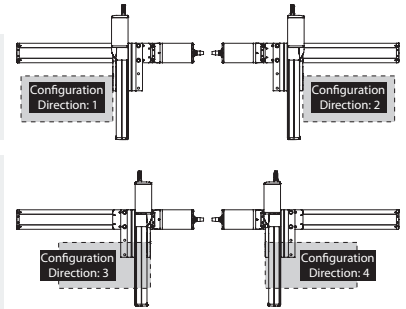
Point 1

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

Point 2

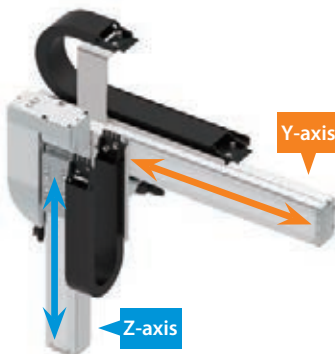
A cable track can be selected for Y-axis wiring. Select the cable track size from a maximum of 4 different sizes. You can also select a cable track for wiring by the user.

Configuration Direction



YZB (Z-axis base mount) type

→ 2-axis combinations IK2-P6YB:
p35~52



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

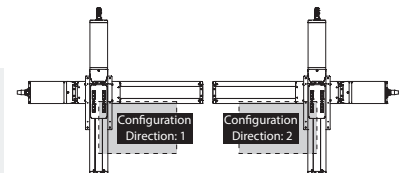
Point 1

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

Point 2

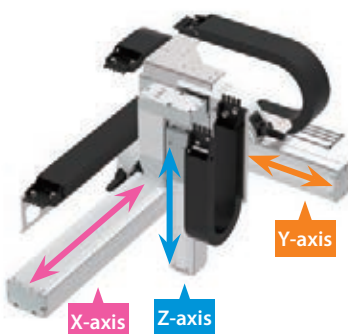
A cable track can be selected for Z-axis wiring. Select the cable track size from a maximum of 4 different sizes. You can also select a cable track for wiring by the user.

Configuration Direction



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

→ 3-axis combinations IK3-P6BB:
p53~82



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).

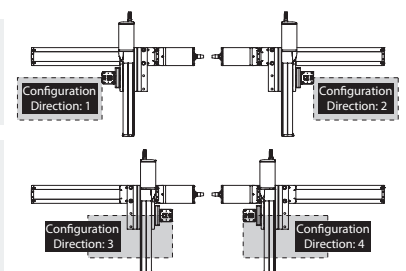
Point 1

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.

Configuration Direction



Cartesian RoboCylinder

RoboCylinder 2-axis Combinations

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

IK2
Pulse Motor



RoboCylinder 3-axis Combinations

IK3-P6BBC1□□S	53
IK3-P6BBC2□□S	55
IK3-P6BBC3□□S	57
IK3-P6BBB1□□S	59
IK3-P6BBB2□□S	61
IK3-P6BBB3□□S	63
IK3-P6BBF1□□S	65
IK3-P6BBF2□□S	67
IK3-P6BBF3□□S	69
IK3-P6BBE1□□S	71
IK3-P6BBE2□□S	73
IK3-P6BBE3□□S	75

IK3
Pulse Motor



Options

77

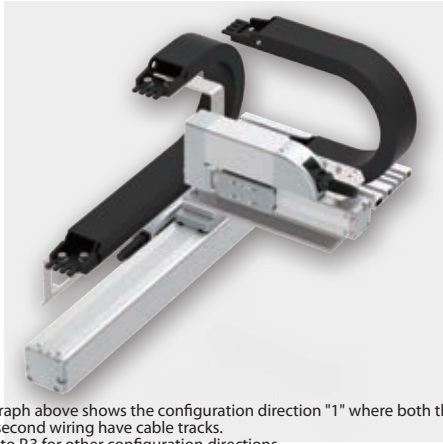
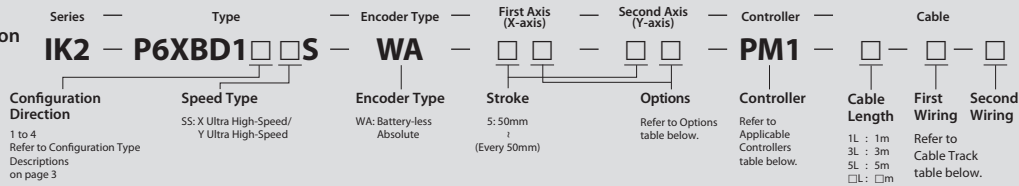
IK2-P6XBD1□□S

RCP6 2-axis combination

X-axis: SA6R (Side-mounted)

Y-axis: SA4R (Side-mounted)

Model Specification Items



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

Payload by Acceleration

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

(Unit: kg)

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

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

Cable Length

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

- Note 1. All-axis standard cable is used.
- Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.
- Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Cable Track

Type	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)
Without cable track (cable only)	N	See P.79	<input type="radio"/>	<input type="radio"/>
Cable track S size (inner width: 38mm)	CT		<input type="radio"/>	<input type="radio"/>
Cable track M size (inner width: 50mm)	CTM		<input type="radio"/>	<input type="radio"/>
Cable track L size (inner width: 63mm)	CTL		<input type="radio"/>	<input type="radio"/>
Cable track XL size (inner width: 80mm) *	CTXL		<input type="radio"/>	Cannot be selected *

* Only the first wiring can be selected

Specifications

Item	X-axis	Y-axis
Axis model	RCP6-SA6R	RCP6-SA4R
Stroke (Every 50mm)	50~800mm	50~150mm
Max. speed *	640mm/s	560mm/s
Motor size	42□ Pulse motor	35□ Pulse motor
Ball screw lead	20mm	16mm
Drive system	Ball screw ø10mm rolled C10	Ball screw ø8mm rolled C10
Positioning repeatability	±0.01mm	
Base material	Aluminum	
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)	

* The max. 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.80.

Maximum Stroke

X axis 800 mm

Y axis 150 mm

Max. Speed (Ultra High-speed type)

X axis 640 mm/s

Y axis 560 mm/s

Applicable Controllers

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

□ X-axis: SA6R, Y-axis: SA4R

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options

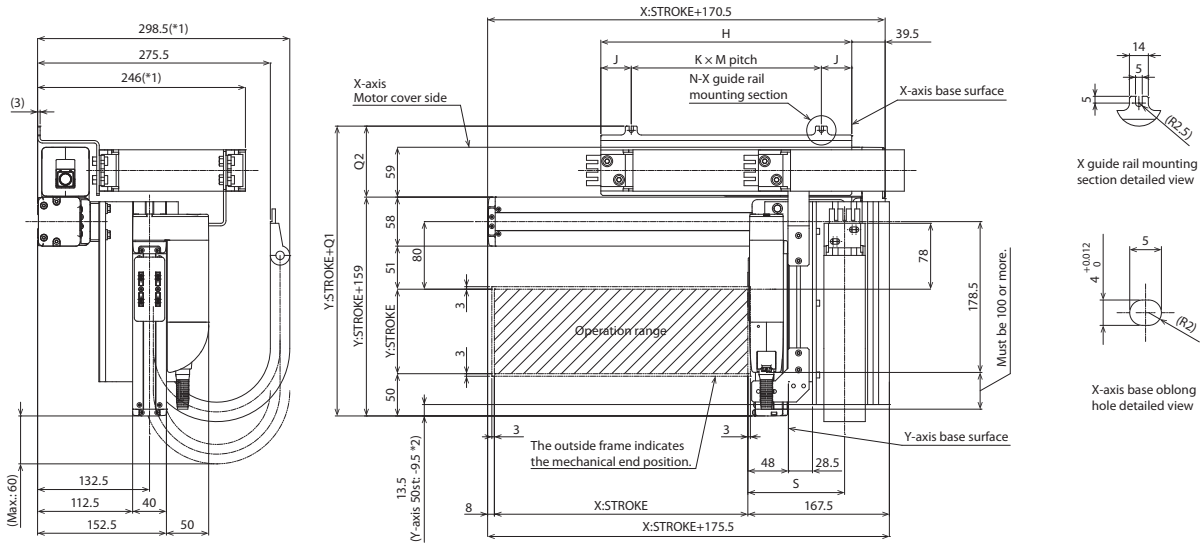
Type	Option code	Reference page	X-axis	Y-axis
Brake	B	See P.77	<input type="radio"/>	<input type="radio"/>
Non-motor end specification	NM	See P.78	<input type="radio"/>	<input type="radio"/>
Slider roller specification	SR	See P.78	<input type="radio"/>	<input type="radio"/>

Dimensions

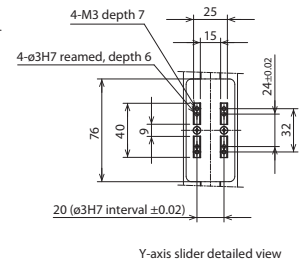
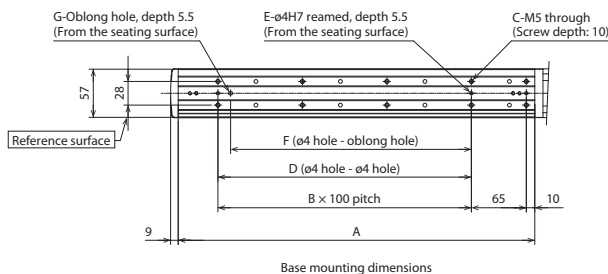
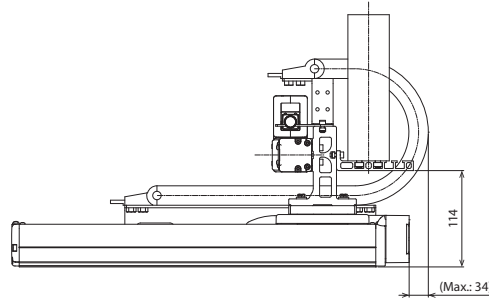
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Note 1. The configuration position in the figure is home.
Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



*1: The cable track may swell, becoming slightly larger than the indicated dimensions.
*2: When the Y-axis is 50st, the Y guide rail overhangs the actuator tip.



(*) Notes
The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer.
Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.79)

■ Dimensions by Stroke

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

Cable track size	CT	CTM	CTL	CTLX
Q1	243	256	269	286
Q2	84	97	110	127
S	114.5	121	127.5	-

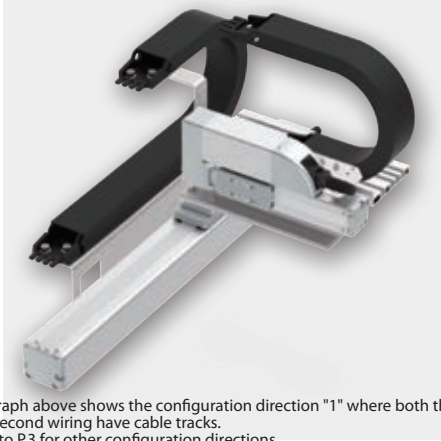
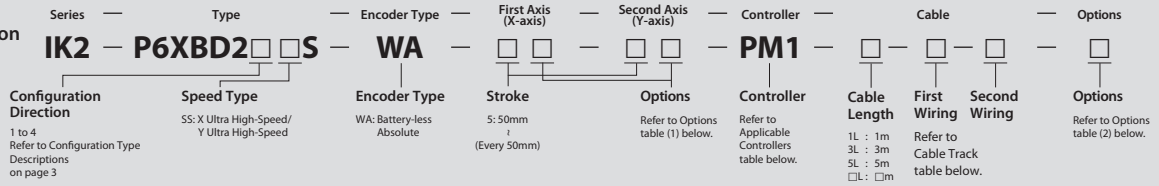
* Dimensions Q1, Q2 and S change depending on the size of the cable track.

IK2-P6XBD2□□S

RCP6 2-axis combination

X-axis: SA6C (Straight)
Y-axis: SA4R (Side-mounted)

Model Specification Items



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

Payload by Acceleration

■ SS type: X ultra high-speed/Y ultra high-speed (Unit: kg)

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

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

Cable Length

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

Note 1. All-axis standard cable is used.
Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.
Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Cable Track

Type	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)
Without cable track (cable only)	N	See P.79	<input type="radio"/>	<input type="radio"/>
Cable track S size (inner width: 38mm)	CT		<input type="radio"/>	<input type="radio"/>
Cable track M size (inner width: 50mm)	CTM		<input type="radio"/>	<input type="radio"/>
Cable track L size (inner width: 63mm)	CTL		<input type="radio"/>	<input type="radio"/>
Cable track XL size (inner width: 80mm) *	CTXL		<input type="radio"/>	Cannot be selected *

* Only the first wiring can be selected

Specifications

Item	X-axis	Y-axis
Axis model	RCP6-SA6C	RCP6-SA4R
Stroke (Every 50mm)	50~800mm	50~150mm
Max. speed *	640mm/s	560mm/s
Motor size	42□ Pulse motor	35□ Pulse motor
Ball screw lead	20mm	16mm
Drive system	Ball screw ø10mm rolled C10	Ball screw ø8mm rolled C10
Positioning repeatability	±0.01mm	
Base material	Aluminum	
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)	

* The max. 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.80.

■ Maximum Stroke

X axis 800 mm Y axis 150 mm

■ Max. Speed (Ultra High-speed type)

X axis 640 mm/s Y axis 560 mm/s

Applicable Controllers

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

□ X-axis: SA6C, Y-axis: SA4R

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options (1)

Type	Option code	Reference page	X-axis	Y-axis
Brake	B	See P.77	<input type="radio"/>	<input type="radio"/>
Cable exit direction (Top)	CJT	See P.77	<input type="radio"/>	Cannot be selected
Cable exit direction (Right)	CJR	See P.77	<input type="radio"/>	
Cable exit direction (Left)	CJL	See P.77	<input type="radio"/>	
Cable exit direction (Bottom)	CJB	See P.77	<input type="radio"/>	
Non-motor end specification	NM	See P.78	<input type="radio"/>	<input type="radio"/>
Slider roller specification	SR	See P.78	<input type="radio"/>	<input type="radio"/>

Options (2)

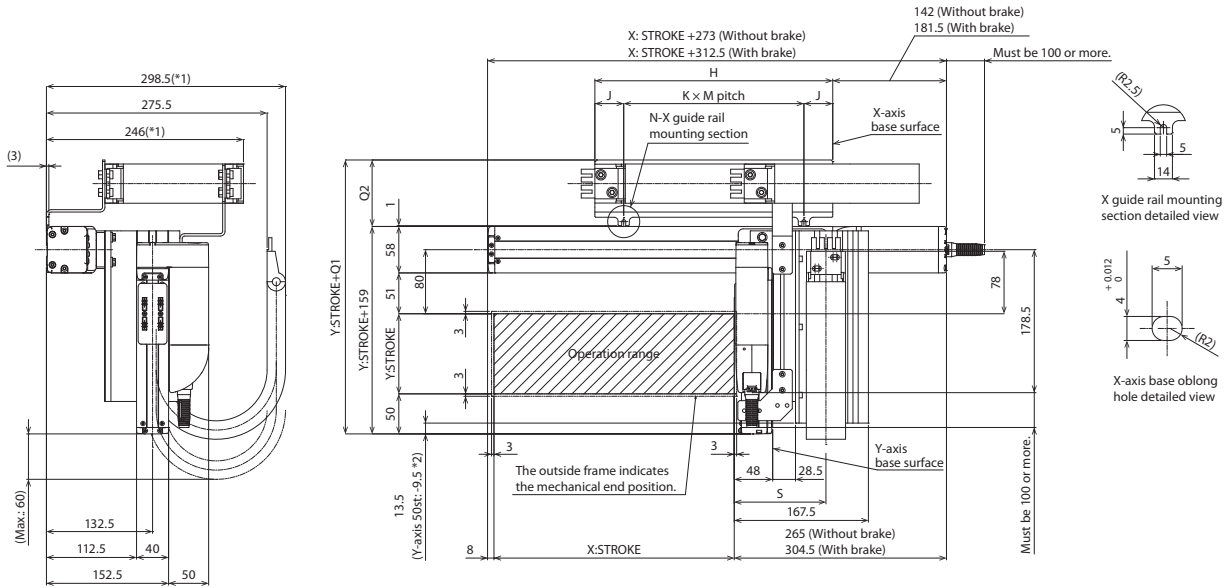
Type	Option code	Reference page
Foot plate	FTP	See P.77

Dimensions

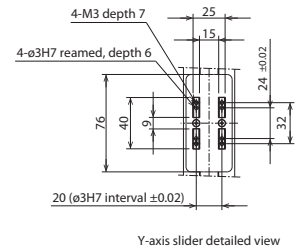
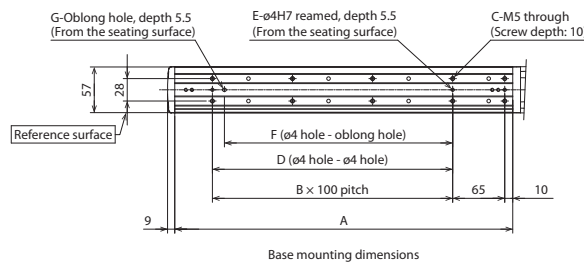
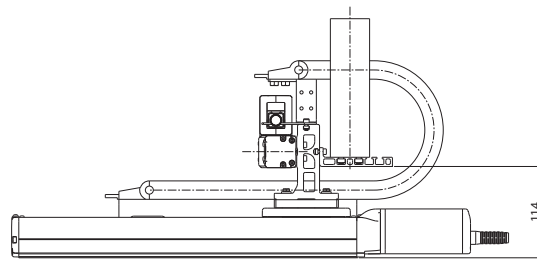
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Note 1. The configuration position in the figure is home.
Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



*1: The cable track may swell, becoming slightly larger than the indicated dimensions.
*2: When the Y-axis is 50st, the Y guide rail overhangs the actuator tip.



(*) Notes

The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer.
When the foot plate option is selected, the unit will be shipped fixed on the foot plate. (See P.77)
Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.79)

■ Dimensions by Stroke

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

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

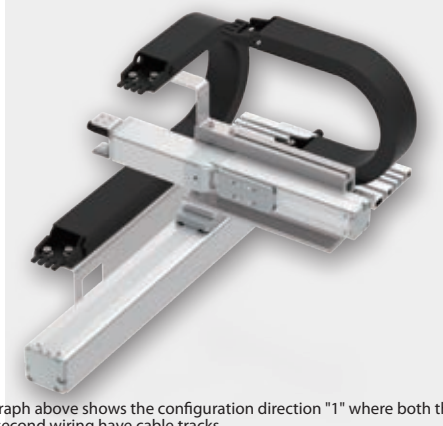
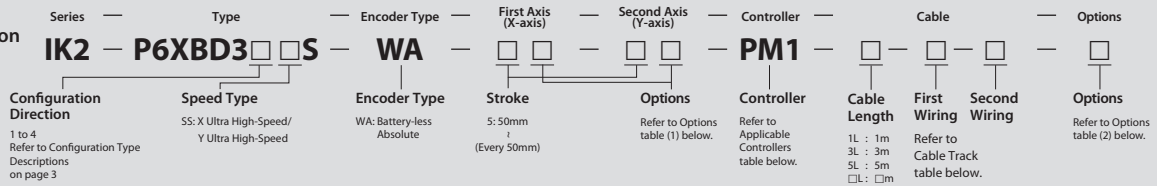
* Dimensions Q1, Q2 and S change depending on the size of the cable track.

IK2-P6XBD3□□S

RCP6 2-axis combination

X-axis: SA6C (Straight)
Y-axis: SA4C (Straight)

Model Specification Items



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

Payload by Acceleration

SS type: X ultra high-speed/Y ultra high-speed (Unit: kg)

Acceleration/ deceleration (G)	Y-axis stroke (mm)	50~150 (Every 50mm)
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0.3		3
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Cable Length

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

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Cable Track

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Cable track S size (inner width: 38mm)	CT		○	○
Cable track M size (inner width: 50mm)	CTM		○	○
Cable track L size (inner width: 63mm)	CTL		○	○
Cable track XL size (inner width: 80mm) *	CTXL		○	Cannot be selected *

* Only the first wiring can be selected

Specifications

Item	X-axis	Y-axis
Axis model	RCP6-SA6C	RCP6-SA4C
Stroke (Every 50mm)	50~800mm	50~150mm
Max. speed *	640mm/s	560mm/s
Motor size	42□ Pulse motor	35□ Pulse motor
Ball screw lead	20mm	16mm
Drive system	Ball screw ø10mm rolled C10	Ball screw ø8mm rolled C10
Positioning repeatability	±0.01mm	
Base material	Aluminum	
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)	

* The max. 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.80.

Maximum Stroke

X axis 800 mm Y axis 150 mm

Max. Speed (Ultra High-speed type)

X axis 640 mm/s Y axis 560 mm/s

Applicable Controllers

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

□ X-axis: SA6C, Y-axis: SA4C

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options (1)

Type	Option code	Reference page	X-axis	Y-axis
Brake	B	See P.77	○	○
Cable exit direction (Top)	CJT	See P.77	○	Cannot be selected
Cable exit direction (Right)	CJR	See P.77	○	
Cable exit direction (Left)	CJL	See P.77	○	
Cable exit direction (Bottom)	CJB	See P.77	○	
Non-motor end specification	NM	See P.78	○	○
Slider roller specification	SR	See P.78	○	○

Options (2)

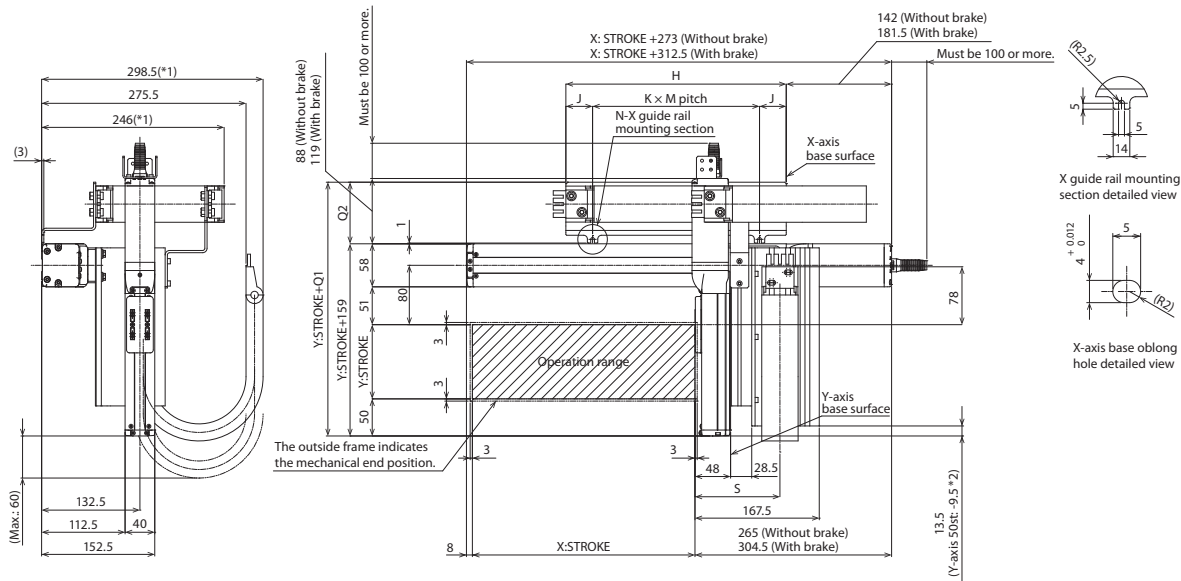
Type	Option code	Reference page
Foot plate	FTP	See P.77

Dimensions

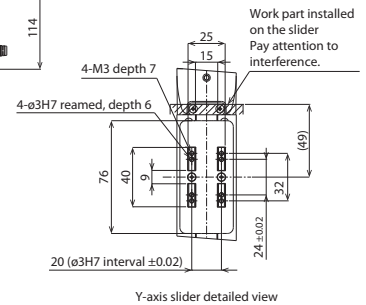
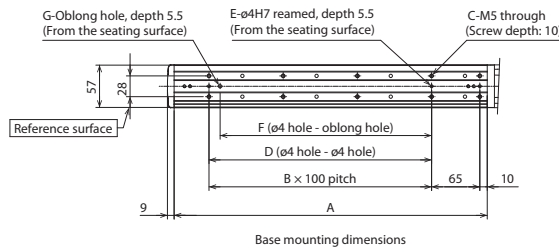
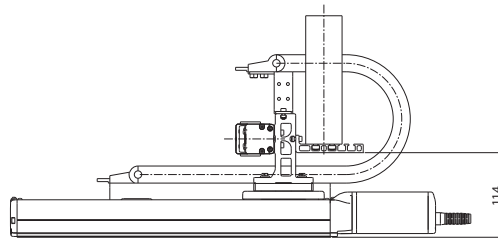
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Note 1. The configuration position in the figure is home.
Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



*1: The cable track may swell, becoming slightly larger than the indicated dimensions.
*2: When the Y-axis is 50st, the Y guide rail overhangs the actuator tip.



(*) Notes

The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer.
When the foot plate option is selected, the unit will be shipped fixed on the foot plate. (See P.77)
Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.79)

■ Dimensions by Stroke

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

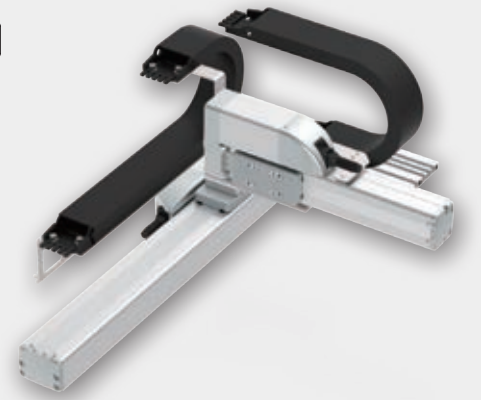
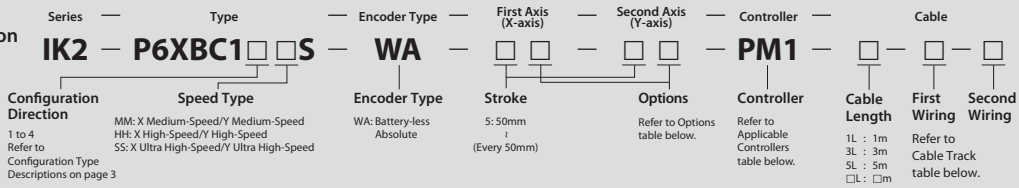
Cable track size	CT	CTM	CTL	CTXL
Q1	242	255	268	285
Q2	83	96	109	126
S	114.5	121	127.5	-

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

IK2-P6XBC1□□S

RCP6 2-axis combination
 X-axis: SA7R (Side-mounted)
 Y-axis: SA6R (Side-mounted)

Model Specification Items



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

Payload by Acceleration

MM type: X medium-speed/Y medium-speed (Unit: kg)

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

HH type: X high-speed/Y high-speed

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

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

Acceleration/deceleration (G)	Y-axis stroke (mm)	50	100~200 (Every 50mm)
		0.1	
0.3			4
0.5		3	2.5
0.7		2	1.5
1			1

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

Cable Length

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

- Note 1. All-axis standard cable is used.
- Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.
- Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Cable Track

Type	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)
Without cable track (cable only)	N	See P.79	○	○
Cable track S size (inner width: 38mm)	CT		○	○
Cable track M size (inner width: 50mm)	CTM		○	○
Cable track L size (inner width: 63mm)	CTL		○	○
Cable track XL size (inner width: 80mm) *	CTXL		○	Cannot be selected *

* Only the first wiring can be selected

Specifications

Item	X-axis	Y-axis
Axis model	RCP6-SA7R	RCP6-SA6R
Stroke (Every 50mm)	50~800mm	50~200mm
Max. speed *	MM	280mm/s
	HH	560mm/s
	SS	640mm/s
Motor size	56□ Pulse motor	42□ Pulse motor
Ball screw lead	MM	8mm
	HH	16mm
	SS	24mm
Drive system	Ball screw ø12mm rolled C10	Ball screw ø10mm rolled C10
Positioning repeatability	±0.01mm	
Base material	Aluminum	
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)	

Maximum Stroke

X axis 800 mm Y axis 200 mm

Max. Speed (Ultra High-speed type)

X axis 640 mm/s Y axis 800 mm/s

* The max. 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.80.

Applicable Controllers

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

□ X-axis: SA7R, Y-axis: SA6R

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options

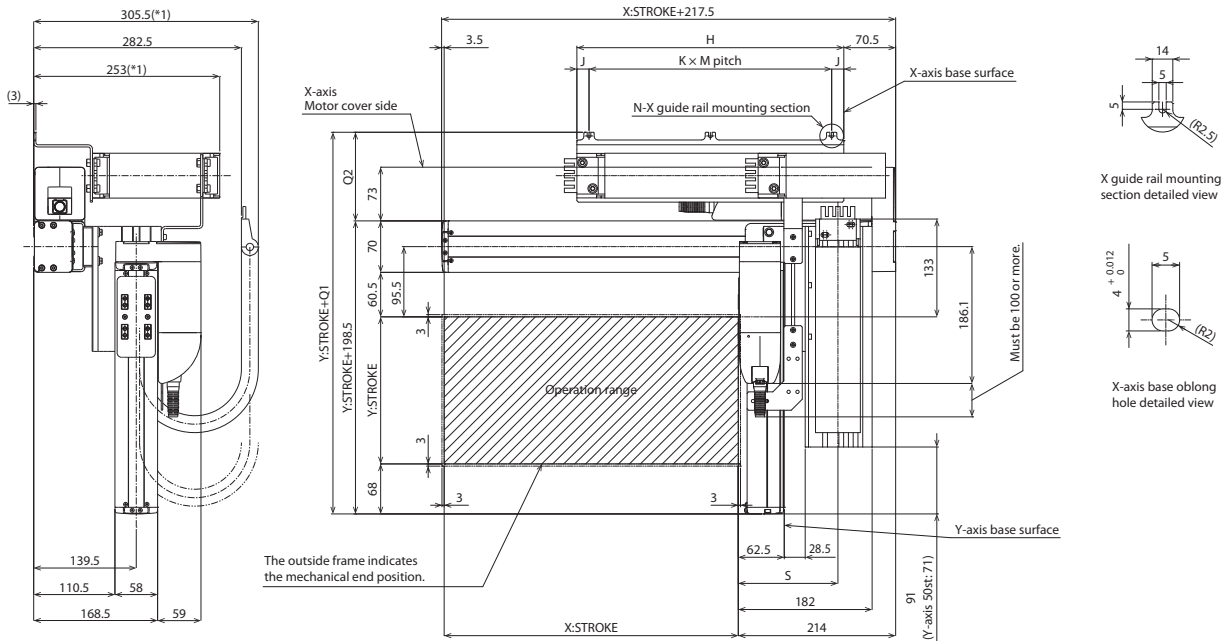
Type	Option code	Reference page	X-axis	Y-axis
Brake	B	See P.77	○	○
Non-motor end specification	NM	See P.78	○	○
Slider roller specification	SR	See P.78	○	○

Dimensions

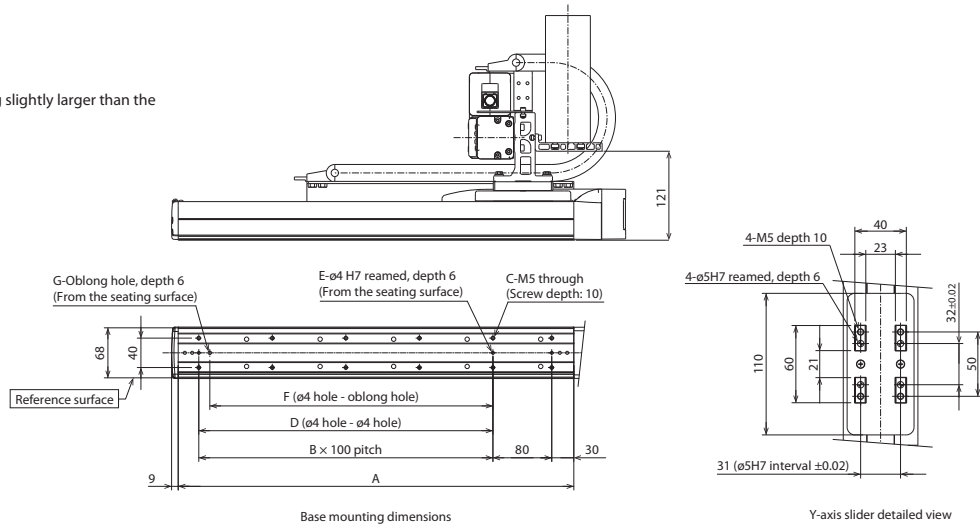
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Note 1. The configuration position in the figure is home.
Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



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



(*) Notes

The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer.
Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.79)

■ 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
B	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8
C	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20
D	0	0	100	200	200	300	300	400	400	500	500	600	600	700	700	800
E	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	0	85	85	185	185	285	285	385	385	485	485	585	585	685	685	785
G	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
H	188	213	238	263	288	313	338	363	388	413	438	463	488	513	538	563
J	16.5	16.5	14	16.5	16.5	16.5	14	16.5	14	16	15	66.5	44	56.5	69	16
K	1	1	1	2	2	2	2	2	2	3	3	3	2	2	2	3
M	155	180	210	115	127.5	140	155	165	180	127	136	110	200	200	200	177
N	2	2	2	3	3	3	3	3	3	4	4	4	3	3	3	4

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

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

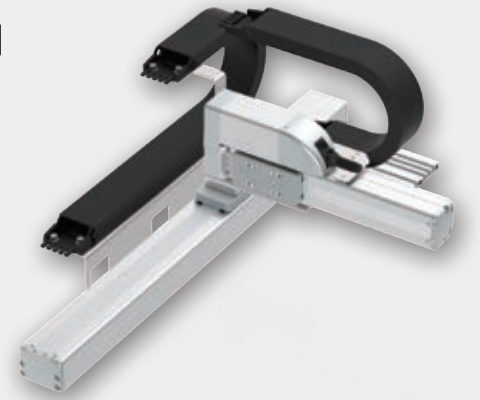
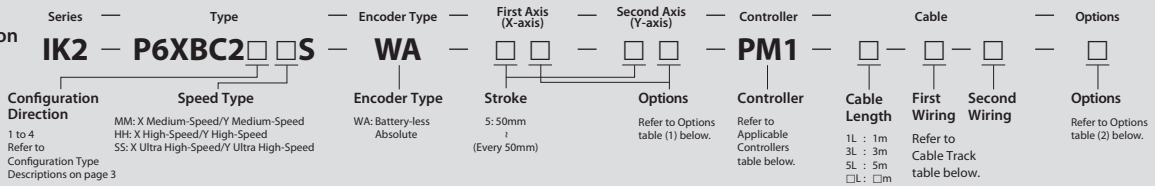
IK2-P6XBC2□□S

RCP6 2-axis combination

X-axis: SA7C (Straight)

Y-axis: SA6R (Side-mounted)

Model Specification Items



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

Payload by Acceleration

MM type: X medium-speed/Y medium-speed

(Unit: kg)

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

HH type: X high-speed/Y high-speed

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

Acceleration/ deceleration (G)	Y-axis stroke (mm)	50~200 (Every 50mm)	Y-axis stroke (mm)	
			50	100~200 (Every 50mm)
0.1		5		4
0.3		5		4
0.5		4	3	2.5
0.7		2	2	1.5
1			1	

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

Cable Length

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

Note 1. All-axis standard cable is used.
Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.
Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Cable Track

Type	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)
Without cable track (cable only)	N	See P.79	<input type="radio"/>	<input type="radio"/>
Cable track S size (inner width: 38mm)	CT		<input type="radio"/>	<input type="radio"/>
Cable track M size (inner width: 50mm)	CTM		<input type="radio"/>	<input type="radio"/>
Cable track L size (inner width: 63mm)	CTL		<input type="radio"/>	<input type="radio"/>
Cable track XL size (inner width: 80mm) *	CTXL		<input type="radio"/>	Cannot be selected *

* Only the first wiring can be selected

Specifications

Item	X-axis	Y-axis
Axis model	RCP6-SA7C	RCP6-SA6R
Stroke (Every 50mm)	50~800mm	50~200mm
Max. speed *	MM	280mm/s
	HH	560mm/s
	SS	640mm/s
Motor size	56□ Pulse motor	42□ Pulse motor
Ball screw lead	MM	8mm
	HH	16mm
	SS	24mm
Drive system	Ball screw ø12mm rolled C10	Ball screw ø10mm rolled C10
Positioning repeatability	±0.01mm	
Base material	Aluminum	
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)	

Maximum Stroke

X axis 800 mm

Y axis 200 mm

Max. Speed (Ultra High-speed type)

X axis 640 mm/s

Y axis 800 mm/s

* The max. 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.80.

Applicable Controllers

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

□ X-axis: SA7C, Y-axis: SA6R

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options (1)

Type	Option code	Reference page	X-axis	Y-axis
Brake	B	See P.77	<input type="radio"/>	<input type="radio"/>
Cable exit direction (Top)	CJT	See P.77	<input type="radio"/>	Cannot be selected
Cable exit direction (Right)	CJR	See P.77	<input type="radio"/>	
Cable exit direction (Left)	CJL	See P.77	<input type="radio"/>	
Cable exit direction (Bottom)	CJB	See P.77	<input type="radio"/>	
Non-motor end specification	NM	See P.78	<input type="radio"/>	
Slider roller specification	SR	See P.78	<input type="radio"/>	<input type="radio"/>

Options (2)

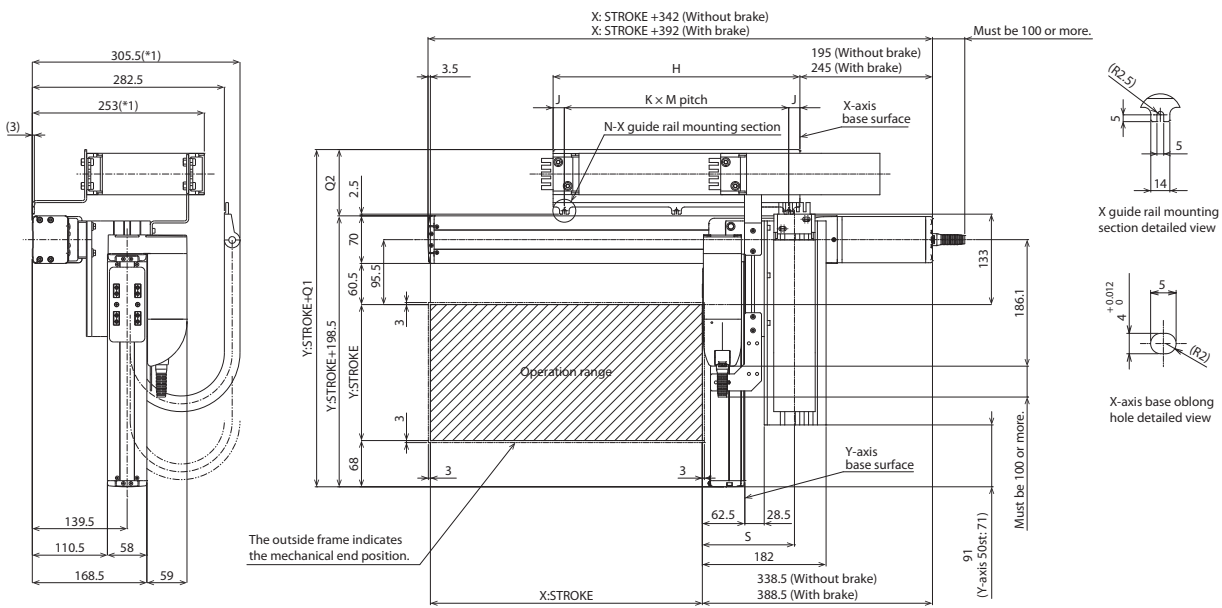
Type	Option code	Reference page
Foot plate	FTP	See P.77

Dimensions

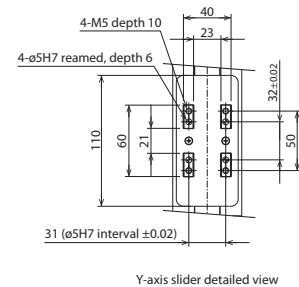
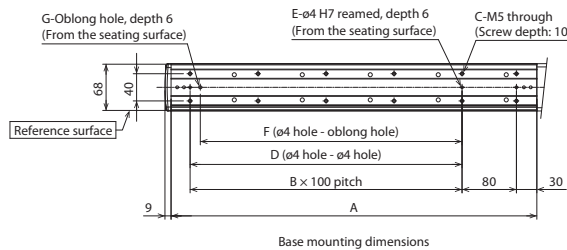
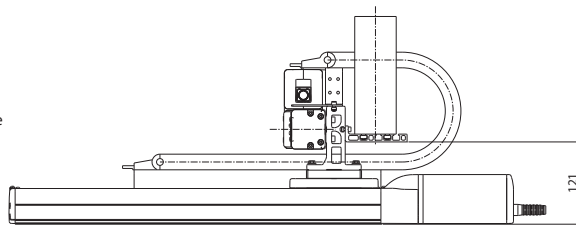
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Note 1. The configuration position in the figure is home.
Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



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



(*) Notes

The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer.
When the foot plate option is selected, the unit will be shipped fixed on the foot plate. (See P.77)
Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.79)

■ 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
B	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8
C	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20
D	0	0	100	200	200	300	300	400	400	500	500	600	600	700	700	800
E	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	0	85	85	185	185	285	285	385	385	485	485	585	585	685	685	785
G	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
H	188	213	238	263	288	313	338	363	388	413	438	463	488	513	538	563
J	16.5	16.5	14	16.5	16.5	16.5	14	16.5	14	16	15	66.5	44	56.5	69	16
K	1	1	1	2	2	2	2	2	2	3	3	3	2	2	2	3
M	155	180	210	115	127.5	140	155	165	180	127	136	110	200	200	200	177
N	2	2	2	3	3	3	3	3	3	4	4	4	3	3	3	4

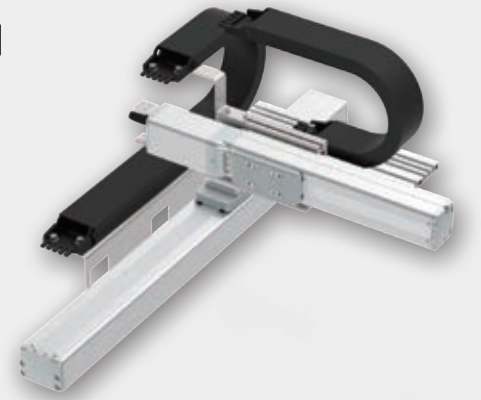
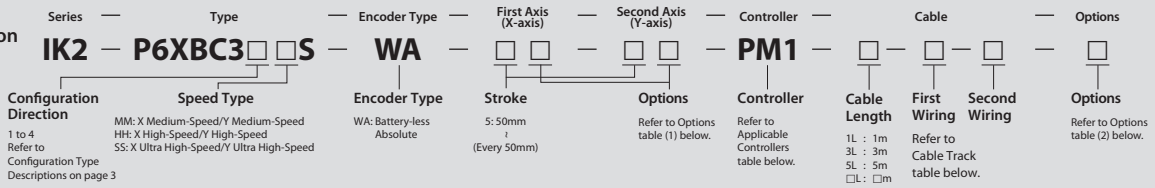
Cable track size	CT	CTM	CTL	CTXL
Q1	283	296	309	326
Q2	84.5	97.5	110.5	127.5
S	129	135.5	142	-

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

IK2-P6XBC3□□S

RCP6 2-axis combination
X-axis: SA7C (Straight)
Y-axis: SA6C (Straight)

Model Specification Items



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

Payload by Acceleration

■ **MM type: X medium-speed/Y medium-speed** (Unit: kg)

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

■ **HH type: X high-speed/Y high-speed** ■ **SS type: X ultra high-speed/Y ultra high-speed**

Acceleration/deceleration (G)	Y-axis stroke (mm)	50~200 (Every 50mm)	Y-axis stroke (mm)	
			50	100~200 (Every 50mm)
0.1		5		4
0.3		5		4
0.5		4	3	2.5
0.7		2	2	1.5
1			1	1

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

Cable Length

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

Note 1. All-axis standard cable is used.
Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.
Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Cable Track

Type	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)
Without cable track (cable only)	N	See P.79	○	○
Cable track S size (inner width: 38mm)	CT		○	○
Cable track M size (inner width: 50mm)	CTM		○	○
Cable track L size (inner width: 63mm)	CTL		○	○
Cable track XL size (inner width: 80mm) *	CTXL		○	Cannot be selected *

* Only the first wiring can be selected

Specifications

Item	X-axis	Y-axis
Axis model	RCP6-SA7C	RCP6-SA6C
Stroke (Every 50mm)	50~800mm	50~200mm
Max. speed *	MM	280mm/s
	HH	560mm/s
	SS	640mm/s
Motor size	56□ Pulse motor	42□ Pulse motor
Ball screw lead	MM	8mm
	HH	16mm
	SS	24mm
Drive system	Ball screw ø12mm rolled C10	Ball screw ø10mm rolled C10
Positioning repeatability	±0.01mm	
Base material	Aluminum	
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)	

■ **Maximum Stroke**

X axis 800 mm Y axis 200 mm

■ **Max. Speed (Ultra High-speed type)**

X axis 640 mm/s Y axis 800 mm/s

* The max. 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.80.

Applicable Controllers

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

□ X-axis: SA7C, Y-axis: SA6C

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options (1)

Type	Option code	Reference page	X-axis	Y-axis
Brake	B	See P.77	○	○
Cable exit direction (Top)	CJT	See P.77	○	Cannot be selected
Cable exit direction (Right)	CJR	See P.77	○	
Cable exit direction (Left)	CJL	See P.77	○	
Cable exit direction (Bottom)	CJB	See P.77	○	
Non-motor end specification	NM	See P.78	○	
Slider roller specification	SR	See P.78	○	○

Options (2)

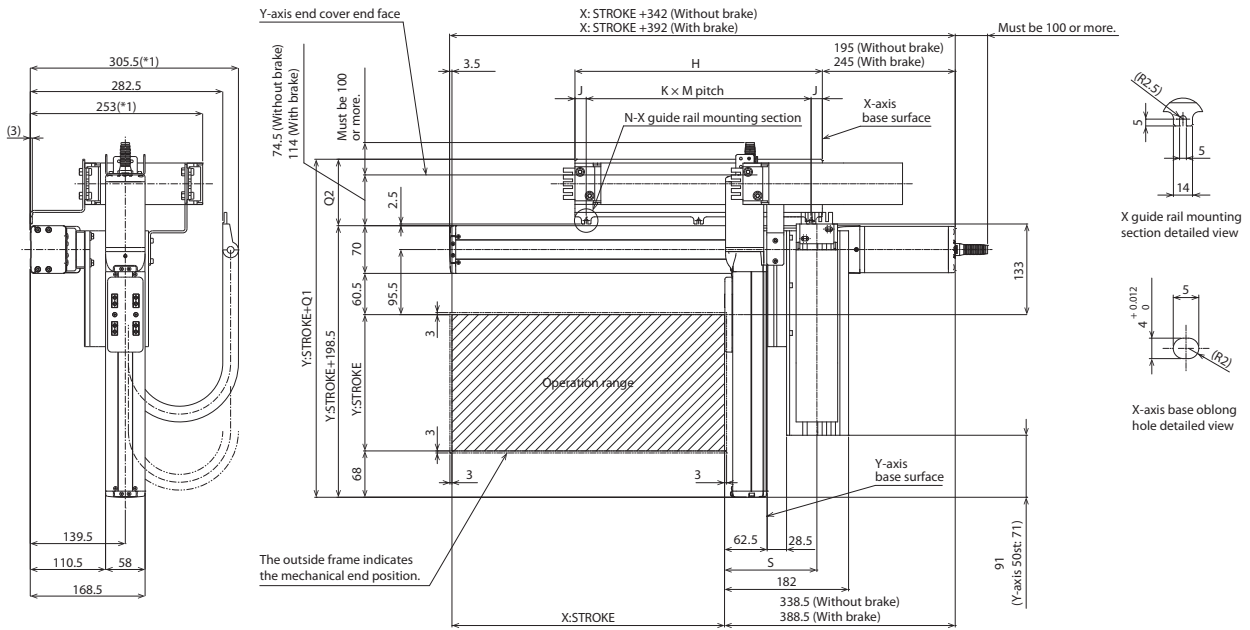
Type	Option code	Reference page
Foot plate	FTP	See P.77

Dimensions

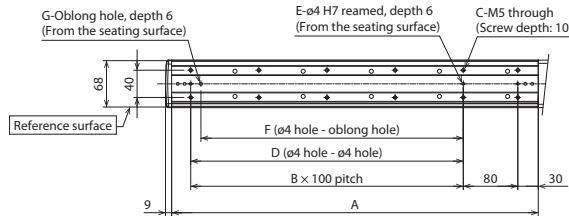
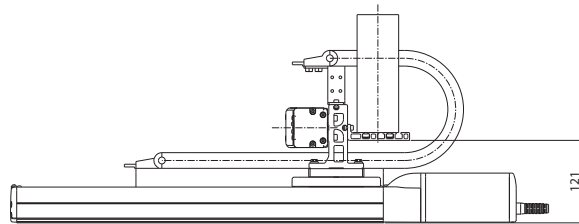
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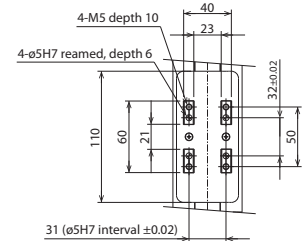
Note 1. The configuration position in the figure is home.
Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



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



Base mounting dimensions



Y-axis slider detailed view

(*) Notes

The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer.
When the foot plate option is selected, the unit will be shipped fixed on the foot plate. (See P.77)
Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.79)

■ 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
B	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8
C	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20
D	0	0	100	200	200	300	300	400	400	500	500	600	600	700	700	800
E	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	0	85	85	185	185	285	285	385	385	485	485	585	585	685	685	785
G	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
H	188	213	238	263	288	313	338	363	388	413	438	463	488	513	538	563
J	16.5	16.5	14	16.5	16.5	16.5	14	16.5	14	16	15	66.5	44	56.5	69	16
K	1	1	1	2	2	2	2	2	2	3	3	3	2	2	2	3
M	155	180	210	115	127.5	140	155	165	180	127	136	110	200	200	200	177
N	2	2	2	3	3	3	3	3	3	4	4	4	3	3	3	4

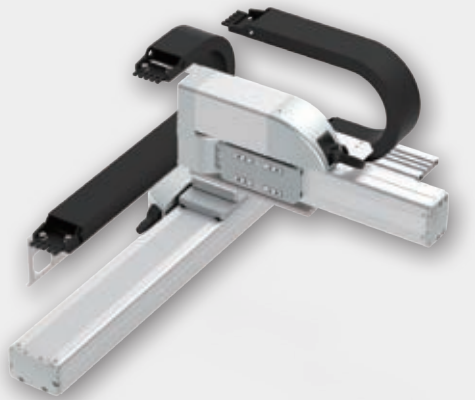
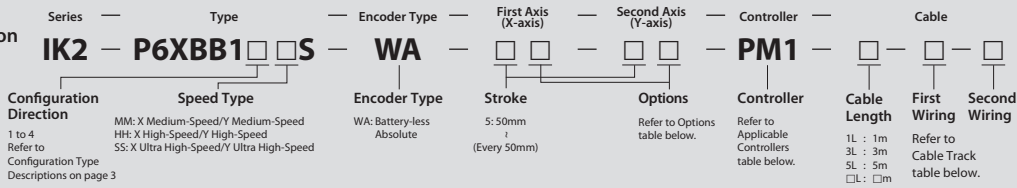
Cable track size	CT	CTM	CTL	CTXL
Q1	283	296	309	326
Q2	84.5	97.5	110.5	127.5
S	129	135.5	142	-

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

IK2-P6XBB1□□S

RCP6 2-axis combination
 X-axis: SA8R (Side-mounted)
 Y-axis: SA7R (Side-mounted)

Model Specification Items



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

Payload by Acceleration

■ **MM type: X medium-speed/Y medium-speed** (Unit: kg)

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

■ **HH type: X high-speed/Y high-speed** ■ **SS type: X ultra high-speed/Y ultra high-speed**

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

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

Cable Length

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

- Note 1. All-axis standard cable is used.
- Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.
- Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Cable Track

Type	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)
Without cable track (cable only)	N	See P.79	○	○
Cable track S size (inner width: 38mm)	CT		○	○
Cable track M size (inner width: 50mm)	CTM		○	○
Cable track L size (inner width: 63mm)	CTL		○	○
Cable track XL size (inner width: 80mm) *	CTXL		○	Cannot be selected *

* Only the first wiring can be selected

Specifications

Item	X-axis	Y-axis
Axis model	RCP6-SA8R	RCP6-SA7R
Stroke (Every 50mm)	50~1100mm	50~250mm
Max. speed *	MM	300mm/s
	HH	400mm/s
	SS	650mm/s
Motor size	56□ High-thrust pulse motor	56□ Pulse motor
Ball screw lead	MM	10mm
	HH	20mm
	SS	30mm
Drive system	Ball screw ø16mm rolled C10	Ball screw ø12mm rolled C10
Positioning repeatability	±0.01mm	
Base material	Aluminum	
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)	

■ **Maximum Stroke**

X axis 1100 mm **Y axis 250 mm**

■ **Max. Speed (Ultra High-speed type)**

X axis 650 mm/s **Y axis 640 mm/s**

* The max. 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.80.

Applicable Controllers

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

□ **X-axis: SA8R**

Type	Reference page
PCON-CFB/CGFB	Please see the RCP6 catalog or PCON-CB/CFB manual.

□ **Y-axis: SA7R**

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options

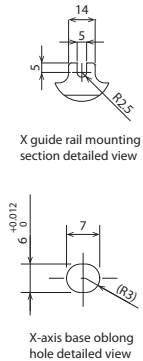
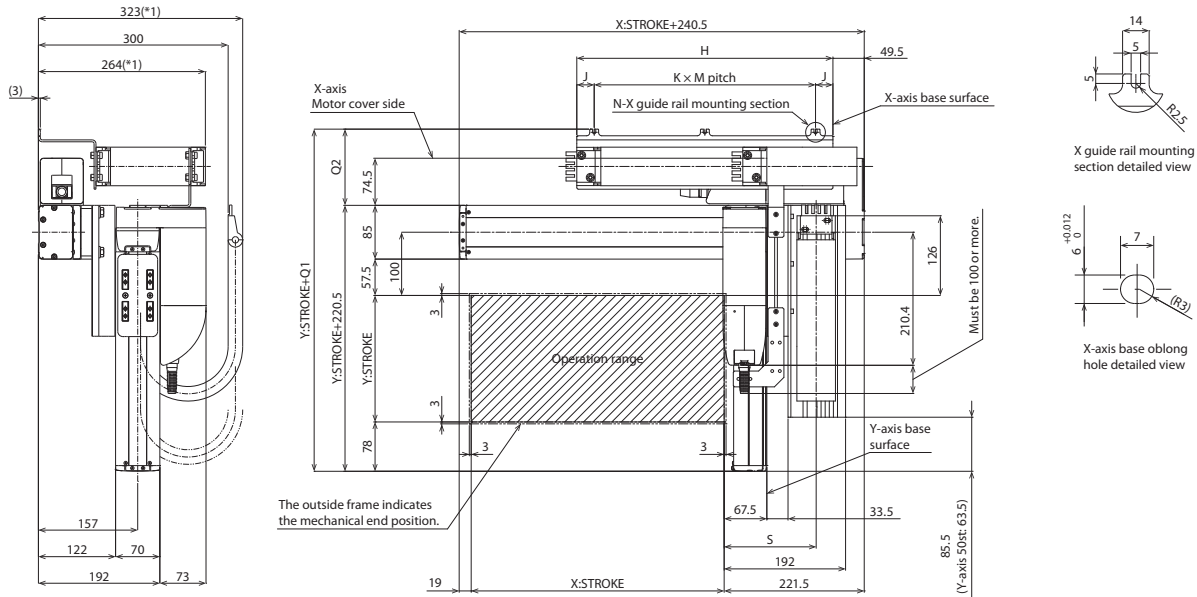
Type	Option code	Reference page	X-axis	Y-axis
Brake	B	See P.77	○	○
Non-motor end specification	NM	See P.78	○	○
Slider roller specification	SR	See P.78	○	○

Dimensions

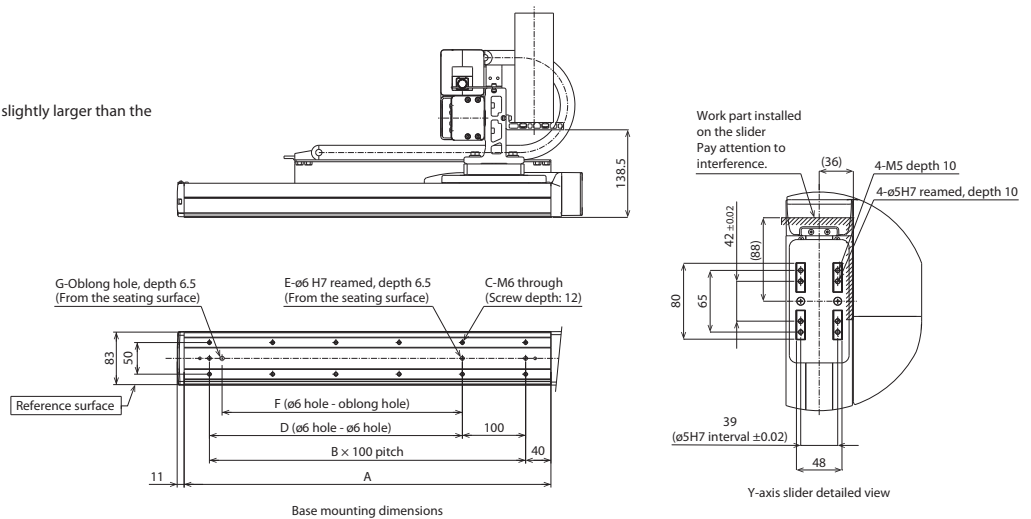
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Note 1. The configuration position in the figure is home.
Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



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



(* Notes

The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer.
Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.79)

■ 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
B	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12
C	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26
D	0	100	100	200	200	300	300	400	400	500	500	600	600	700	700	800	800	900	900	1000	1000	1100
E	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	0	0	80	180	180	280	280	380	380	480	480	580	580	680	680	780	780	880	880	980	980	1080
G	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
H	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	27.5	27.5	22.5	27.5	27.5	27.5	27.5	22.5	22.5	27.5
K	1	1	1	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	4	4	4
M	170	200	225	125	137.5	150	162.5	175	187.5	200	145	150	125	150	150	150	175	200	175	165	155	175
N	2	2	2	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5	5	5

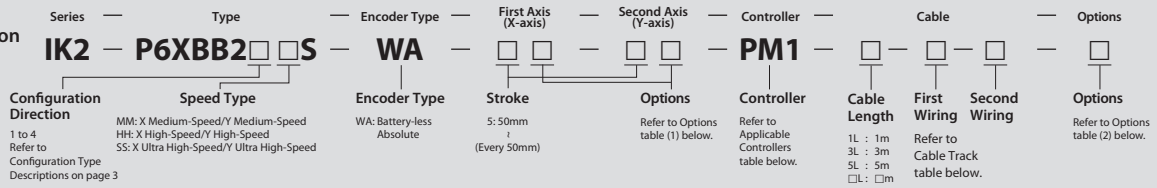
Cable track size	CT	CTM	CTL	CTLX
Q1	328	341	354	371
Q2	107.5	120.5	133.5	150.5
S	139	145.5	152	-

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

IK2-P6XBB2□□S

RCP6 2-axis combination
X-axis: SA8C (Straight)
Y-axis: SA7R (Side-mounted)

Model Specification Items



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

Payload by Acceleration

MM type: X medium-speed/Y medium-speed

(Unit: kg)

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

HH type: X high-speed/Y high-speed

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

Acceleration/ deceleration (G)	Y-axis stroke (mm)	50~150 (Every 50mm)		50~250 (Every 50mm)	
		200	250	300	350
0.1		11	10.5	9	3
0.3		8			1.5
0.5		5			
0.7		4			

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

Cable Length

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

Note 1. All-axis standard cable is used.
Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.
Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Cable Track

Type	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)
Without cable track (cable only)	N	See P.79	<input type="radio"/>	<input type="radio"/>
Cable track S size (inner width: 38mm)	CT		<input type="radio"/>	<input type="radio"/>
Cable track M size (inner width: 50mm)	CTM		<input type="radio"/>	<input type="radio"/>
Cable track L size (inner width: 63mm)	CTL		<input type="radio"/>	<input type="radio"/>
Cable track XL size (inner width: 80mm) *	CTLX		<input type="radio"/>	Cannot be selected *

* Only the first wiring can be selected

Specifications

Item	X-axis	Y-axis
Axis model	RCP6-SA8C	RCP6-SA7R
Stroke (Every 50mm)	50~1100mm	50~250mm
Max. speed *	MM	280mm/s
	HH	560mm/s
	SS	640mm/s
Motor size	56□ High-thrust pulse motor	56□ Pulse motor
Ball screw lead	MM	8mm
	HH	16mm
	SS	24mm
Drive system	Ball screw ø16mm rolled C10	Ball screw ø12mm rolled C10
Positioning repeatability	±0.01mm	
Base material	Aluminum	
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)	

Maximum Stroke

X axis 1100 mm

Y axis 250 mm

Max. Speed (Ultra High-speed type)

X axis 650 mm/s

Y axis 640 mm/s

* The max. 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.80.

Applicable Controllers

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

□ X-axis: SA8C

Type	Reference page
PCON-CFB/CGFB	Please see the RCP6 catalog or PCON-CB/CFB manual.

□ Y-axis: SA7R

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options (1)

Type	Option code	Reference page	X-axis	Y-axis
Brake	B	See P.77	<input type="radio"/>	<input type="radio"/>
Cable exit direction (Top)	CJT	See P.77	<input type="radio"/>	Cannot be selected
Cable exit direction (Right)	CJR	See P.77	<input type="radio"/>	
Cable exit direction (Left)	CJL	See P.77	<input type="radio"/>	
Cable exit direction (Bottom)	CJB	See P.77	<input type="radio"/>	
Non-motor end specification	NM	See P.78	<input type="radio"/>	<input type="radio"/>
Slider roller specification	SR	See P.78	<input type="radio"/>	<input type="radio"/>

Options (2)

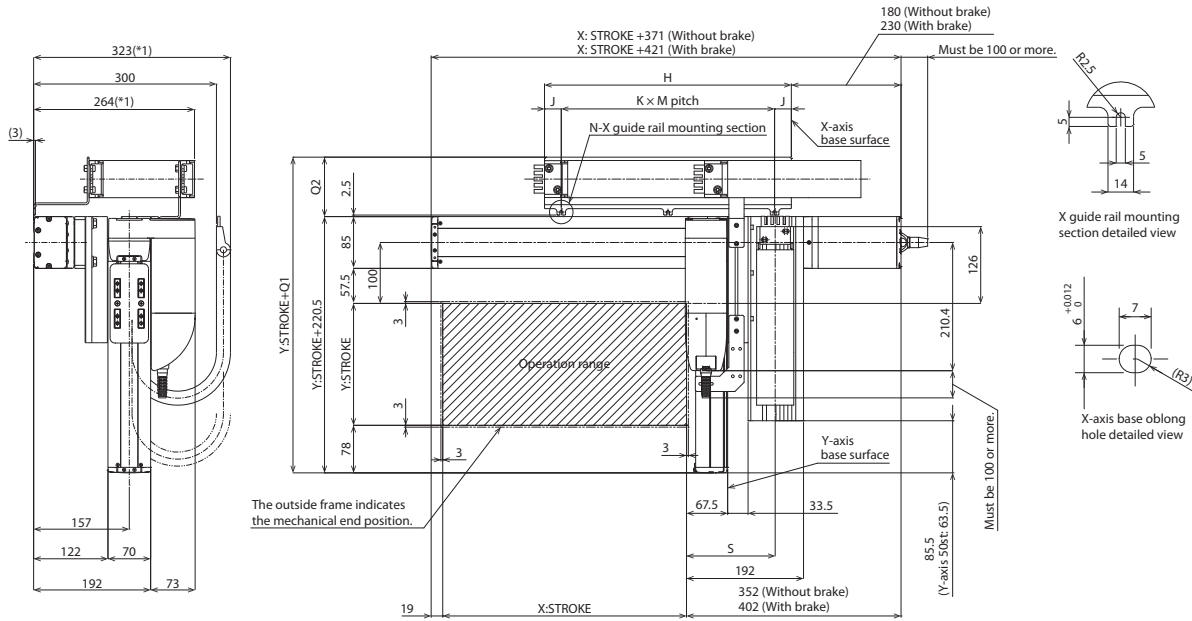
Type	Option code	Reference page
Foot plate	FTP	See P.77

Dimensions

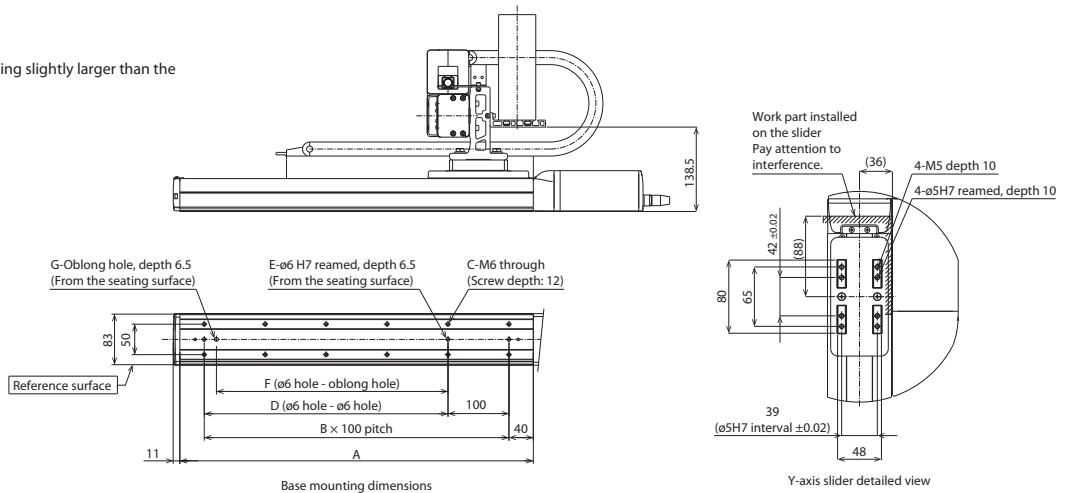
CAD drawings can be downloaded from our website.
www.robocylinder.de



Note 1. The configuration position in the figure is home.
Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



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



(*) Notes
The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer.
When the foot plate option is selected, the unit will be shipped fixed on the foot plate. (See P.77)
Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.79)

■ 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
B	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12
C	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26
D	0	100	100	200	200	300	300	400	400	500	500	600	600	700	700	800	800	900	900	1000	1000	1100
E	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	0	0	80	180	180	280	280	380	380	480	480	580	580	680	680	780	780	880	880	980	980	1080
G	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
H	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	22.5	27.5	22.5	27.5	22.5	27.5	22.5	27.5	22.5	27.5
K	1	1	1	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3	4	4
M	170	200	225	125	137.5	150	162.5	175	187.5	200	145	150	125	150	150	150	175	200	175	165	155	175
N	2	2	2	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5	5	5

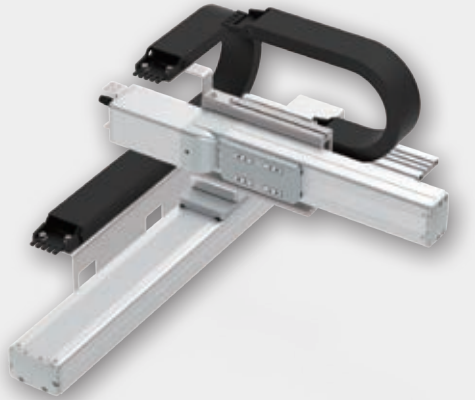
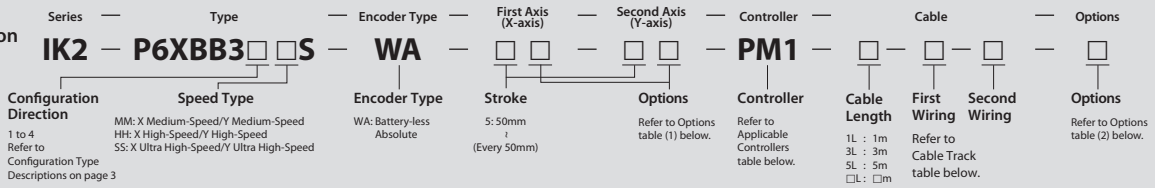
Cable track size	CT	CTM	CTL	CTXL
Q1	305	318	331	348
Q2	84.5	97.5	110.5	127.5
S	139	145.5	152	-

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

IK2-P6XBB3□□S

RCP6 2-axis combination
 X-axis: SA8C (Straight)
 Y-axis: SA7C (Straight)

Model Specification Items



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

Payload by Acceleration

■ **MM type: X medium-speed/Y medium-speed** (Unit: kg)

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

■ **HH type: X high-speed/Y high-speed** ■ **SS type: X ultra high-speed/Y ultra-high speed**

Acceleration/ deceleration (G)	Y-axis stroke (mm)	50~150 (Every 50mm)		50~250 (Every 50mm)	
		200	250	3	1.5
0.1		11	10.5	9	
0.3		8			
0.5		5			
0.7		4			

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

Cable Length

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

- Note 1. All-axis standard cable is used.
- Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.
- Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Cable Track

Type	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)
Without cable track (cable only)	N	See P.79	○	○
Cable track S size (inner width: 38mm)	CT		○	○
Cable track M size (inner width: 50mm)	CTM		○	○
Cable track L size (inner width: 63mm)	CTL		○	○
Cable track XL size (inner width: 80mm) *	CTXL		○	Cannot be selected *

* Only the first wiring can be selected

Specifications

Item	X-axis	Y-axis
Axis model	RCP6-SA8C	RCP6-SA7C
Stroke (Every 50mm)	50~1100mm	50~250mm
Max. speed *	MM	300mm/s
	HH	400mm/s
	SS	650mm/s
Motor size	56□ High-thrust pulse motor	56□ Pulse motor
Ball screw lead	MM	10mm
	HH	20mm
	SS	30mm
Drive system	Ball screw ø16mm rolled C10	Ball screw ø12mm rolled C10
Positioning repeatability	±0.01mm	
Base material	Aluminum	
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)	

■ **Maximum Stroke**

X axis 1100 mm Y axis 250 mm

■ **Max. Speed (Ultra High-speed type)**

X axis 650 mm/s Y axis 640 mm/s

* The max. 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.80.

Applicable Controllers

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

□ **X-axis: SA8C**

Type	Reference page
PCON-CFB/CGFB	Please see the RCP6 catalog or PCON-CB/CFB manual.

□ **Y-axis: SA7C**

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options (1)

Type	Option code	Reference page	X-axis	Y-axis
Brake	B	See P.77	○	○
Cable exit direction (Top)	CJT	See P.77	○	Cannot be selected
Cable exit direction (Right)	CJR	See P.77	○	
Cable exit direction (Left)	CJL	See P.77	○	
Cable exit direction (Bottom)	CJB	See P.77	○	
Non-motor end specification	NM	See P.78	○	○
Slider roller specification	SR	See P.78	○	○

Options (2)

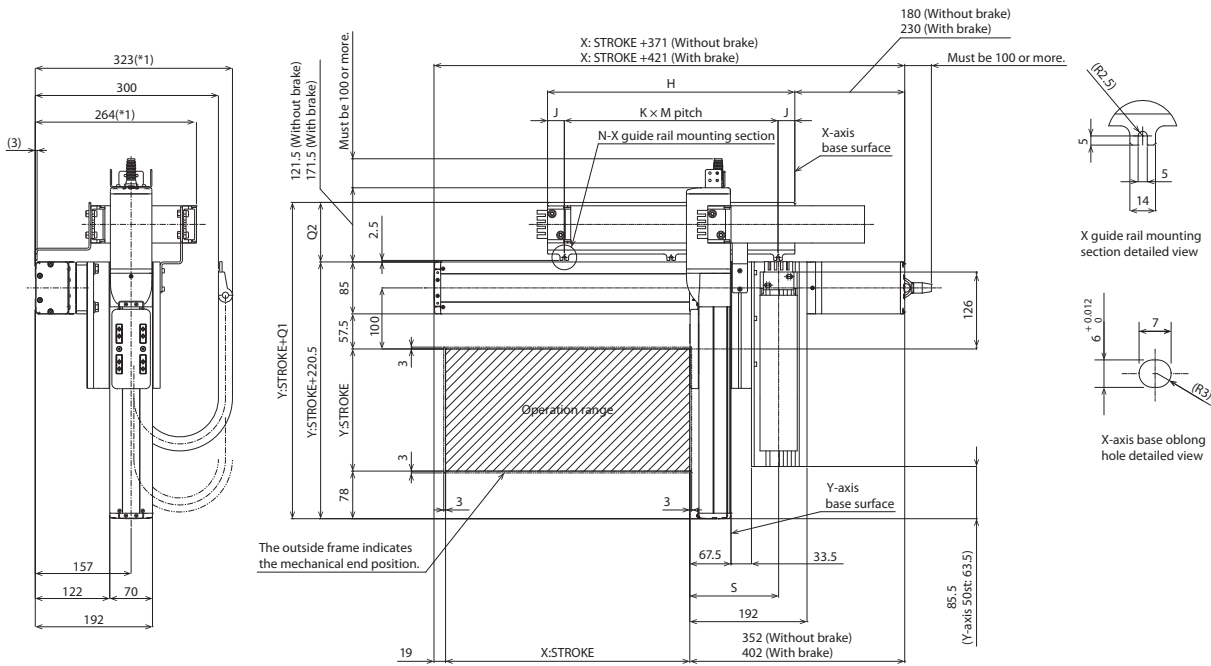
Type	Option code	Reference page
Foot plate	FTP	See P.77

Dimensions

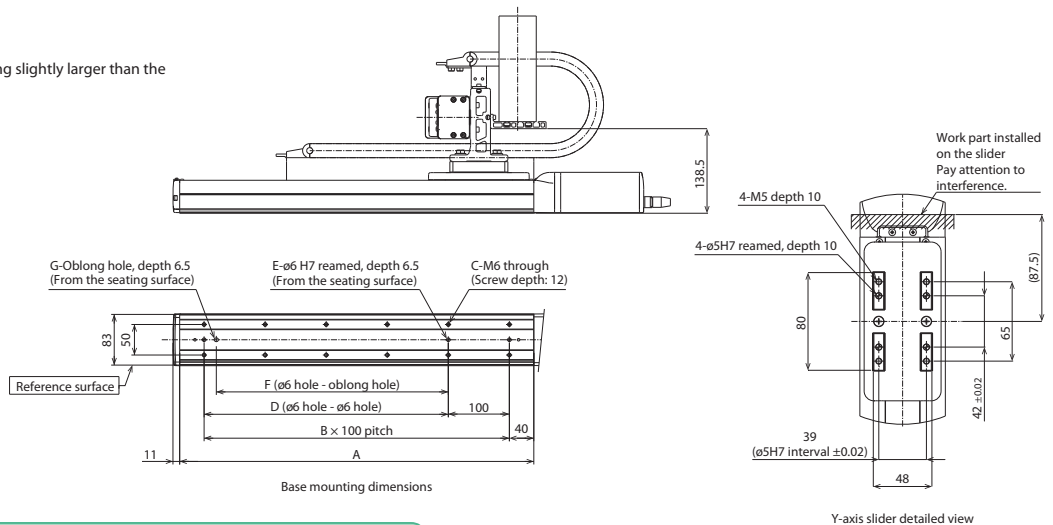
CAD drawings can be downloaded from our website.
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Note 1. The configuration position in the figure is home.
Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



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



(*) Notes
The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer.
When the foot plate option is selected, the unit will be shipped fixed on the foot plate. (See P.77)
Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.79)

■ 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
B	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12
C	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26
D	0	100	100	200	200	300	300	400	400	500	500	600	600	700	700	800	800	900	900	1000	1000	1100
E	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	0	0	80	180	180	280	280	380	380	480	480	580	580	680	680	780	780	880	880	980	980	1080
G	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
H	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	27.5	27.5	27.5	22.5	27.5	27.5	27.5	22.5	27.5	27.5
K	1	1	1	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	4	4	4
M	170	200	225	125	137.5	150	162.5	175	187.5	200	145	150	125	150	150	150	175	200	175	165	155	175
N	2	2	2	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5	5	5

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

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

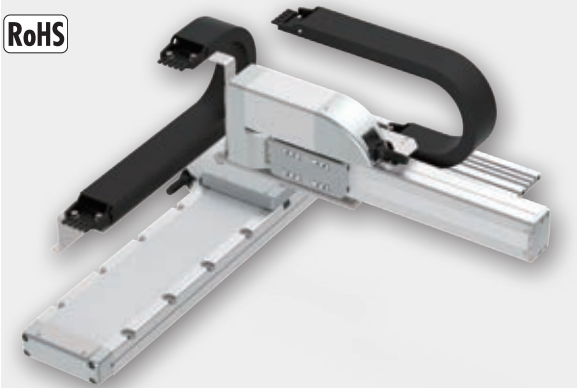
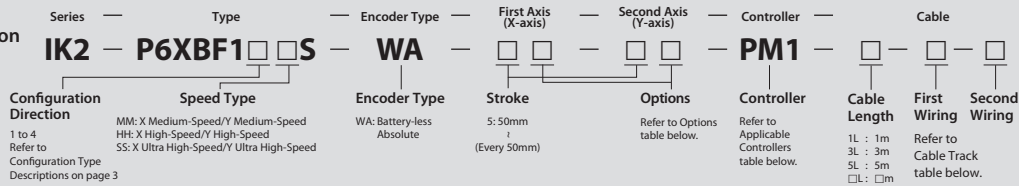
IK2-P6XBF1□□S

RCP6 2-axis combination

X-axis: WSA14R (Side-mounted)

Y-axis: SA7R (Side-mounted)

Model Specification Items



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

Payload by Acceleration

MM type: X medium-speed/Y medium-speed

(Unit: kg)

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

HH type: X high-speed/Y high-speed

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

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

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

Cable Length

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

Note 1. All-axis standard cable is used.
 Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.
 Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Cable Track

Type	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)
Without cable track (cable only)	N	See P.79	○	○
Cable track S size (inner width: 38mm)	CT		○	○
Cable track M size (inner width: 50mm)	CTM		○	○
Cable track L size (inner width: 63mm)	CTL		○	○
Cable track XL size (inner width: 80mm) *	CTXL		○	Cannot be selected *

* Only the first wiring can be selected

Specifications

Item	X-axis	Y-axis
Axis model	RCP6-WSA14R	RCP6-SA7R
Stroke (Every 50mm)	50~800mm	50~400mm
Max. speed *	MM	210mm/s
	HH	420mm/s
	SS	560mm/s
Motor size	56□ Pulse motor	56□ Pulse motor
Ball screw lead	MM	8mm
	HH	16mm
	SS	24mm
Drive system	Ball screw ø12mm rolled C10	Ball screw ø12mm rolled C10
Positioning repeatability	±0.01mm	
Base material	Aluminum	
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)	

Maximum Stroke

X axis 800 mm

Y axis 400 mm

Max. Speed (Ultra High-speed type)

X axis 560 mm/s

Y axis 640 mm/s

* The max. 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.80.

Applicable Controllers

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

□ X-axis: WSA14R, Y-axis: SA7R

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options

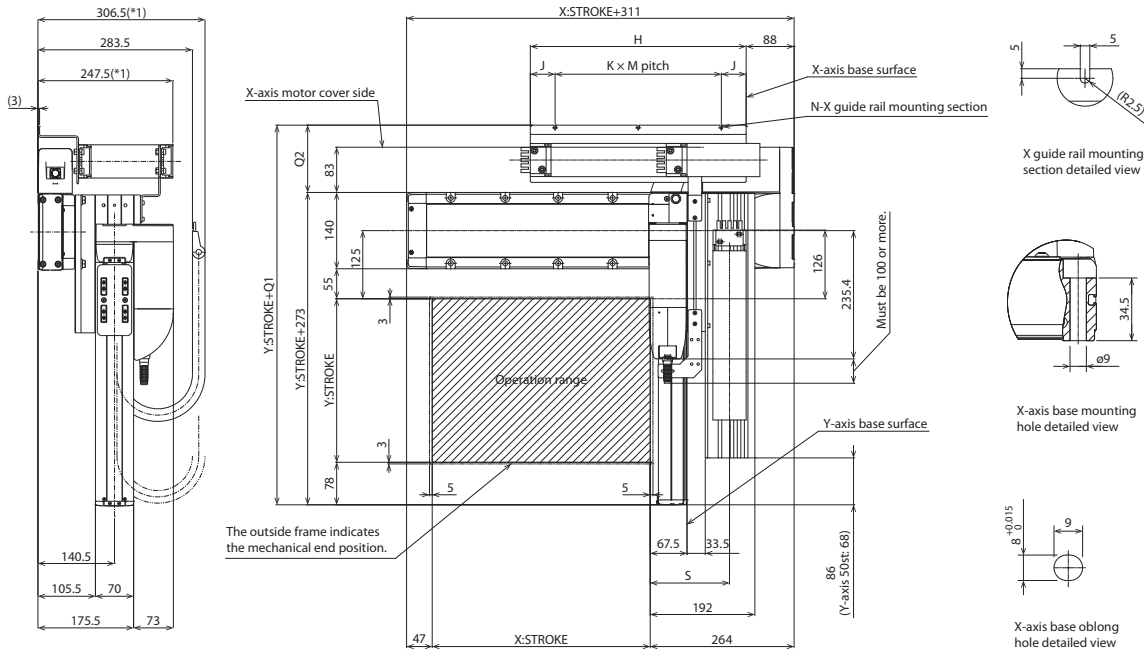
Type	Option code	Reference page	X-axis	Y-axis
Brake	B	See P.77	○	○
Non-motor end specification	NM	See P.78	○	○
Slider roller specification	SR	See P.78	○	○

Dimensions

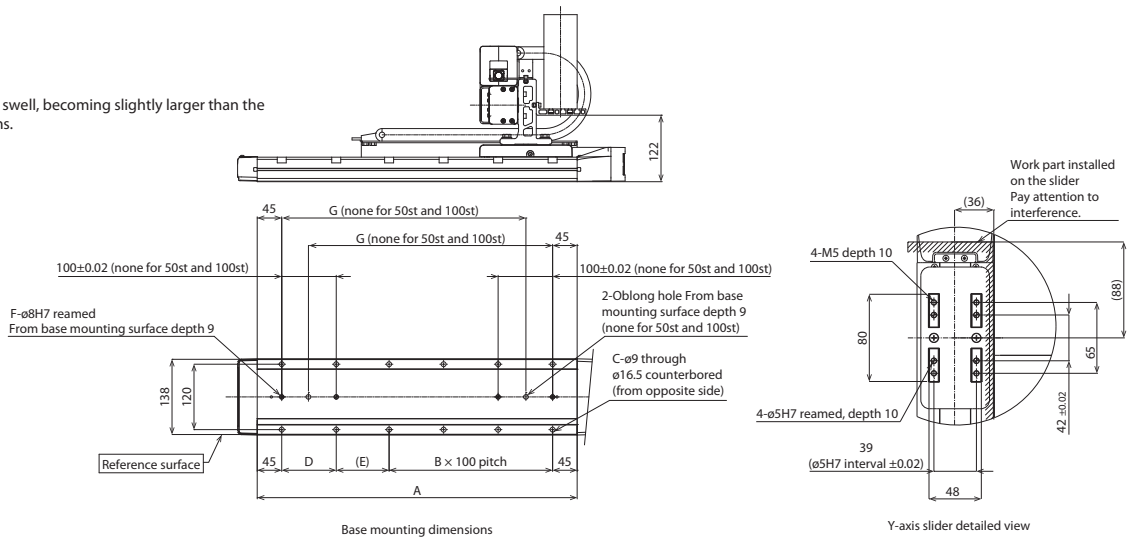
CAD drawings can be downloaded from our website.
www.robocylinder.de



Note 1. The configuration position in the figure is home.
Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



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



(*) Notes

The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer.
Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.79)

■ 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
B	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
H	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	43	48	45.5	43	43	45.5	43	43
K	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4
M	130	155	90	102.5	115	127.5	140	152.5	110	120	125	135	145	115	120	127.5
N	2	2	3	3	3	3	3	3	4	4	4	4	4	5	5	5

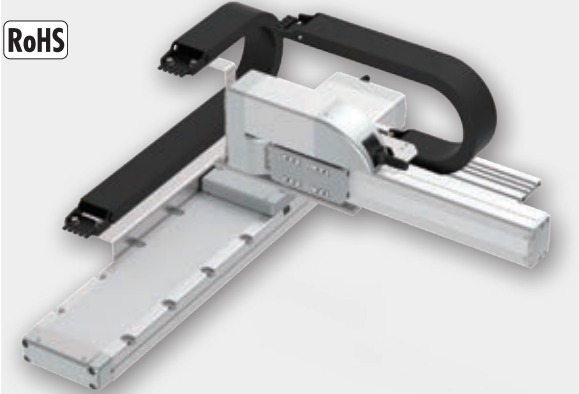
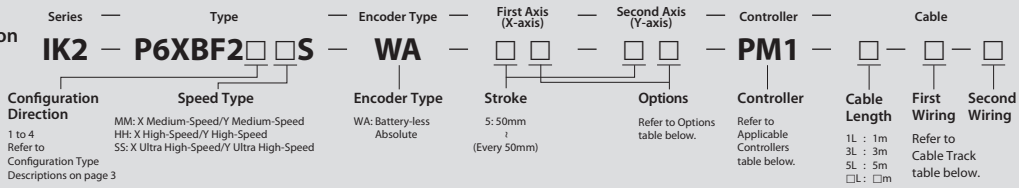
Cable track size	CT	CTM	CTL	CTXL
Q1	383.5	396.5	409.5	426.5
Q2	110.5	123.5	136.5	153.5
S	139	145.5	152	-

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

IK2-P6XBF2□□S RCP6 2-axis combination

X-axis: WSA14C (Straight)
Y-axis: SA7R (Side-mounted)

Model Specification Items



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

Payload by Acceleration

MM type: X medium-speed/Y medium-speed (Unit: kg)

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

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

Acceleration/ deceleration (G)	Y-axis stroke (mm)			
	50~100 (Every 50mm)	150~300 (Every 50mm)	350~400 (Every 50mm)	450~500 (Every 50mm)
0.1	8	7.5		
0.3	8	7.5		
0.5	5	4.5	4	
0.7	3	2.5	2	

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

Cable Length

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

Note 1. All-axis standard cable is used.
Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.
Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Cable Track

Type	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)
Without cable track (cable only)	N	See P.79	○	○
Cable track S size (inner width: 38mm)	CT		○	○
Cable track M size (inner width: 50mm)	CTM		○	○
Cable track L size (inner width: 63mm)	CTL		○	○
Cable track XL size (inner width: 80mm) *	CTXL		○	Cannot be selected *

* Only the first wiring can be selected

Specifications

Item	X-axis	Y-axis
Axis model	RCP6-WSA14C	RCP6-SA7R
Stroke (Every 50mm)	50~800mm	50~400mm
Max. speed *	MM	210mm/s
	HH	420mm/s
	SS	560mm/s
Motor size	56□ Pulse motor	56□ Pulse motor
	MM	8mm
Ball screw lead	HH	16mm
	SS	24mm
	SS	24mm
Drive system	Ball screw ø12mm rolled C10	Ball screw ø12mm rolled C10
Positioning repeatability	±0.01mm	
Base material	Aluminum	
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)	

Maximum Stroke

X axis 800 mm Y axis 400 mm

Max. Speed (Ultra High-speed type)

X axis 560 mm/s Y axis 640 mm/s

* The max. 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.80.

Applicable Controllers

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

□ X-axis: WSA14C, Y-axis: SA7R

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options

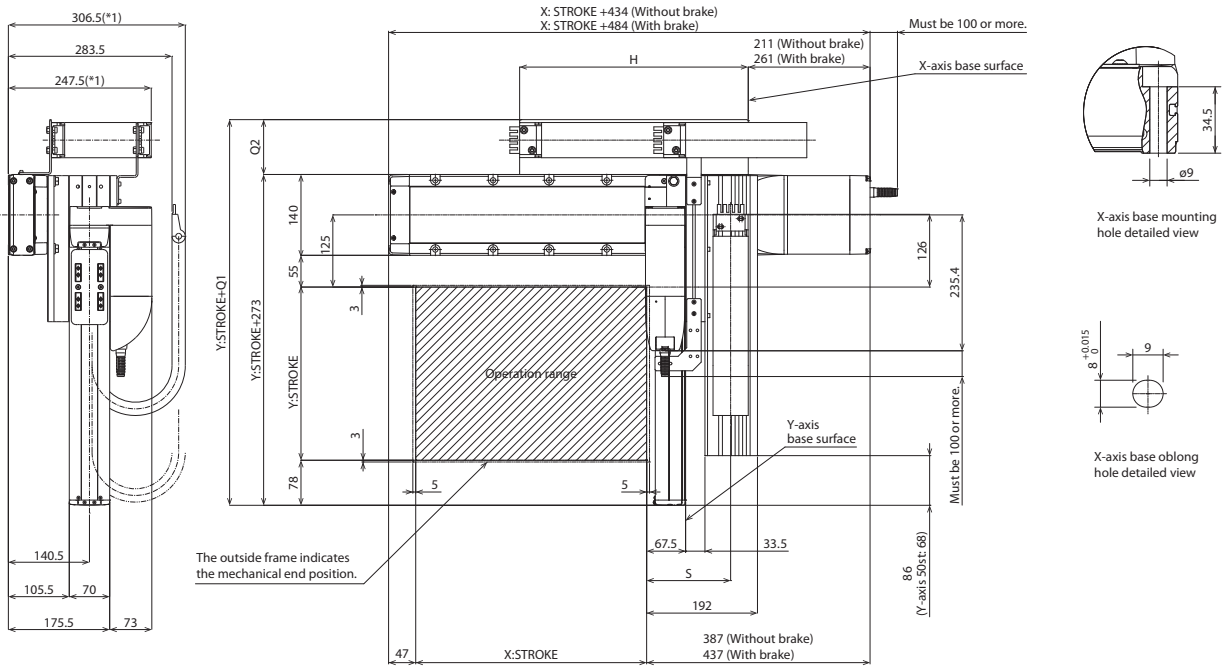
Type	Option code	Reference page	X-axis	Y-axis
Brake	B	See P.77	○	○
Cable exit direction (Top)	CJT	See P.77	○	Cannot be selected
Cable exit direction (Right)	CJR	See P.77	○	
Cable exit direction (Left)	CJL	See P.77	○	
Cable exit direction (Bottom)	CJB	See P.77	○	
Non-motor end specification	NM	See P.78	○	
Slider roller specification	SR	See P.78	○	○

Dimensions

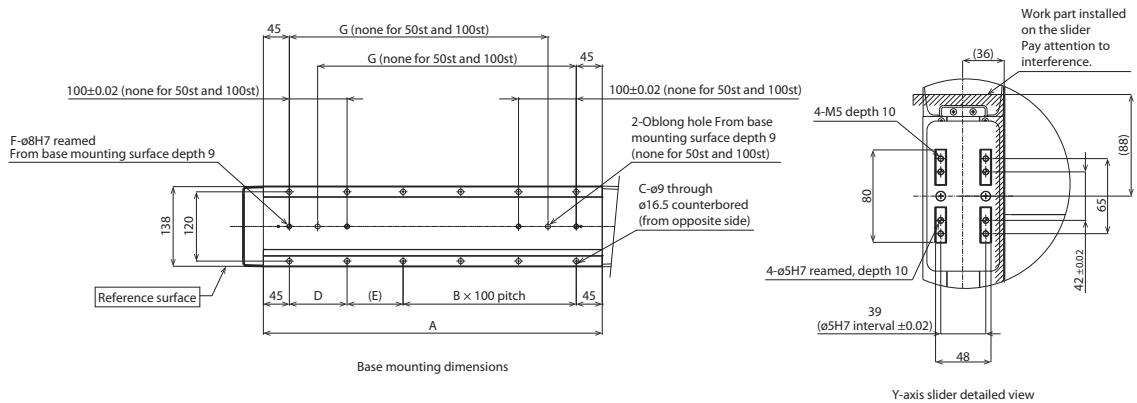
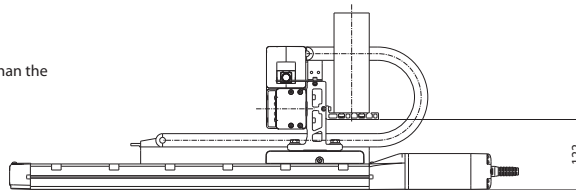
CAD drawings can be downloaded from our website.
www.robocylinder.de



Note 1. The configuration position in the figure is home.
Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



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



(* Notes

The X-axis cable track guide rail is fixed on the X-axis body. Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.79)

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
B	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
H	221	246	271	296	321	346	371	396	421	446	471	496	521	546	571	596

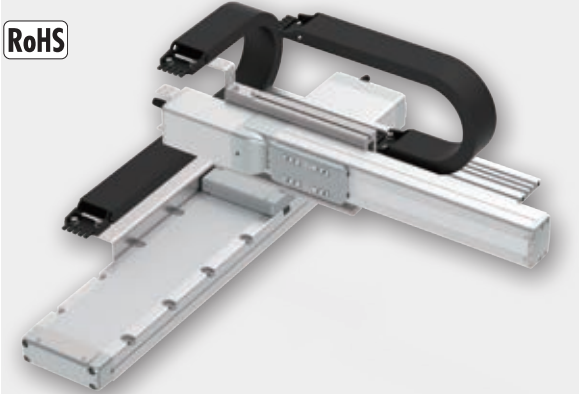
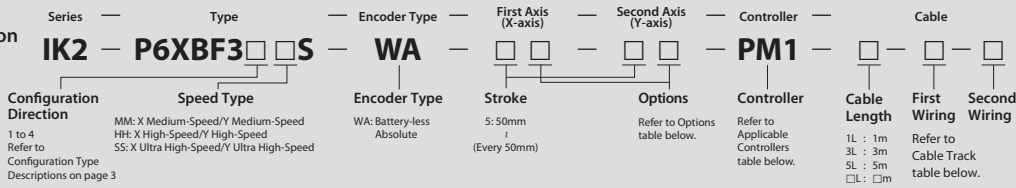
Cable track size	CT	CTM	CTL	CTXL
Q1	356	368	383	401
Q2	83	95	110	128
S	139	145.5	152	-

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

IK2-P6XBF3□□S RCP6 2-axis combination

X-axis: WSA14C (Straight)
Y-axis: SA7C (Straight)

Model Specification Items



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

Payload by Acceleration

■ **MM type: X medium-speed/Y medium-speed** (Unit: kg)

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

■ **HH type: X high-speed/Y high-speed** ■ **SS type: X ultra high-speed/Y ultra high-speed**

Acceleration/ deceleration (G)	Y-axis stroke (mm)			
	50~100 (Every 50mm)	150~300 (Every 50mm)	350~400 (Every 50mm)	450~500 (Every 50mm)
0.1	8	7.5	6	5
0.3	8	7.5	5.5	4.5
0.5	5	4.5	3	2.5
0.7	3	2.5	2	

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

Cable Length

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

Note 1. All-axis standard cable is used.
Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.
Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Cable Track

Type	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)
Without cable track (cable only)	N	See P.79	○	○
Cable track S size (inner width: 38mm)	CT		○	○
Cable track M size (inner width: 50mm)	CTM		○	○
Cable track L size (inner width: 63mm)	CTL		○	○
Cable track XL size (inner width: 80mm) *	CTXL		○	Cannot be selected *

* Only the first wiring can be selected

Specifications

Item	X-axis	Y-axis
Axis model	RCP6-WSA14C	RCP6-SA7C
Stroke (Every 50mm)	50~800mm	50~400mm
Max. speed *	MM	210mm/s
	HH	420mm/s
	SS	560mm/s
Motor size	56□ Pulse motor	56□ Pulse motor
Ball screw lead	MM	8mm
	HH	16mm
	SS	24mm
Drive system	Ball screw ø12mm rolled C10	Ball screw ø12mm rolled C10
Positioning repeatability	±0.01mm	
Base material	Aluminum	
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)	

Maximum Stroke

X axis 800 mm

Y axis 400 mm

Max. Speed (Ultra High-speed type)

X axis 560 mm/s

Y axis 640 mm/s

* The max. 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.80.

Applicable Controllers

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

□ X-axis: WSA14C, Y-axis: SA7C

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options

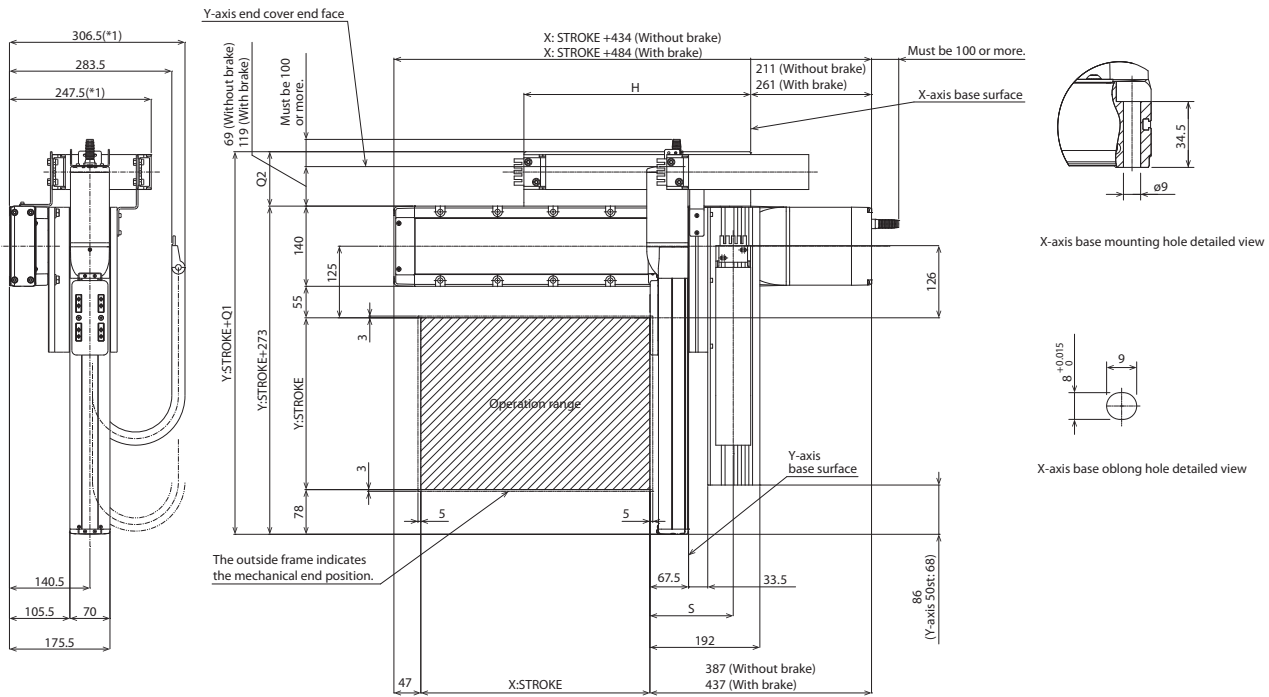
Type	Option code	Reference page	X-axis	Y-axis
Brake	B	See P.77	○	○
Cable exit direction (Top)	CJT	See P.77	○	Cannot be selected
Cable exit direction (Right)	CJR	See P.77	○	
Cable exit direction (Left)	CJL	See P.77	○	
Cable exit direction (Bottom)	CJB	See P.77	○	
Non-motor end specification	NM	See P.78	○	
Slider roller specification	SR	See P.78	○	○

Dimensions

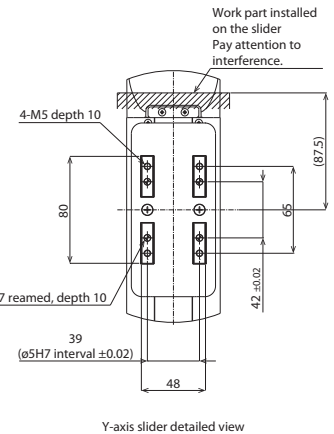
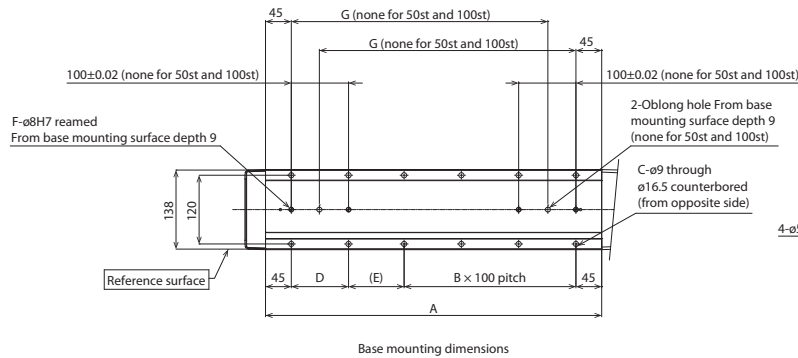
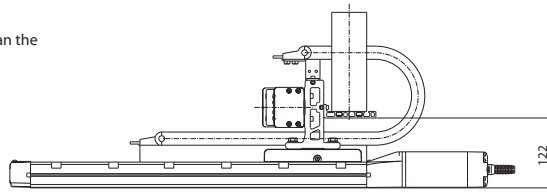
CAD drawings can be downloaded from our website.
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Note 1. The configuration position in the figure is home.
Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



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



(* Notes

The X-axis cable track guide rail is fixed on the X-axis body. Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.79)

■ 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
B	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	298	348	398	448	498	548	598	648	698	748	798	848	898
H	221	246	271	296	321	346	371	396	421	446	471	496	521	546	571	596

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

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

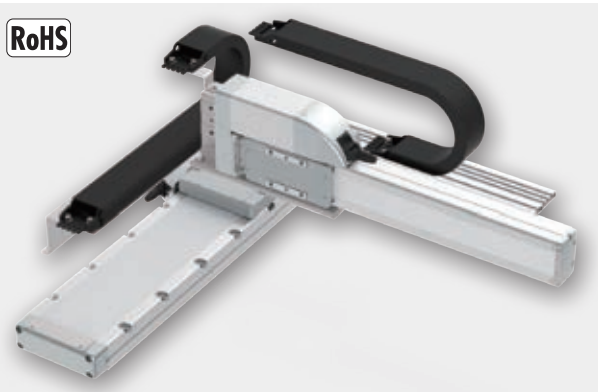
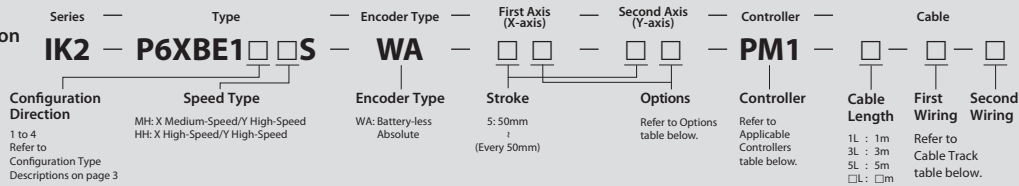
IK2-P6XBE1□□S

RCP6 2-axis combination

X-axis: WSA16R (Side-mounted)

Y-axis: SA8R (Side-mounted)

Model Specification Items



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

Payload by Acceleration

MH type: X medium-speed/Y high-speed

(Unit: kg)

Acceleration/deceleration (G)	Y-axis stroke (mm)	50~100 (Every 50mm)	150~200 (Every 50mm)	250~300 (Every 50mm)	350~400 (Every 50mm)	450	500
0.1		17	16	15	14	12	10
0.3		17	16	15	14	12	10
0.5		11		10.5		10	

HH type: X high-speed/Y high-speed

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

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

Cable Length

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

- Note 1. All-axis standard cable is used.
- Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.
- Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Cable Track

Type	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)
Without cable track (cable only)	N	See P.79	○	○
Cable track S size (inner width: 38mm)	CT		○	○
Cable track M size (inner width: 50mm)	CTM		○	○
Cable track L size (inner width: 63mm)	CTL		○	○
Cable track XL size (inner width: 80mm) *	CTXL		○	Cannot be selected *

* Only the first wiring can be selected

Specifications

Item	X-axis	Y-axis
Axis model	RCP6-WSA16R	RCP6-SA8R
Stroke (Every 50mm)	50~1100mm	50~500mm
Max. speed *	MH	210mm/s
	HH	365mm/s
Motor size	56□ High-thrust pulse motor	56□ High-thrust pulse motor
	56□ High-thrust pulse motor	56□ High-thrust pulse motor
Ball screw lead	MH	10mm
	HH	20mm
Drive system	Ball screw ø16mm rolled C10	Ball screw ø16mm rolled C10
	Ball screw ø16mm rolled C10	Ball screw ø16mm rolled C10
Positioning repeatability	±0.01mm	
Base material	Aluminum	
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)	

* The max. 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.80.

Maximum Stroke

X axis 1100 mm

Y axis 500 mm

Max. Speed (High-speed type)

X axis 365 mm/s

Y axis 650 mm/s

Applicable Controllers

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

□ X-axis: WSA16R, Y-axis: SA8R

Type	Reference page
PCON-CFB/CGFB	Please see the RCP6 catalog or PCON-CB/CFB manual.

Options

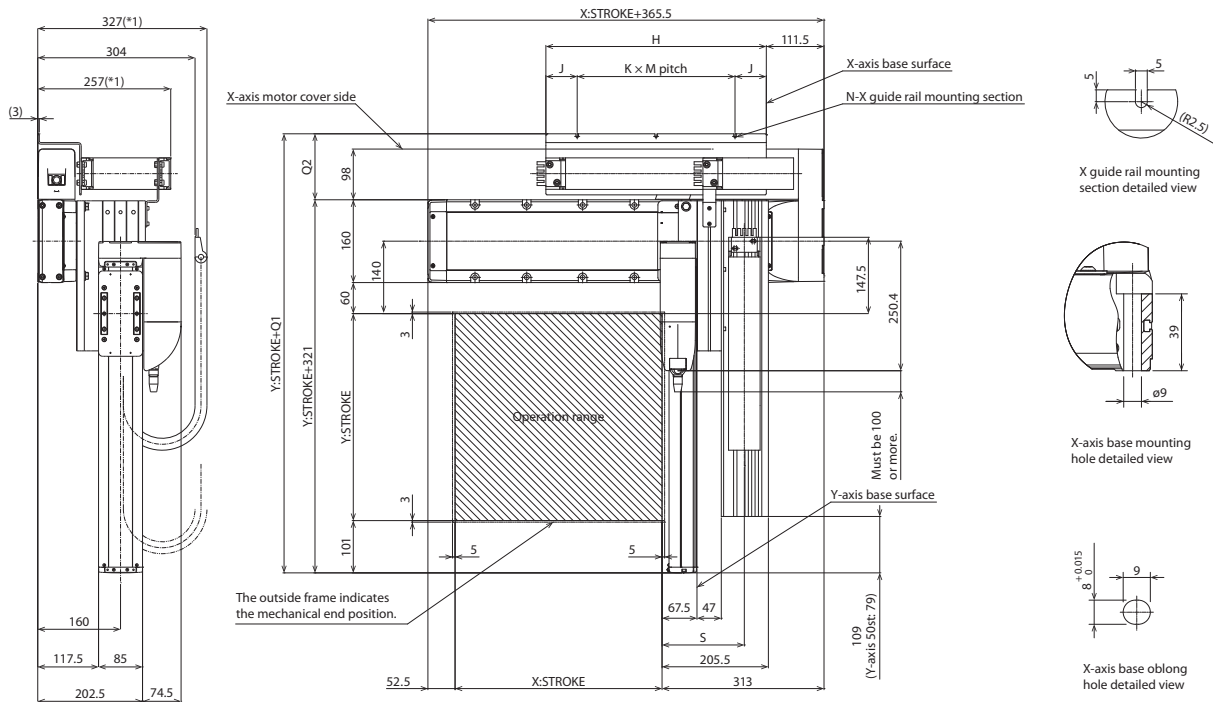
Type	Option code	Reference page	X-axis	Y-axis
Brake	B	See P.77	○	○
Non-motor end specification	NM	See P.78	○	○
Slider roller specification	SR	See P.78	○	○

Dimensions

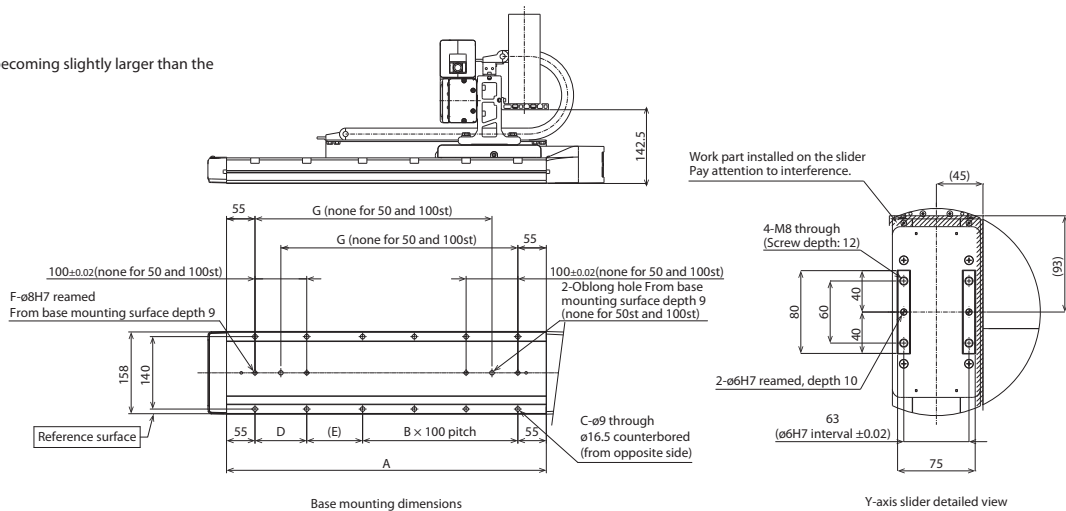
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Note 1. The configuration position in the figure is home.
Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



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



(*) Notes

The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer.
Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.79)

■ Dimensions by Stroke

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

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

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

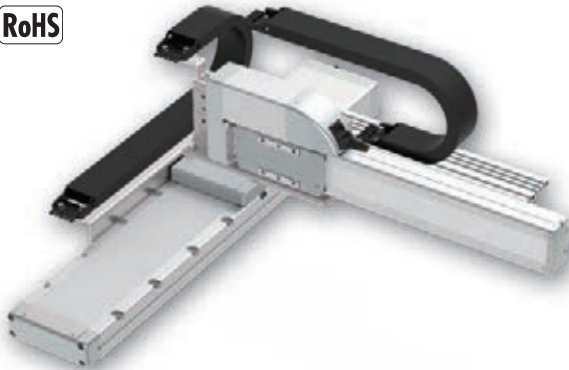
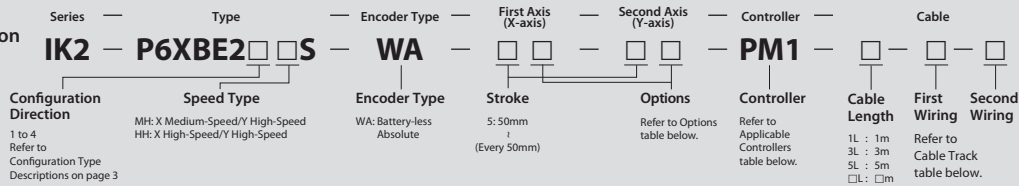
IK2-P6XBE2□□S

RCP6 2-axis combination

X-axis: WSA16C (Straight)

Y-axis: SA8R (Side-mounted)

Model Specification Items



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

Payload by Acceleration

MH type: X medium-speed/Y high-speed

(Unit: kg)

Acceleration/deceleration (G)	Y-axis stroke (mm) 50~100 (Every 50mm)	150~200 (Every 50mm)	250~300 (Every 50mm)	350~400 (Every 50mm)	450	500
0.1	17	16	15	14	12	10
0.3	17	16	15	14	12	10
0.5	11		10.5		10	

HH type: X high-speed/Y high-speed

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

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

Cable Length

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

Note 1. All-axis standard cable is used.
 Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.
 Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Cable Track

Type	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)
Without cable track (cable only)	N	See P.79	○	○
Cable track S size (inner width: 38mm)	CT		○	○
Cable track M size (inner width: 50mm)	CTM		○	○
Cable track L size (inner width: 63mm)	CTL		○	○
Cable track XL size (inner width: 80mm) *	CTXL		○	Cannot be selected *

* Only the first wiring can be selected

Specifications

Item	X-axis	Y-axis
Axis model	RCP6-WSA16C	RCP6-SA8R
Stroke (Every 50mm)	50~1100mm	50~500mm
Max. speed *	MH	210mm/s
	HH	365mm/s
Motor size	56□ High-thrust pulse motor	400mm/s
	56□ High-thrust pulse motor	650mm/s
Ball screw lead	MH	10mm
	HH	20mm
Drive system	Ball screw ø16mm rolled C10	Ball screw ø16mm rolled C10
Positioning repeatability	±0.01mm	
Base material	Aluminum	
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)	

* The max. 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.80.

Maximum Stroke

X axis 1100 mm Y axis 500 mm

Max. Speed (High-speed type)

X axis 365 mm/s Y axis 650 mm/s

Applicable Controllers

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

□ X-axis: WSA16C, Y-axis: SA8R

Type	Reference page
PCON-CFB/CGFB	Please see the RCP6 catalog or PCON-CB/CFB manual.

Options

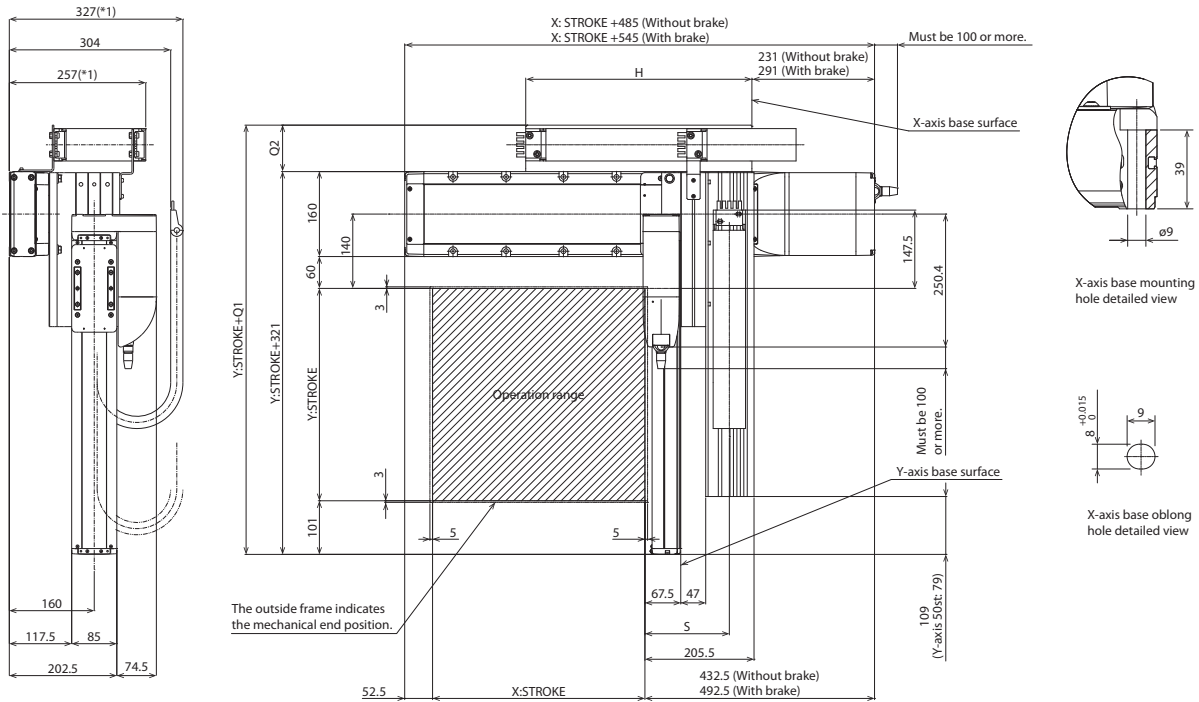
Type	Option code	Reference page	X-axis	Y-axis
Brake	B	See P.77	○	○
Cable exit direction (Top)	CJT	See P.77	○	Cannot be selected
Cable exit direction (Right)	CJR	See P.77	○	
Cable exit direction (Left)	CJL	See P.77	○	
Cable exit direction (Bottom)	CJB	See P.77	○	
Non-motor end specification	NM	See P.78	○	○
Slider roller specification	SR	See P.78	○	○

Dimensions

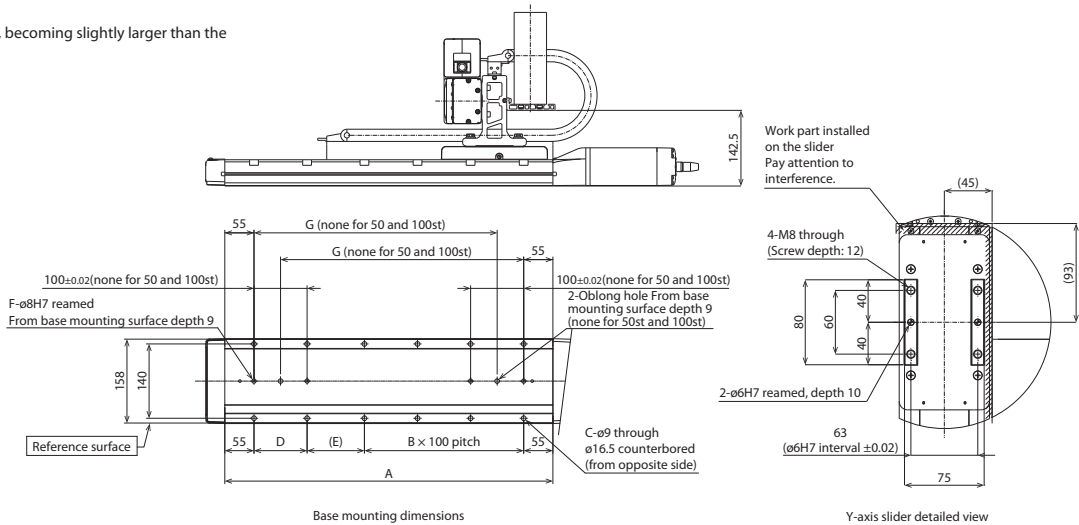
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Note 1. The configuration position in the figure is home.
Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



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



(* Notes

The X-axis cable track guide rail is fixed on the X-axis body.
Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.79)

Dimensions by Stroke

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

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

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

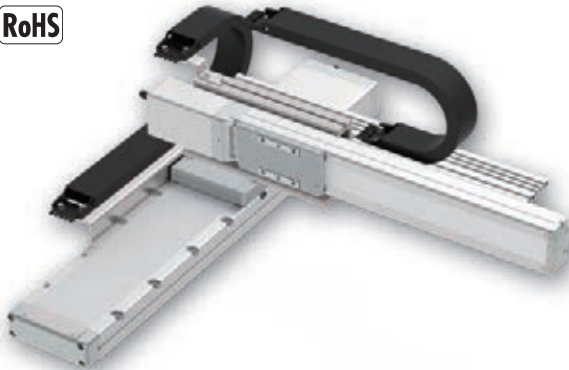
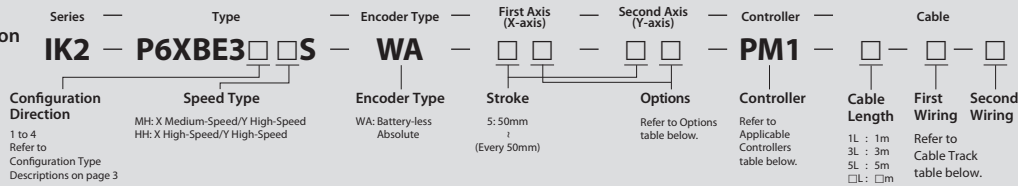
IK2-P6XBE3□□S

RCP6 2-axis combination

X-axis: WSA16C (Straight)

Y-axis: SA8C (Straight)

Model Specification Items



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

Payload by Acceleration

MH type: X medium-speed/Y high-speed

(Unit: kg)

Acceleration/ deceleration (G)	Y-axis stroke (mm)	50~100 (Every 50mm)	150~200 (Every 50mm)	250~300 (Every 50mm)	350~400 (Every 50mm)	450	500
	0.1		17	16	15	14	12
0.3		17	16	15	14	12	10
0.5		11		10.5		10	

HH type: X high-speed/Y high-speed

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

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

Cable Length

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

- Note 1. All-axis standard cable is used.
 Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.
 Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Cable Track

Type	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)
Without cable track (cable only)	N	See P.79	○	○
Cable track S size (inner width: 38mm)	CT		○	○
Cable track M size (inner width: 50mm)	CTM		○	○
Cable track L size (inner width: 63mm)	CTL		○	○
Cable track XL size (inner width: 80mm) *	CTXL		○	Cannot be selected *

* Only the first wiring can be selected

Specifications

Item	X-axis	Y-axis
Axis model	RCP6-WSA16C	RCP6-SA8C
Stroke (Every 50mm)	50~1100mm	50~500mm
Max. speed *	MH	210mm/s
	HH	365mm/s
Motor size	56□ High-thrust pulse motor	56□ High-thrust pulse motor
	Ball screw lead	MH: 10mm HH: 20mm
Drive system	Ball screw ø16mm rolled C10	Ball screw ø16mm rolled C10
Positioning repeatability	±0.01mm	
Base material	Aluminum	
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)	

* The max. 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.80.

Maximum Stroke

X axis 1100 mm **Y axis 500 mm**

Max. Speed (High-speed type)

X axis 365 mm/s **Y axis 650 mm/s**

Applicable Controllers

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

□ X-axis: WSA16C, Y-axis: SA8C

Type	Reference page
PCON-CFB/CGFB	Please see the RCP6 catalog or PCON-CB/CFB manual.

Options

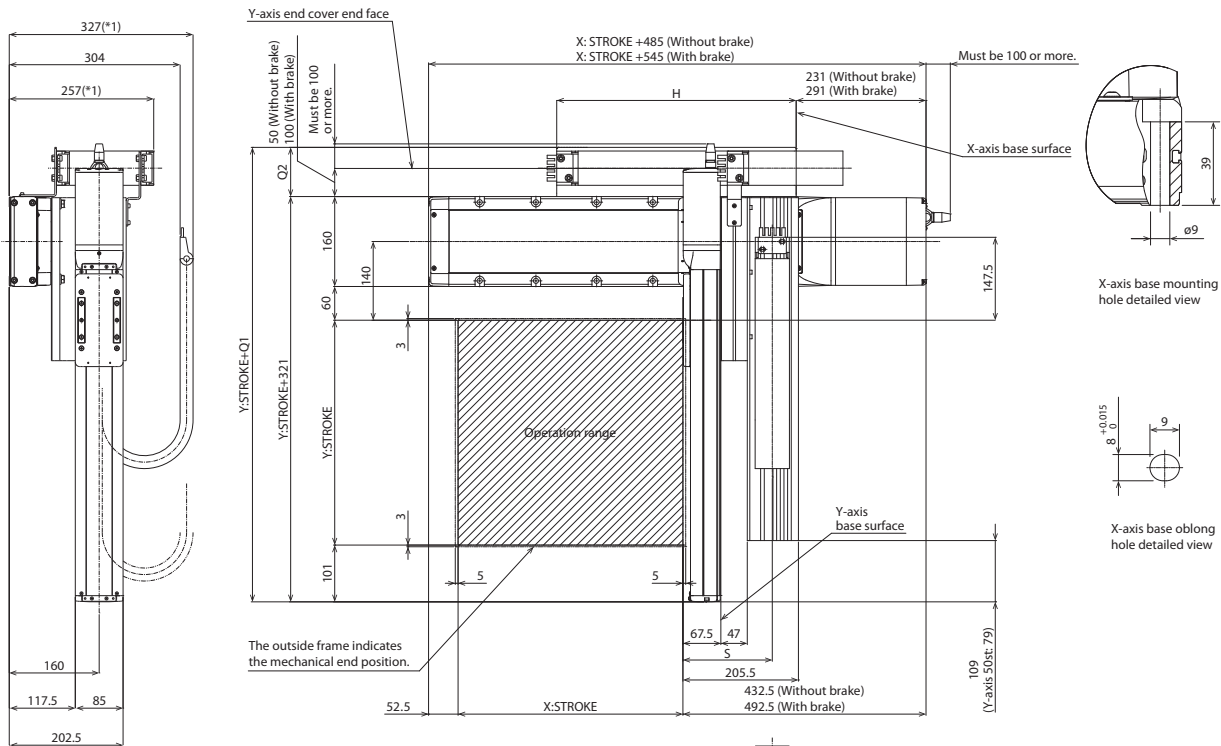
Type	Option code	Reference page	X-axis	Y-axis
Brake	B	See P.77	○	○
Cable exit direction (Top)	CJT	See P.77	○	Cannot be selected
Cable exit direction (Right)	CJR	See P.77	○	
Cable exit direction (Left)	CJL	See P.77	○	
Cable exit direction (Bottom)	CJB	See P.77	○	
Non-motor end specification	NM	See P.78	○	○
Slider roller specification	SR	See P.78	○	○

Dimensions

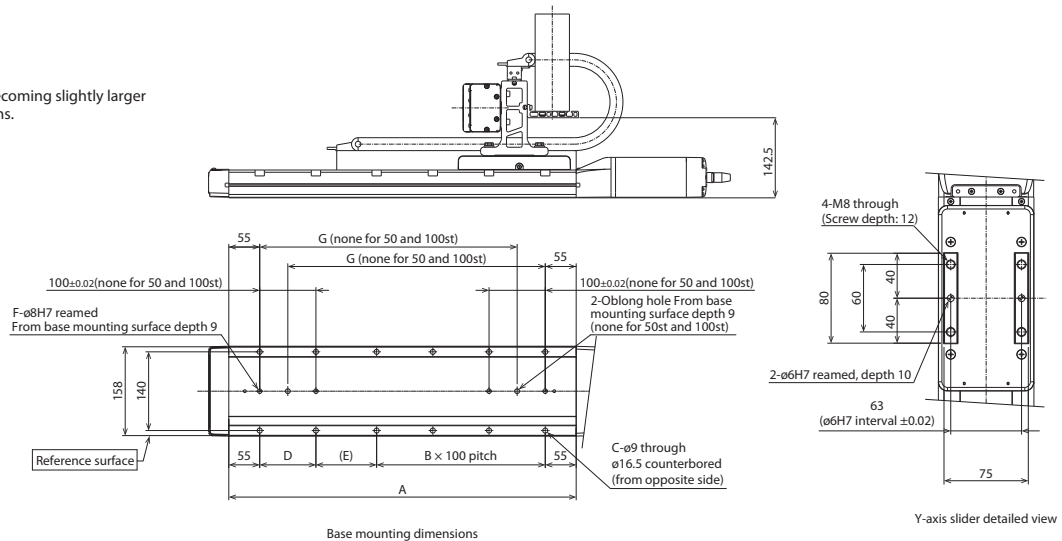
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Note 1. The configuration position in the figure is home.
Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



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



(*) Notes
The X-axis cable track guide rail is fixed on the X-axis body.
Also, the moving end of the Y-axis cable track is to be fixed to a plate or the like mounted on the Y-axis slider by the customer. (See P.79)

■ Dimensions by Stroke

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

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

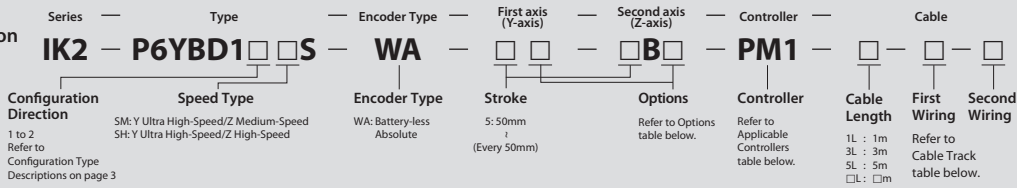
* Dimensions Q1, Q2 and S change depending on the size of the cable track.

IK2-P6YBD1□□S

RCP6 2-axis combination

Y-axis: SA6R (Side-mounted)
Z-axis: SA4R (Side-mounted)

Model Specification Items



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

Payload by Acceleration

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

(Unit: kg)

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

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

Acceleration/deceleration (G)	Z-axis stroke (mm) 50~150 (Every 50mm)
0.1	1
0.3	1
0.5	1

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

Cable Length

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

Note 1. All-axis standard cable is used.
Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.
Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Cable Track

Type	Model	Reference page	First wiring (Y-axis lateral)	Second wiring (Z-axis lateral)
Without cable track (cable only)	N	See P.79	○	○
Cable track S size (inner width: 38mm)	CT		○	○
Cable track M size (inner width: 50mm)	CTM		○	○
Cable track L size (inner width: 63mm)	CTL		○	○
Cable track XL size (inner width: 80mm) *	CTXL		○	Cannot be selected *

* Only the first wiring can be selected

Specifications

Item	Y-axis	Z-axis
Axis model	RCP6-SA6R	RCP6-SA4R
Stroke (Every 50mm)	50~800mm	50~150mm
Max. speed *	SM	350mm/s
	SH	610mm/s
Motor size	42□ Pulse motor	35□ Pulse motor
Ball screw lead	SM	5mm
	SH	10mm
Drive system	Ball screw ø10mm rolled C10	Ball screw ø8mm rolled C10
Positioning repeatability	±0.01mm	
Base material	Aluminum	
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)	

* The max. 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.80.

Maximum Stroke

Y axis 800 mm

Z axis 150 mm

Max. Speed (High-speed type)

Y axis 800 mm/s

Z axis 610 mm/s

Applicable Controllers

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

□ Y-axis: SA6R, Z-axis: SA4R

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options

Type	Option code	Reference page	Y-axis	Z-axis
Brake	B	See P.77	○	Standard equipment *
Cable exit direction (Outside)	CJO	See P.77	○	Cannot be selected
Non-motor end specification	NM	See P.78	○	○
Slider roller specification	SR	See P.78	○	○

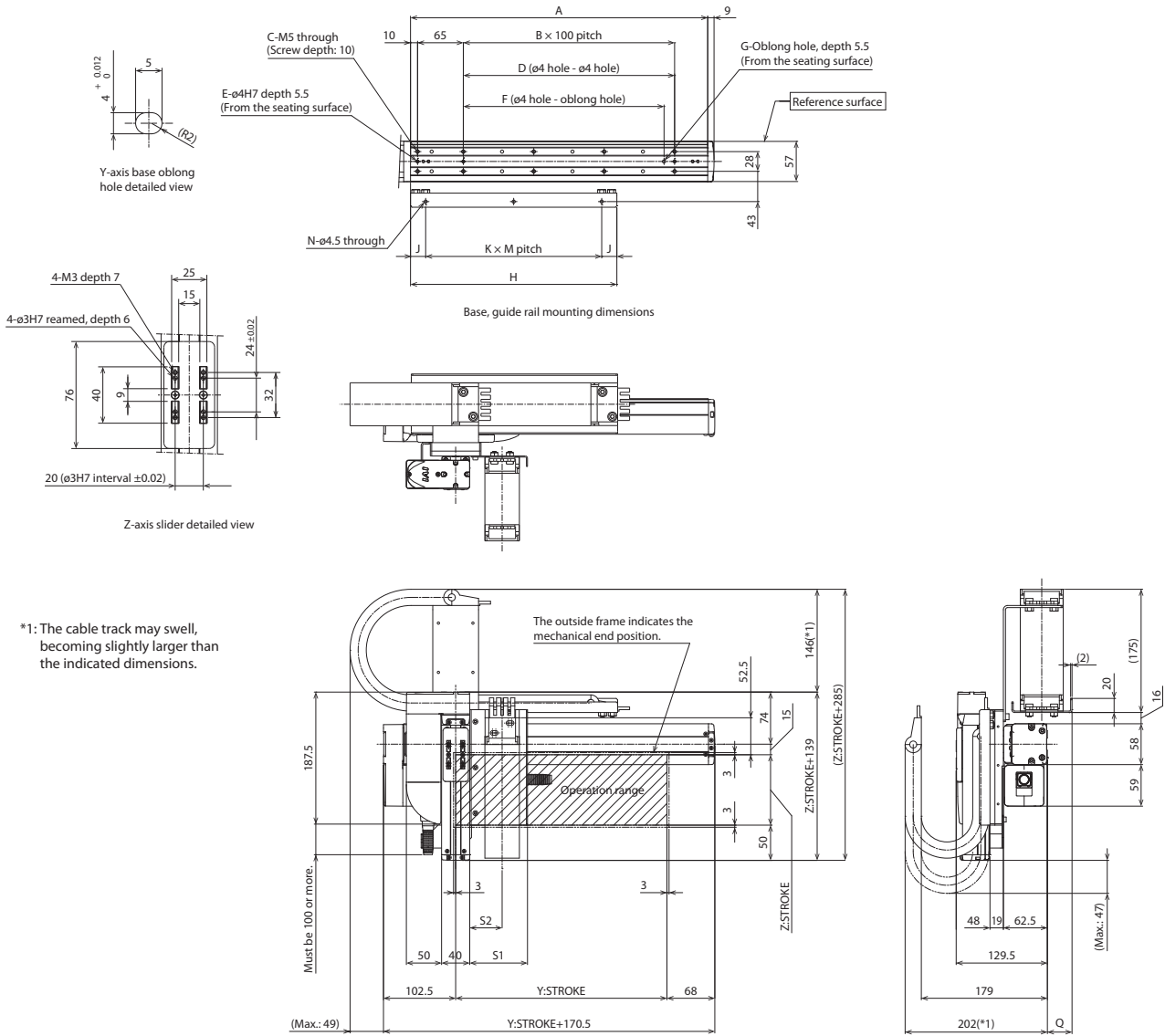
* Be sure to specify.

Dimensions

CAD drawings can be downloaded from our website.
www.robocylinder.de



Note 1. The configuration position in the figure is home.
Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



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

(*) Notes

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

■ Dimensions by Stroke

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

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

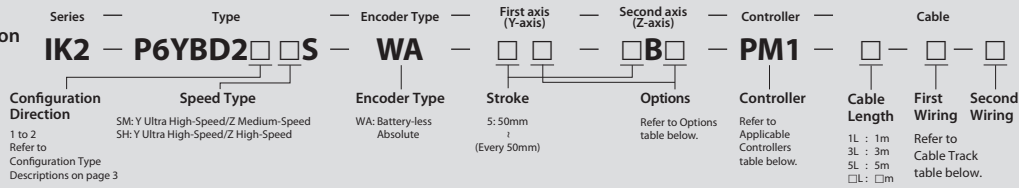
* Dimensions Q, S1 and S2 change depending on the size of the cable track.

IK2-P6YBD2□□S

RCP6 2-axis combination

Y-axis: SA6C (Straight)
Z-axis: SA4R (Side-mounted)

Model Specification Items



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

Payload by Acceleration

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

(Unit: kg)

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

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

Acceleration/deceleration (G)	Z-axis stroke (mm) 50~150 (Every 50mm)
0.1	1
0.3	1
0.5	1

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

Cable Length

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

Note 1. All-axis standard cable is used.
Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.
Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Cable Track

Type	Model	Reference page	First wiring (Y-axis lateral)	Second wiring (Z-axis lateral)
Without cable track (cable only)	N	See P.79	○	○
Cable track S size (inner width: 38mm)	CT		○	○
Cable track M size (inner width: 50mm)	CTM		○	○
Cable track L size (inner width: 63mm)	CTL		○	○
Cable track XL size (inner width: 80mm) *	CTXL		○	Cannot be selected *

* Only the first wiring can be selected

Specifications

Item	Y-axis	Z-axis
Axis model	RCP6-SA6C	RCP6-SA4R
Stroke (Every 50mm)	50~800mm	50~150mm
Max. speed *	SM	350mm/s
	SH	610mm/s
Motor size	42□ Pulse motor	35□ Pulse motor
Ball screw lead	SM	5mm
	SH	10mm
Drive system	Ball screw ø10mm rolled C10	Ball screw ø8mm rolled C10
Positioning repeatability	±0.01mm	
Base material	Aluminum	
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)	

* The max. 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.80.

Maximum Stroke

Y axis 800 mm Z axis 150 mm

Max. Speed (High-speed type)

Y axis 800 mm/s Z axis 610 mm/s

Applicable Controllers

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

□ Y-axis: SA6C, Z-axis: SA4R

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options

Type	Option code	Reference page	Y-axis	Z-axis
Brake	B	See P.77	○	Standard equipment *
Cable exit direction (Top)	CJT	See P.77	○	Cannot be selected
Cable exit direction (Right)	CJR	See P.77	○	
Cable exit direction (Left)	CJL	See P.77	○	
Cable exit direction (Bottom)	CJB	See P.77	○	
Non-motor end specification	NM	See P.78	○	○
Slider roller specification	SR	See P.78	○	○

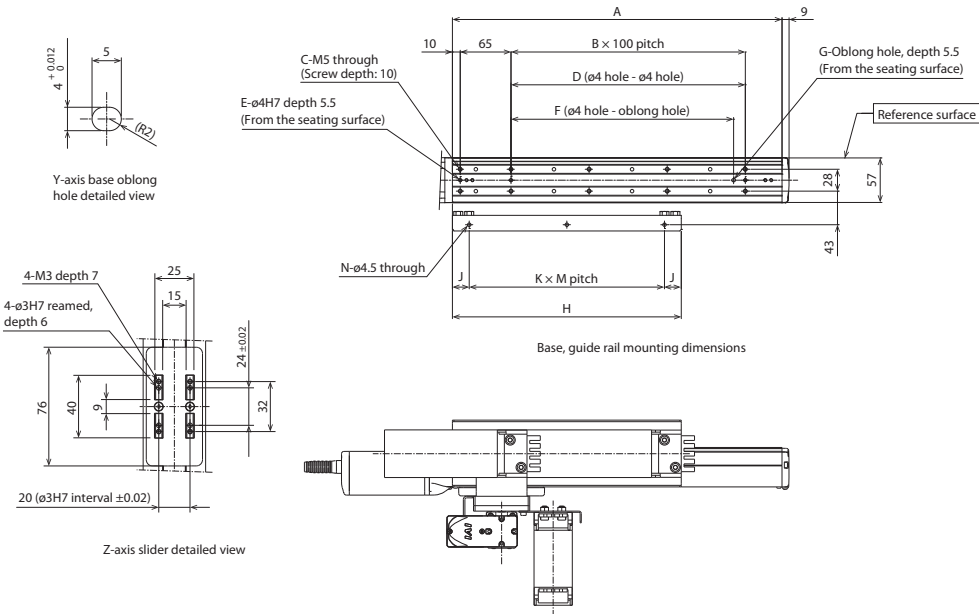
* Be sure to specify.

Dimensions

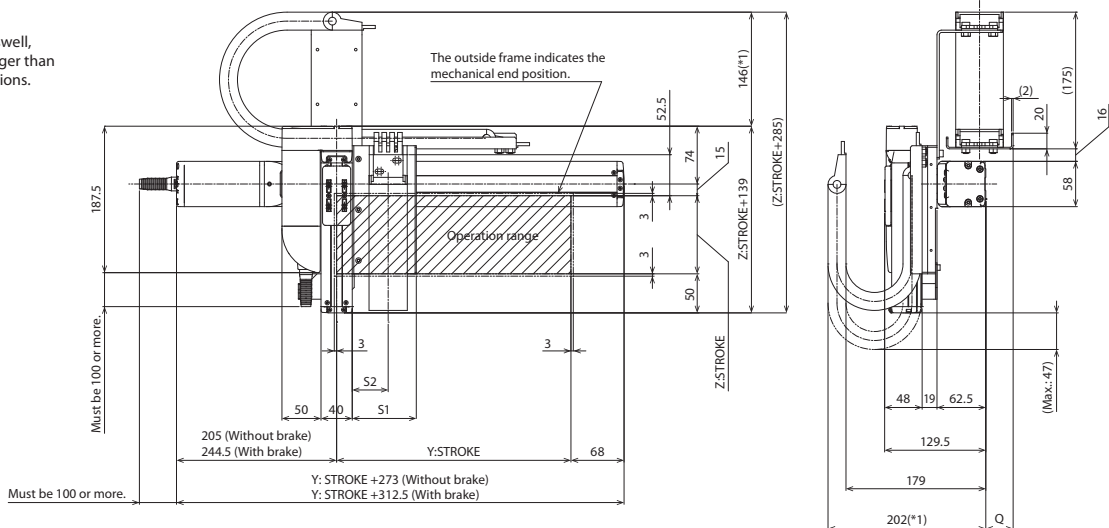
CAD drawings can be downloaded from our website.
www.robocylinder.de



Note 1. The configuration position in the figure is home.
Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



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



(*) Notes

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

■ Dimensions by Stroke

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

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

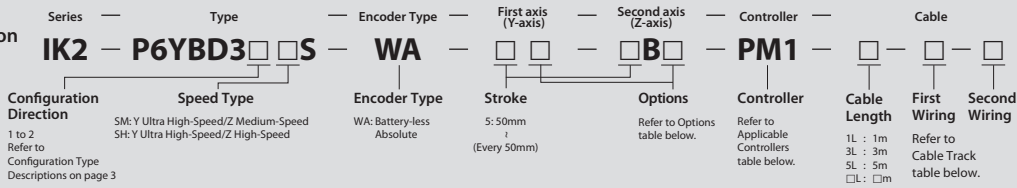
* Dimensions Q, S1 and S2 change depending on the size of the cable track.

IK2-P6YBD3□□S

RCP6 2-axis combination

Y-axis: SA6C (Straight)
Z-axis: SA4C (Straight)

Model Specification Items



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

Payload by Acceleration

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

(Unit: kg)

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

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

Acceleration/deceleration (G)	Z-axis stroke (mm) 50~150 (Every 50mm)
0.1	1
0.3	1
0.5	1

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

Cable Length

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

Note 1. All-axis standard cable is used.
Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.
Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Cable Track

Type	Model	Reference page	First wiring (Y-axis lateral)	Second wiring (Z-axis lateral)
Without cable track (cable only)	N	See P.79	○	○
Cable track S size (inner width: 38mm)	CT		○	○
Cable track M size (inner width: 50mm)	CTM		○	○
Cable track L size (inner width: 63mm)	CTL		○	○
Cable track XL size (inner width: 80mm) *	CTXL		○	Cannot be selected *

* Only the first wiring can be selected

Specifications

Item	Y-axis	Z-axis
Axis model	RCP6-SA6C	RCP6-SA4C
Stroke (Every 50mm)	50~800mm	50~150mm
Max. speed *	SM	350mm/s
	SH	610mm/s
Motor size	42□ Pulse motor	35□ Pulse motor
Ball screw lead	SM	5mm
	SH	10mm
Drive system	Ball screw ø10mm rolled C10	Ball screw ø8mm rolled C10
Positioning repeatability	±0.01mm	
Base material	Aluminum	
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)	

* The max. 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.80.

Maximum Stroke

Y axis 800 mm Z axis 150 mm

Max. Speed (High-speed type)

Y axis 800 mm/s Z axis 610 mm/s

Applicable Controllers

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

□ Y-axis: SA6C, Z-axis: SA4C

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options

Type	Option code	Reference page	Y-axis	Z-axis
Brake	B	See P.77	○	Standard equipment *
Cable exit direction (Top)	CJT	See P.77	○	Cannot be selected
Cable exit direction (Right)	CJR	See P.77	○	
Cable exit direction (Left)	CJL	See P.77	○	
Cable exit direction (Bottom)	CJB	See P.77	○	
Non-motor end specification	NM	See P.78	○	○
Slider roller specification	SR	See P.78	○	○

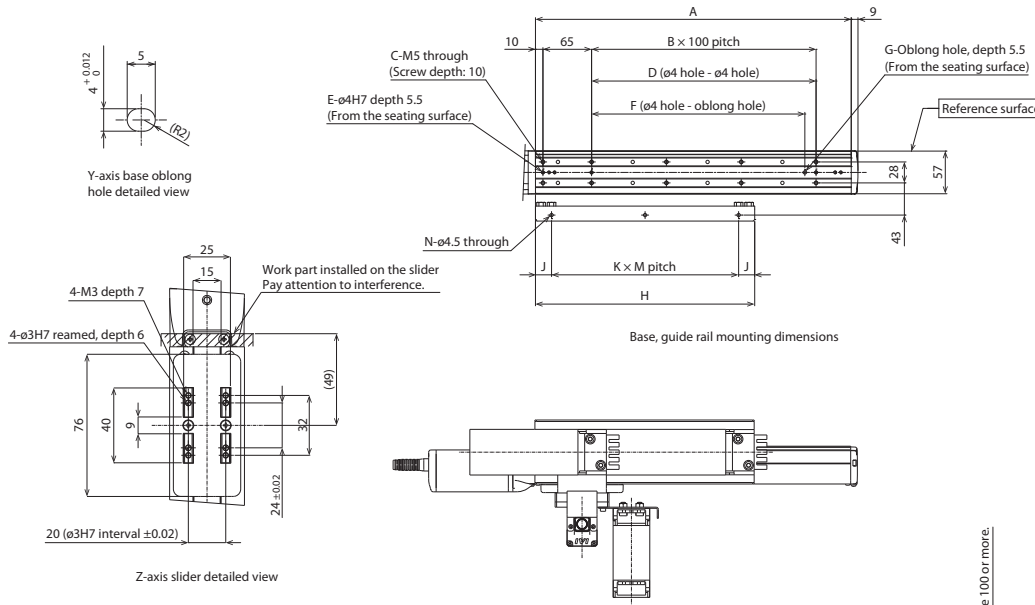
* Be sure to specify.

Dimensions

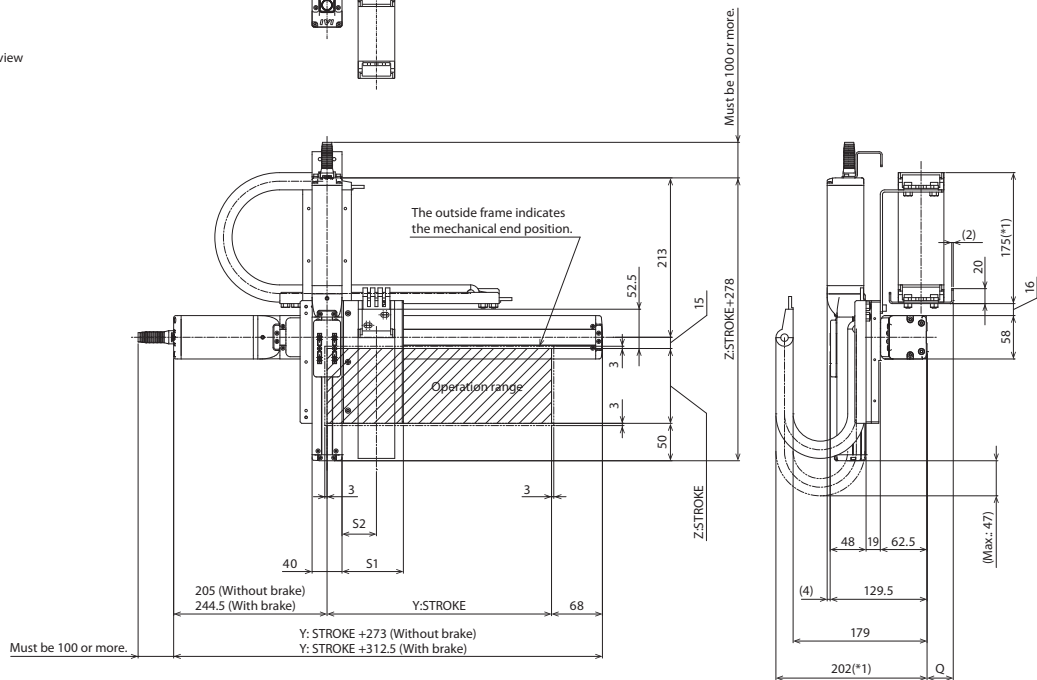
CAD drawings can be downloaded from our website.
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Note 1. The configuration position in the figure is home.
Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



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



(*) Notes

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

■ Dimensions by Stroke

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

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

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

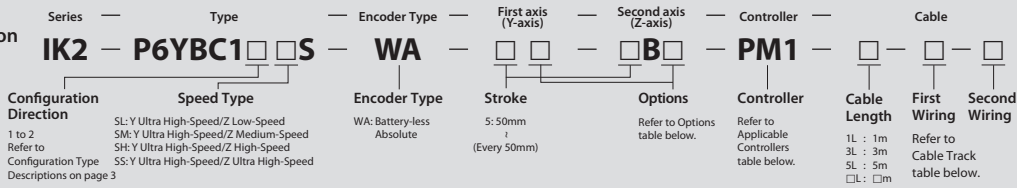
IK2-P6YBC1□□S

RCP6 2-axis combination

Y-axis: SA7R (Side-mounted)

Z-axis: SA6R (Side-mounted)

Model Specification Items



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

Payload by Acceleration

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

Acceleration/deceleration (G)	Z-axis stroke (mm)	50~200 (Every 50mm)
	0.1	3
0.3	3	
0.5	2.5	

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

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

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

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

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

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

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

Cable Length

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

Note 1. All-axis standard cable is used.
 Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.
 Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Cable Track

Type	Model	Reference page	First wiring (Y-axis lateral)	Second wiring (Z-axis lateral)
Without cable track (cable only)	N	See P.79	○	○
Cable track S size (inner width: 38mm)	CT		○	○
Cable track M size (inner width: 50mm)	CTM		○	○
Cable track L size (inner width: 63mm)	CTL		○	○
Cable track XL size (inner width: 80mm) *	CTXL		○	Cannot be selected *

* Only the first wiring can be selected

Specifications

Item	Y-axis	Z-axis	
Axis model	RCP6-SA7R	RCP6-SA6R	
Stroke (Every 50mm)	50~800mm	50~200mm	
Max. speed *	640mm/s	SL	170mm/s
		SM	340mm/s
		SH	680mm/s
		SS	800mm/s
Motor size	56□ Pulse motor	42□ Pulse motor	
Ball screw lead	24mm	SL	3mm
		SM	6mm
		SH	12mm
		SS	20mm
Drive system	Ball screw ø12mm rolled C10	Ball screw ø10mm rolled C10	
Positioning repeatability	±0.01mm		
Base material	Aluminum		
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)		

■ Maximum Stroke

Y axis 800 mm

Z axis 200 mm

■ Max. Speed (Ultra High-speed type)

Y axis 640 mm/s

Z axis 800 mm/s

* The max. 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.80.

Applicable Controllers

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

□ Y-axis: SA7R, Z-axis: SA6R

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options

Type	Option code	Reference page	Y-axis	Z-axis
Brake	B	See P.77	○	Standard equipment *
Cable exit direction (Outside)	CJO	See P.77	○	Cannot be selected
Non-motor end specification	NM	See P.78	○	○
Slider roller specification	SR	See P.78	○	○

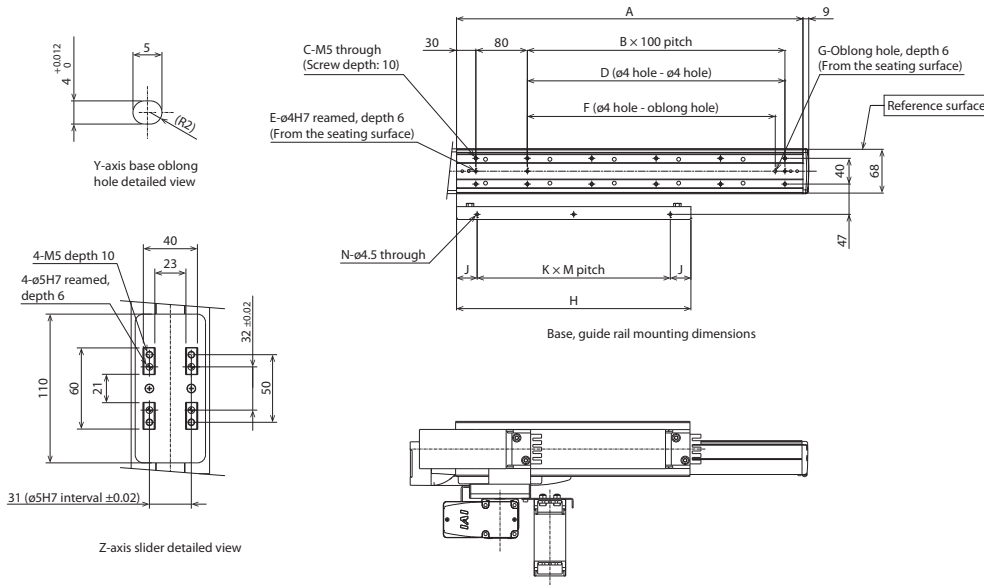
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Dimensions

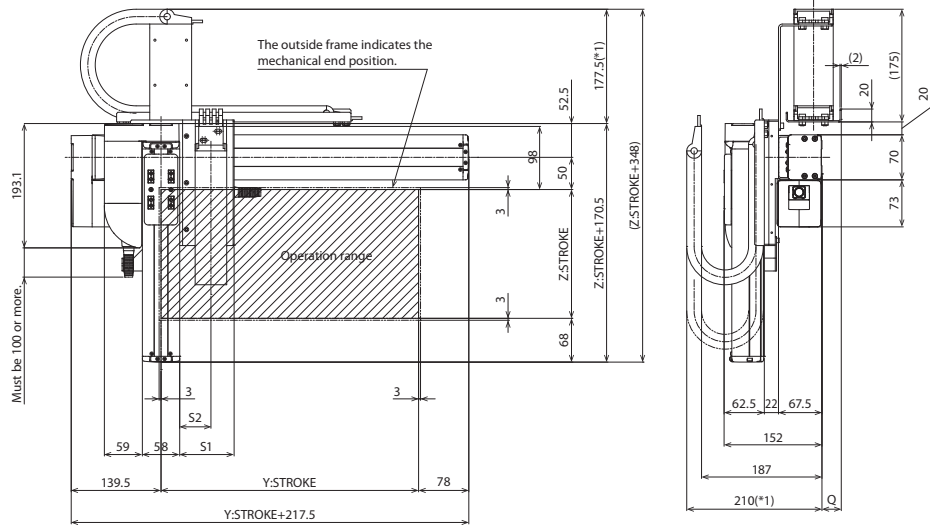
CAD drawings can be downloaded from our website.
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Note 1. The configuration position in the figure is home.
Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



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



(*) Notes

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

■ Dimensions by Stroke

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

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

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

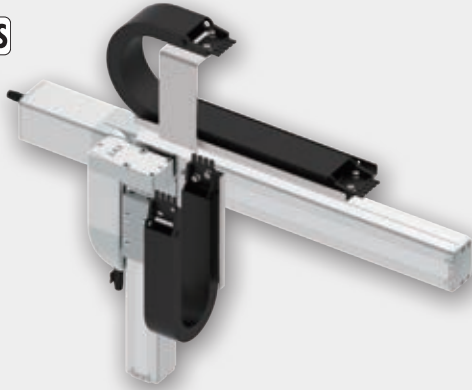
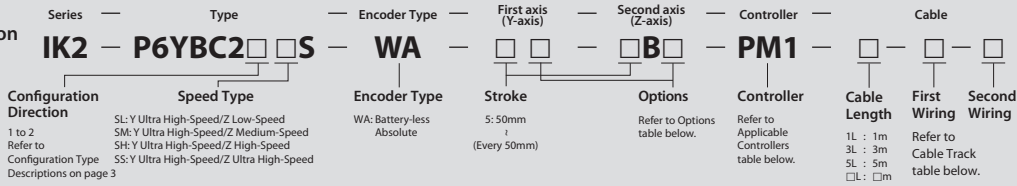
IK2-P6YBC2□□S

RCP6 2-axis combination

Y-axis: SA7C (Straight)

Z-axis: SA6R (Side-mounted)

Model Specification Items



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

Payload by Acceleration

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

Acceleration/ deceleration (G)	Z-axis stroke (mm)	50~200 (Every 50mm)
	0.1	3
0.3	3	
0.5	2.5	

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

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

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

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

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

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

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

Cable Length

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

Note 1. All-axis standard cable is used.
 Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.
 Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Cable Track

Type	Model	Reference page	First wiring (Y-axis lateral)	Second wiring (Z-axis lateral)
Without cable track (cable only)	N	See P.79	○	○
Cable track S size (inner width: 38mm)	CT		○	○
Cable track M size (inner width: 50mm)	CTM		○	○
Cable track L size (inner width: 63mm)	CTL		○	○
Cable track XL size (inner width: 80mm) *	CTXL		○	Cannot be selected *

* Only the first wiring can be selected

Specifications

Item	Y-axis	Z-axis	
Axis model	RCP6-SA7C	RCP6-SA6R	
Stroke (Every 50mm)	50~800mm	50~200mm	
Max. speed *	640mm/s	SL	170mm/s
		SM	340mm/s
		SH	680mm/s
		SS	800mm/s
Motor size	56□ Pulse motor	42□ Pulse motor	
Ball screw lead	24mm	SL	3mm
		SM	6mm
		SH	12mm
		SS	20mm
Drive system	Ball screw ø12mm rolled C10	Ball screw ø10mm rolled C10	
Positioning repeatability	±0.01mm		
Base material	Aluminum		
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)		

Maximum Stroke

Y axis 800 mm Z axis 200 mm

Max. Speed (Ultra High-speed type)

Y axis 640 mm/s Z axis 800 mm/s

* The max. 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.80.

Applicable Controllers

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

□ Y-axis: SA7C, Z-axis: SA6R

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options

Type	Option code	Reference page	Y-axis	Z-axis
Brake	B	See P.77	○	Standard equipment *
Cable exit direction (Top)	CJT	See P.77	○	Cannot be selected
Cable exit direction (Right)	CJR	See P.77	○	
Cable exit direction (Left)	CJL	See P.77	○	
Cable exit direction (Bottom)	CJB	See P.77	○	
Non-motor end specification	NM	See P.78	○	
Slider roller specification	SR	See P.78	○	○

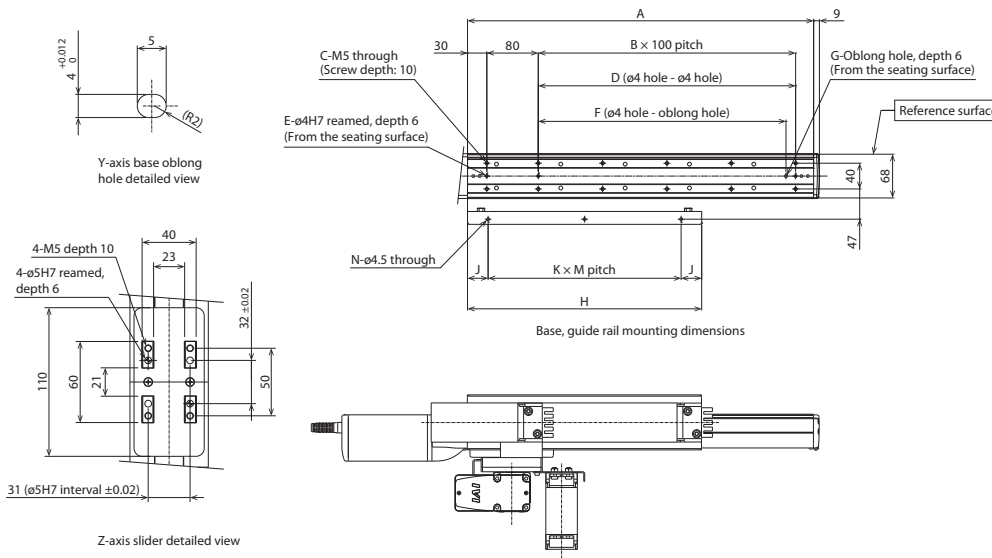
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Dimensions

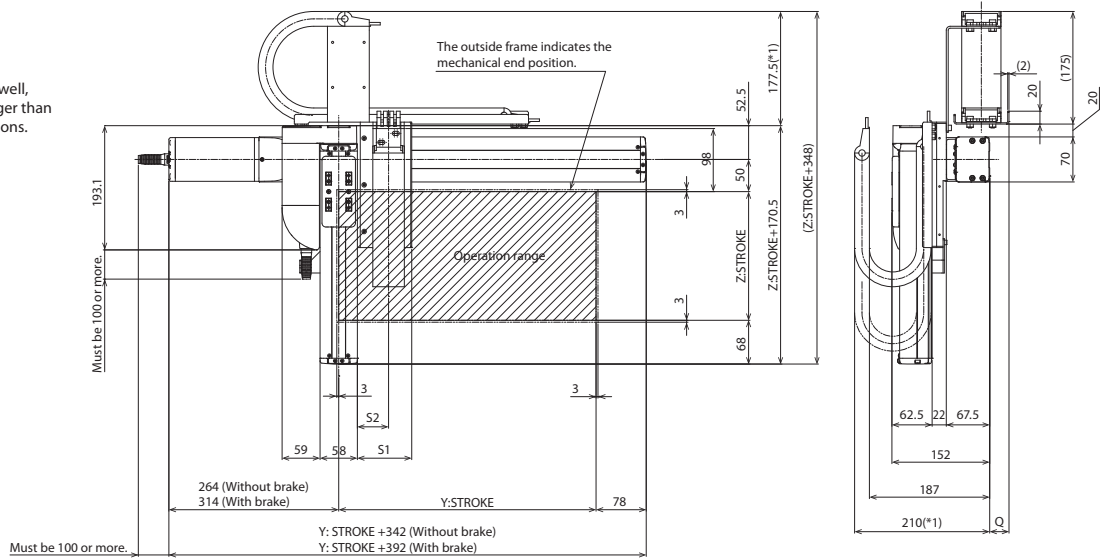
CAD drawings can be downloaded from our website.
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Note 1. The configuration position in the figure is home.
Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



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



(*) Notes

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

■ Dimensions by Stroke

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

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

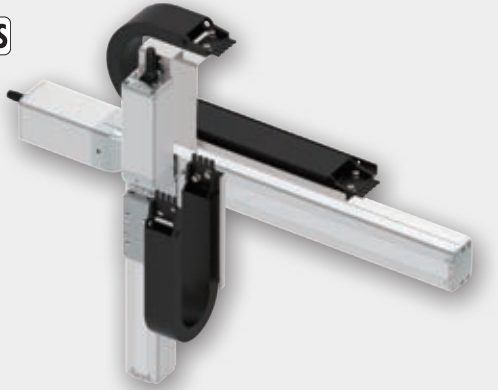
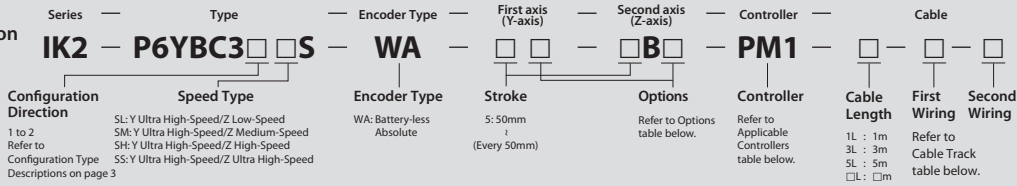
* Dimensions Q, S1 and S2 change depending on the size of the cable track.

IK2-P6YBC3□□S

RCP6 2-axis combination

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

Model Specification Items



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

Payload by Acceleration

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

Acceleration/deceleration (G)	Z-axis stroke (mm)	50~200 (Every 50mm)
	0.1	3
0.3	3	
0.5	2.5	

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

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

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

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

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

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

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

Cable Length

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

- Note 1. All-axis standard cable is used.
- Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.
- Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Cable Track

Type	Model	Reference page	First wiring (Y-axis lateral)	Second wiring (Z-axis lateral)
Without cable track (cable only)	N	See P.79	○	○
Cable track S size (inner width: 38mm)	CT		○	○
Cable track M size (inner width: 50mm)	CTM		○	○
Cable track L size (inner width: 63mm)	CTL		○	○
Cable track XL size (inner width: 80mm) *	CTXL		○	Cannot be selected *

* Only the first wiring can be selected

Specifications

Item	Y-axis	Z-axis
Axis model	RCP6-SA7C	RCP6-SA6C
Stroke (Every 50mm)	50~800mm	50~200mm
Max. speed *	SL	170mm/s
	SM	640mm/s
	SH	340mm/s
	SS	680mm/s
Motor size	56□ Pulse motor	42□ Pulse motor
Ball screw lead	SL	3mm
	SM	24mm
	SH	6mm
	SS	12mm
Drive system	Ball screw ø12mm rolled C10	Ball screw ø10mm rolled C10
Positioning repeatability	±0.01mm	
Base material	Aluminum	
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)	

■ Maximum Stroke

Y axis 800 mm

Z axis 200 mm

■ Max. Speed (Ultra High-speed type)

Y axis 640 mm/s

Z axis 800 mm/s

* The max. 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.80.

Applicable Controllers

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

□ Y-axis: SA7C, Z-axis: SA6C

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options

Type	Option code	Reference page	Y-axis	Z-axis
Brake	B	See P.77	○	Standard equipment *
Cable exit direction (Top)	CJT	See P.77	○	Cannot be selected
Cable exit direction (Right)	CJR	See P.77	○	
Cable exit direction (Left)	CJL	See P.77	○	
Cable exit direction (Bottom)	CJB	See P.77	○	
Non-motor end specification	NM	See P.78	○	
Slider roller specification	SR	See P.78	○	○

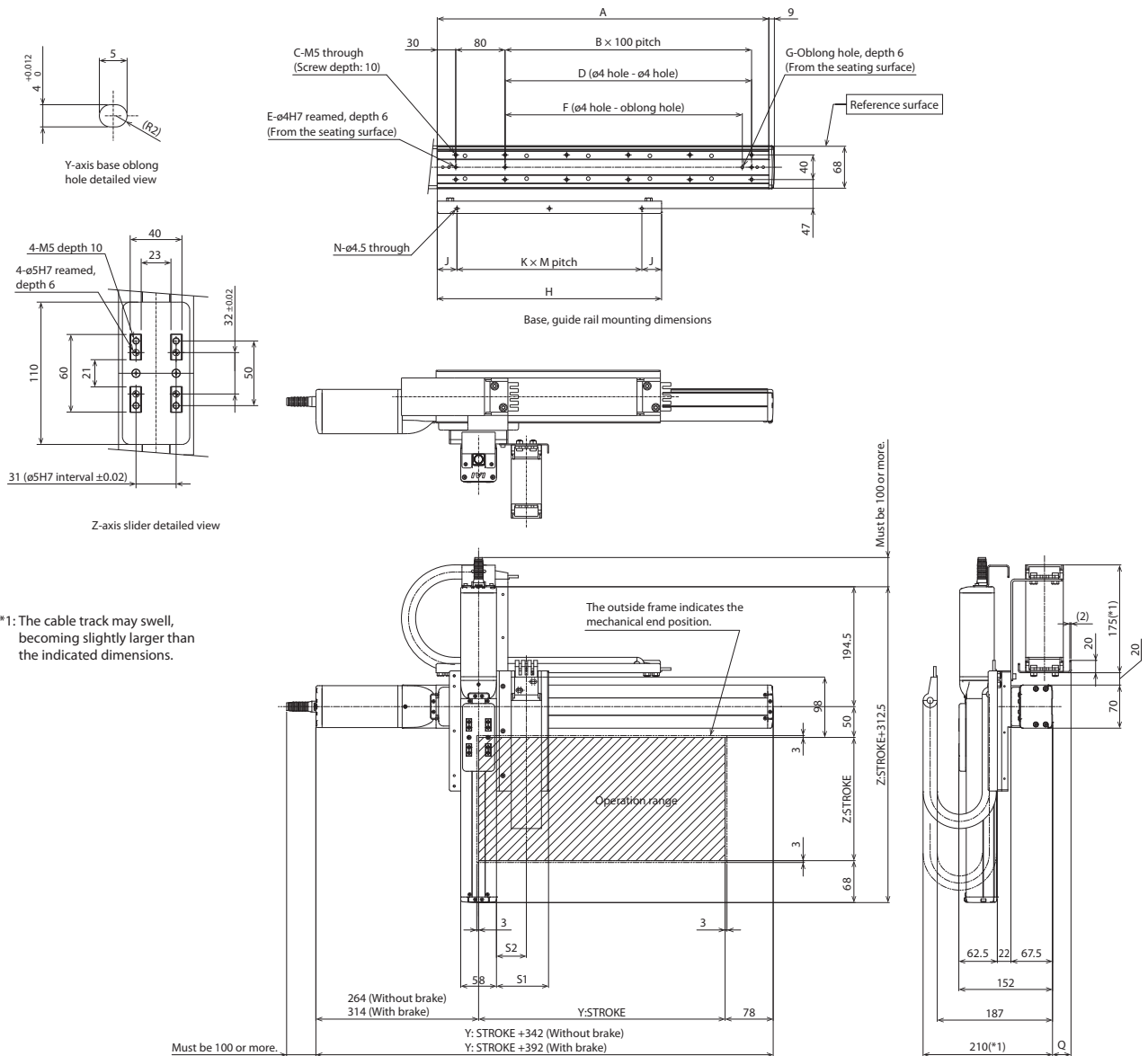
* Be sure to specify.

Dimensions

CAD drawings can be downloaded from our website.
www.robocylinder.de



Note 1. The configuration position in the figure is home.
Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



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

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

■ Dimensions by Stroke

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

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

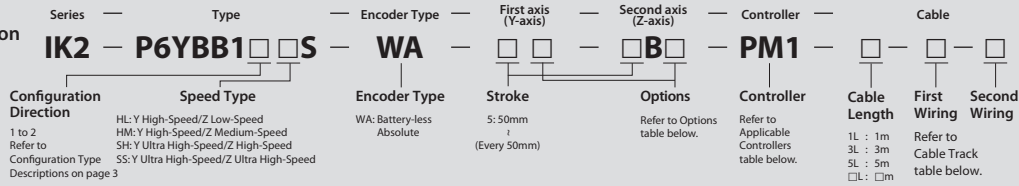
* Dimensions Q, S1 and S2 change depending on the size of the cable track.

IK2-P6YBB1□□S

RCP6 2-axis combination

Y-axis: SA8R (Side-mounted)
Z-axis: SA7R (Side-mounted)

Model Specification Items



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

Payload by Acceleration

HL type: Y high-speed/ Z low-speed

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

HM type: Y high-speed/ Z medium-speed

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

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

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

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

Acceleration/deceleration (G)	Z-axis stroke (mm)	50~200 (Every 50mm)	250~300 (Every 50mm)
	0.1	1.5	
0.3	1.5		
0.5	1.5	1	

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

Cable Length

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

- Note 1. All-axis standard cable is used.
- Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.
- Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Cable Track

Type	Model	Reference page	First wiring (Y-axis lateral)	Second wiring (Z-axis lateral)
Without cable track (cable only)	N	See P.79	○	○
Cable track S size (inner width: 38mm)	CT		○	○
Cable track M size (inner width: 50mm)	CTM		○	○
Cable track L size (inner width: 63mm)	CTL		○	○
Cable track XL size (inner width: 80mm) *	CTXL		○	Cannot be selected *

* Only the first wiring can be selected

Specifications

Item	Y-axis	Z-axis
Axis model	RCP6-SA8R	RCP6-SA7R
Stroke (Every 50mm)	50~1100mm	50~300mm
Max. speed *	HL	105mm/s
	HM	280mm/s
	SH	560mm/s
	SS	640mm/s
Motor size	56□ High-thrust pulse motor	56□ Pulse motor
Ball screw lead	HL	4mm
	HM	8mm
	SH	16mm
	SS	24mm
Drive system	Ball screw ø16mm rolled C10	Ball screw ø12mm rolled C10
Positioning repeatability	±0.01mm	
Base material	Aluminum	
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)	

Maximum Stroke

Y axis 1100 mm

Z axis 300 mm

Max. Speed (Ultra High-speed type)

Y axis 650 mm/s

Z axis 640 mm/s

* The max. 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.80.

Applicable Controllers

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

Y-axis: SA8R

Type	Reference page
PCON-CFB/CGFB	Please see the RCP6 catalog or PCON-CB/CFB manual.

Z-axis: SA7R

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options

Type	Option code	Reference page	Y-axis	Z-axis
Brake	B	See P.77	○	Standard equipment *
Cable exit direction (Outside)	CJO	See P.77	○	Cannot be selected
Non-motor end specification	NM	See P.78	○	○
Slider roller specification	SR	See P.78	○	○

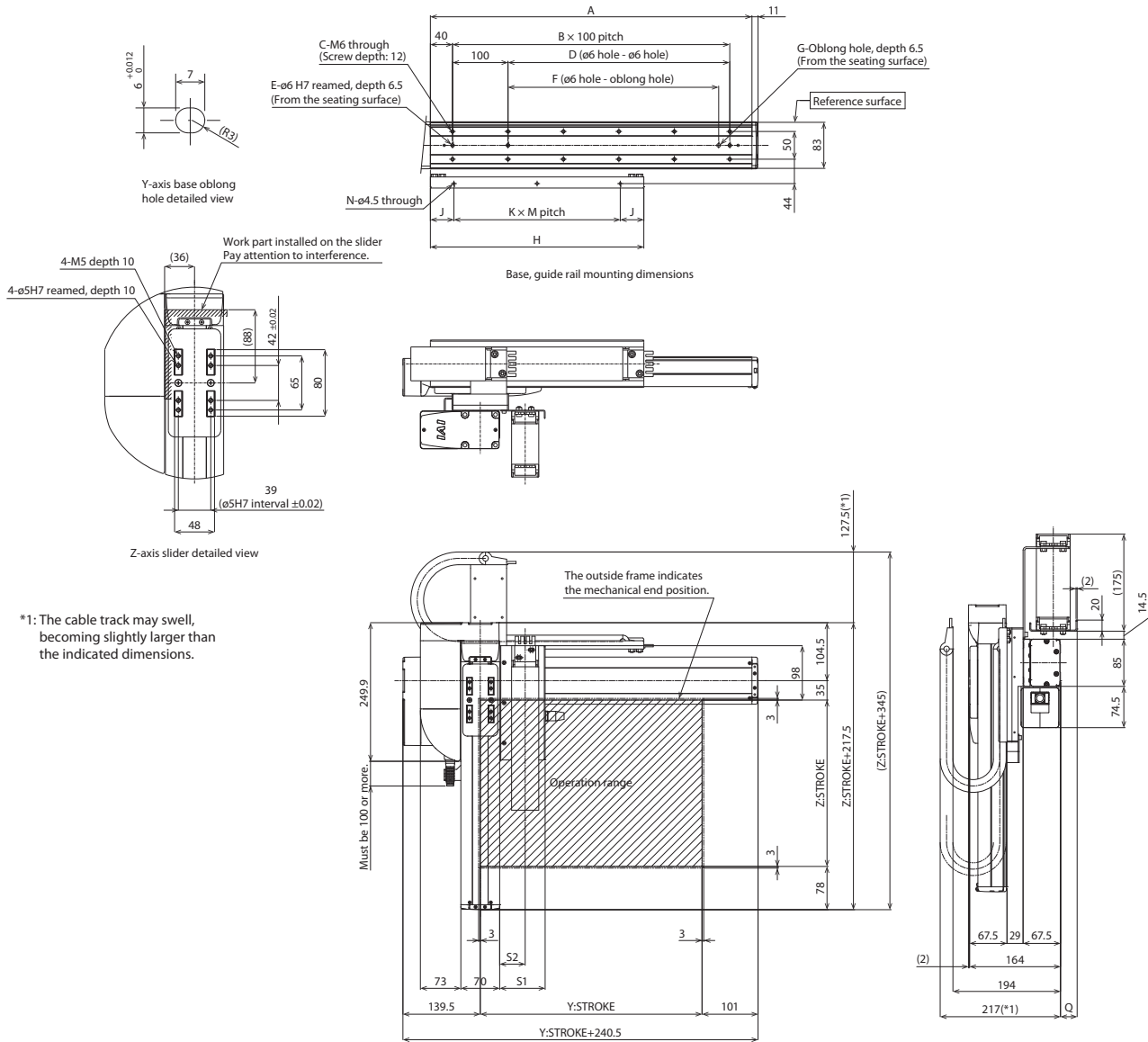
* Be sure to specify.

Dimensions

CAD drawings can be downloaded from our website.
www.robocylinder.de



Note 1. The configuration position in the figure is home.
Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



(*) Notes

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

■ Dimensions by Stroke

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

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

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

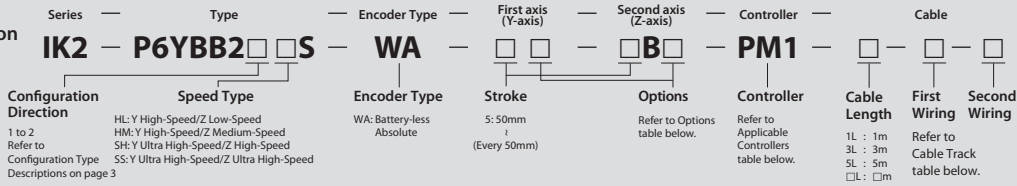
IK2-P6YBB2□□S

RCP6 2-axis combination

Y-axis: SA8C (Straight)

Z-axis: SA7R (Side-mounted)

Model Specification Items



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

Payload by Acceleration

HL type: Y high-speed/ Z low-speed

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

HM type: Y high-speed/ Z medium-speed

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

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

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

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

Acceleration/deceleration (G)	Z-axis stroke (mm)	50~200 (Every 50mm)	250~300 (Every 50mm)
	0.1	1.5	
0.3	1.5		
0.5	1.5	1	

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

Cable Length

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

- Note 1. All-axis standard cable is used.
 Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.
 Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Cable Track

Type	Model	Reference page	First wiring (Y-axis lateral)	Second wiring (Z-axis lateral)
Without cable track (cable only)	N	See P.79	○	○
Cable track S size (inner width: 38mm)	CT		○	○
Cable track M size (inner width: 50mm)	CTM		○	○
Cable track L size (inner width: 63mm)	CTL		○	○
Cable track XL size (inner width: 80mm) *	CTXL		○	Cannot be selected *

* Only the first wiring can be selected

Specifications

Item	Y-axis	Z-axis
Axis model	RCP6-SA8C	RCP6-SA7R
Stroke (Every 50mm)	50~1100mm	50~300mm
Max. speed *	HL	105mm/s
	HM	280mm/s
	SH	560mm/s
	SS	640mm/s
Motor size	56□ High-thrust pulse motor	56□ Pulse motor
Ball screw lead	HL	4mm
	HM	8mm
	SH	16mm
	SS	24mm
Drive system	Ball screw ø16mm rolled C10	Ball screw ø12mm rolled C10
Positioning repeatability	±0.01mm	
Base material	Aluminum	
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)	

Maximum Stroke

Y axis 1100 mm

Z axis 300 mm

Max. Speed (Ultra High-speed type)

Y axis 650 mm/s

Z axis 640 mm/s

* The max. 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.80.

Applicable Controllers

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

Y-axis: SA8C

Type	Reference page
PCON-CFB/CGFB	Please see the RCP6 catalog or PCON-CB/CFB manual.

Z-axis: SA7R

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options

Type	Option code	Reference page	Y-axis	Z-axis
Brake	B	See P.77	○	Standard equipment *
Cable exit direction (Top)	CJT	See P.77	○	Cannot be selected
Cable exit direction (Right)	CJR	See P.77	○	
Cable exit direction (Left)	CJL	See P.77	○	
Cable exit direction (Bottom)	CJB	See P.77	○	
Non-motor end specification	NM	See P.78	○	
Slider roller specification	SR	See P.78	○	○

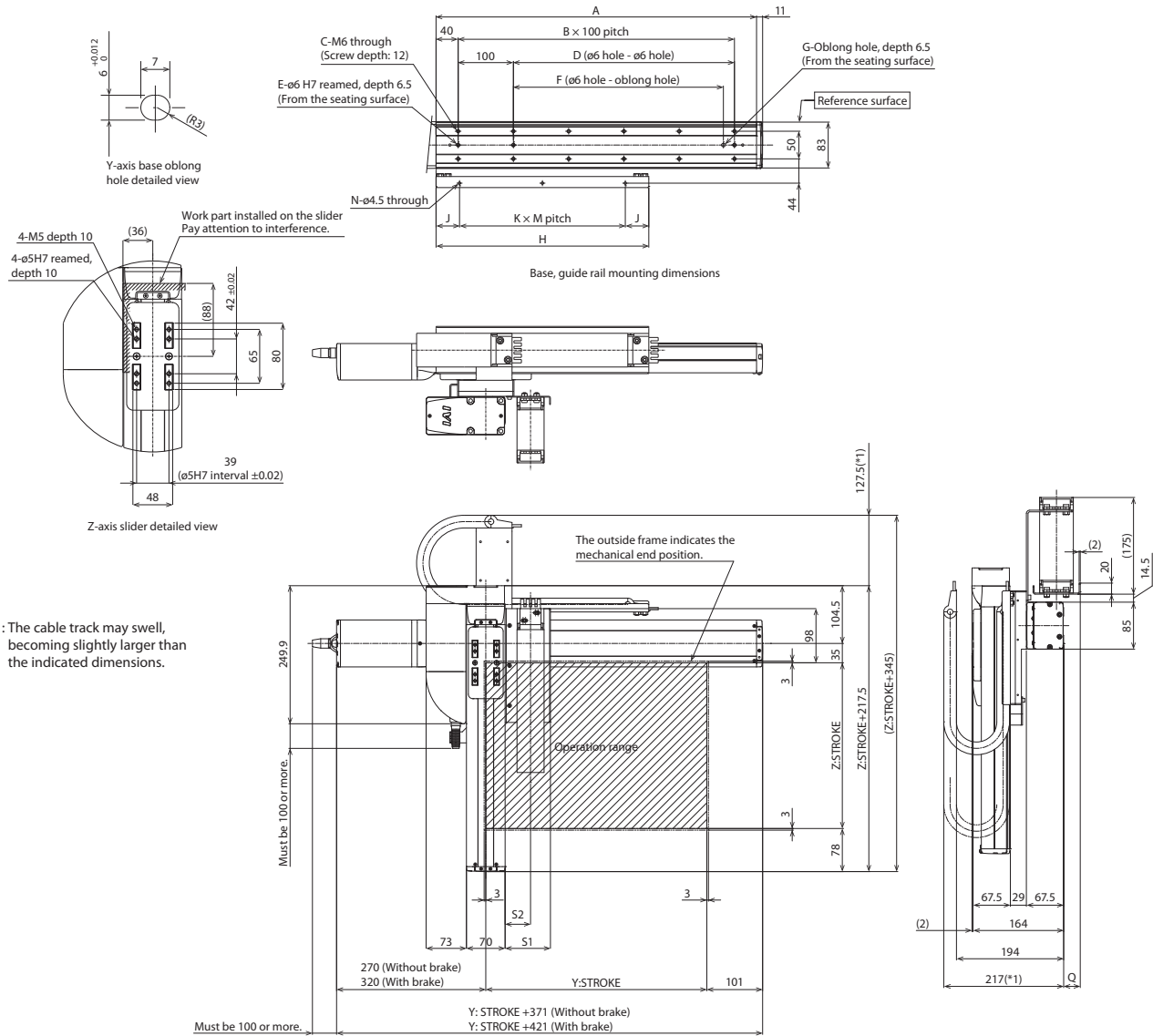
* Be sure to specify.

Dimensions

CAD drawings can be downloaded from our website.
www.robocylinder.de



Note 1. The configuration position in the figure is home.
Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



(*) Notes

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

■ Dimensions by Stroke

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

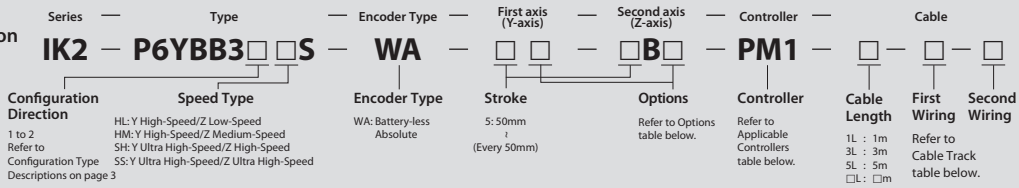
Cable track size	CT	CTM	CTL	CTXL
Q	18	30	45	63
S1	82	94	107	-
S2	46	52.5	59	-

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

IK2-P6YBB3□□S

RCP6 2-axis combination
Y-axis: SA8C (Straight)
Z-axis: SA7C (Straight)

Model Specification Items



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

Payload by Acceleration

HL type: Y high-speed/ Z low-speed

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

HM type: Y high-speed/ Z medium-speed

Acceleration/deceleration (G)	Z-axis stroke (mm)	50~300 (Every 50mm)	
	50~300 (Every 50mm)	50~200 (Every 50mm)	250~300 (Every 50mm)
0.1		4.5	
0.3		4	
0.5		3.5	

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

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

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

Acceleration/deceleration (G)	Z-axis stroke (mm)	50~200 (Every 50mm)	250~300 (Every 50mm)
	0.1		1.5
0.3		1.5	
0.5		1.5	1

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

Cable Length

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

Note 1. All-axis standard cable is used.
Note 2. The length of the second axis cable is from the exit of the cable track. A separate cable is included for wiring inside the cable track.
Note 3. The standard lengths are 1m, 3m and 5m, but other lengths can be specified in 1m increments up to 15m.

Cable Track

Type	Model	Reference page	First wiring (Y-axis lateral)	Second wiring (Z-axis lateral)
Without cable track (cable only)	N	See P.79	○	○
Cable track S size (inner width: 38mm)	CT		○	○
Cable track M size (inner width: 50mm)	CTM		○	○
Cable track L size (inner width: 63mm)	CTL		○	○
Cable track XL size (inner width: 80mm) *	CTXL		○	Cannot be selected *

* Only the first wiring can be selected

Specifications

Item	Y-axis	Z-axis
Axis model	RCP6-SA8C	RCP6-SA7C
Stroke (Every 50mm)	50~1100mm	50~300mm
Max. speed *	HL	105mm/s
	HM	280mm/s
	SH	560mm/s
	SS	640mm/s
Motor size	56□ High-thrust pulse motor	56□ Pulse motor
Ball screw lead	HL	4mm
	HM	8mm
	SH	16mm
	SS	24mm
Drive system	Ball screw ø16mm rolled C10	Ball screw ø12mm rolled C10
Positioning repeatability	±0.01mm	
Base material	Aluminum	
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)	

Maximum Stroke

Y axis 1100 mm

Z axis 300 mm

Max. Speed (Ultra High-speed type)

Y axis 650 mm/s

Z axis 640 mm/s

* The max. 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.80.

Applicable Controllers

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

Y-axis: SA8C

Type	Reference page
PCON-CFB/CGFB	Please see the RCP6 catalog or PCON-CB/CFB manual.

Z-axis: SA7C

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options

Type	Option code	Reference page	Y-axis	Z-axis
Brake	B	See P.77	○	Standard equipment *
Cable exit direction (Top)	CJT	See P.77	○	Cannot be selected
Cable exit direction (Right)	CJR	See P.77	○	
Cable exit direction (Left)	CJL	See P.77	○	
Cable exit direction (Bottom)	CJB	See P.77	○	
Non-motor end specification	NM	See P.78	○	○
Slider roller specification	SR	See P.78	○	○

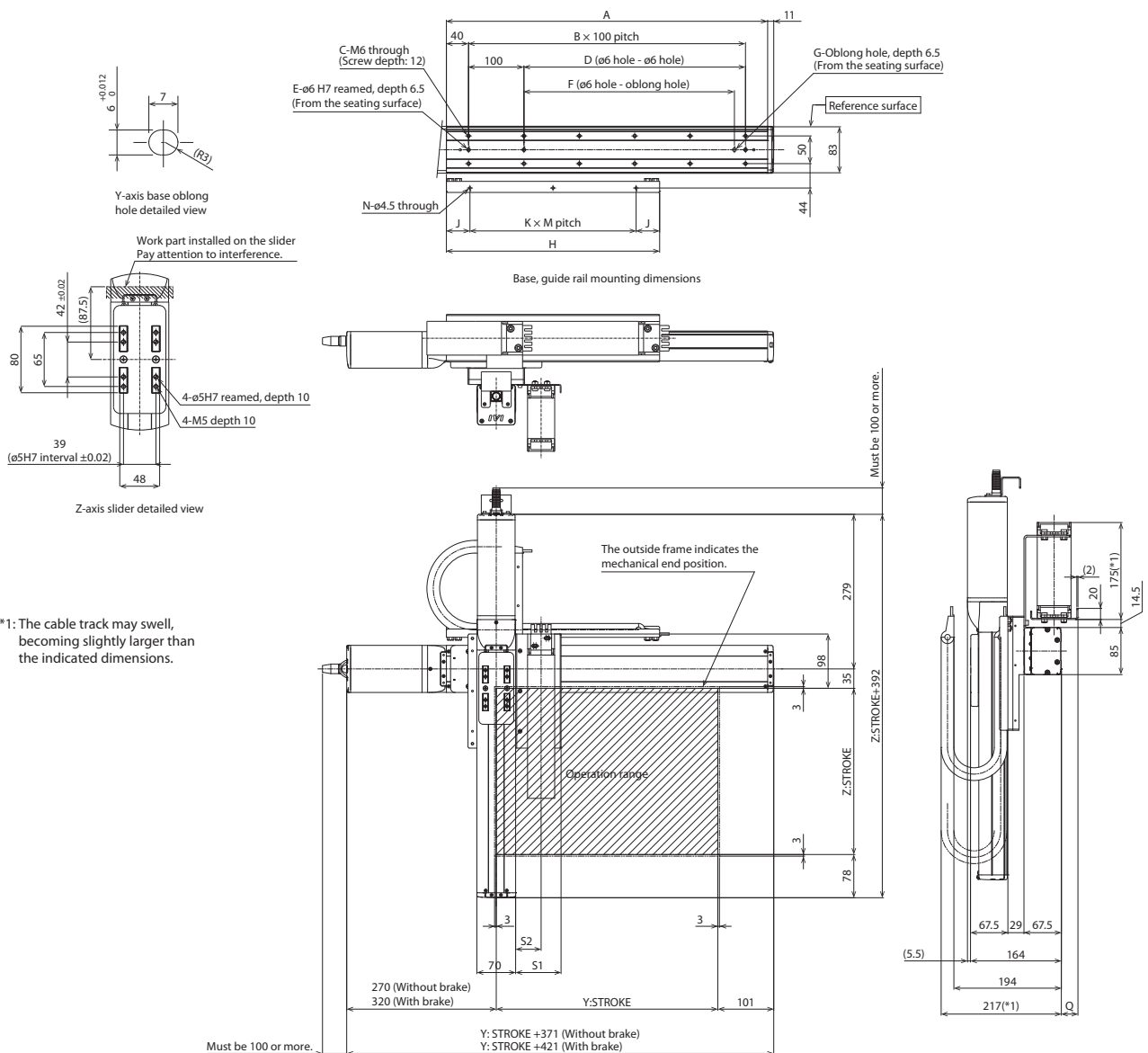
* Be sure to specify.

Dimensions

CAD drawings can be downloaded from our website.
www.robocylinder.de



Note 1. The configuration position in the figure is home.
Note 2. The diagram shows the configuration direction "1" where both the first wiring and second wiring have cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



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

(*) Notes

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

■ Dimensions by Stroke

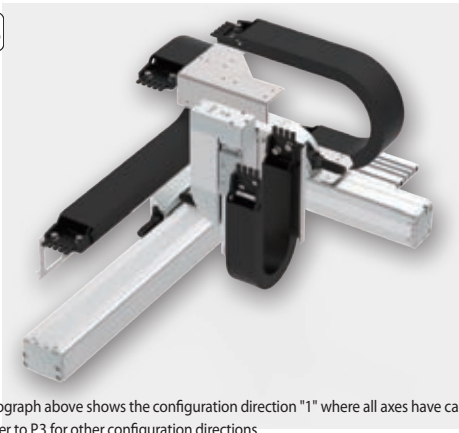
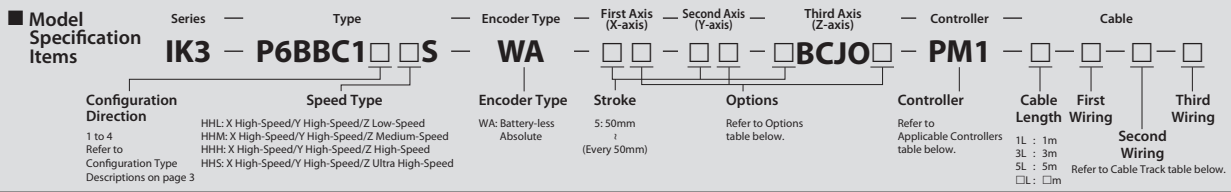
Y: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
A	230	280	330	380	430	480	530	580	630	680	730	780	830	880	930	980	1030	1080	1130	1180	1230	1280
B	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12
C	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22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

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

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

IK3-P6BBC1□□S

RCP6 3-axis combination (XYB + Z-axis, base mount)
 X-axis: SA7R (Side-mounted) Y-axis: SA6R (Side-mounted) Z-axis: SA4R (Side-mounted)



The photograph above shows the configuration direction "1" where all axes have cable tracks. Please refer to P3 for other configuration directions.

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	HHL	HHM	HHH	HHS
Acceleration/deceleration (G)				
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.

Cable Length

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

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

Type	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)	Third wiring (Z-axis lateral)
Without cable track (cable only)	N	See P.79	○	○	○
Cable track S size (inner width: 38mm)	CT		○	○	○
Cable track M size (inner width: 50mm)	CTM		○	○	○
Cable track L size (inner width: 63mm)	CTL		○	○	Cannot be selected *1
Cable track XL size (inner width: 80mm)	CTXL		○	Cannot be selected *2	

*1 Only the first and second wiring can be selected

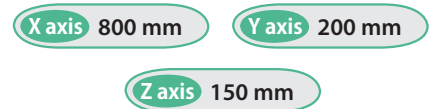
*2 Only the first wiring can be selected

Specifications

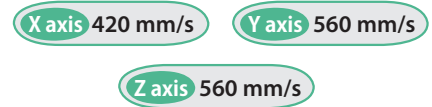
Item	X-axis	Y-axis	Z-axis	
Axis model	RCP6-SA7R	RCP6-SA6R	RCP6-SA4R	
Stroke (Every 50mm)	50~800mm	50~200mm	50~150mm	
Max. speed *	420mm/s	560mm/s	HHL	150mm/s
			HHM	305mm/s
			HHH	525mm/s
			HHS	560mm/s
			Motor size	56□ Pulse motor
Ball screw lead	16mm	12mm	HHL	2.5mm
			HHM	5mm
			HHH	10mm
			HHS	16mm
			Drive system	Ball screw ø12mm rolled C10
Positioning repeatability	±0.01mm			
Base material	Aluminum			
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)			

* The maximum speed may not be reached if the travel distance is short or acceleration is low. Maximum speed may change depending on the stroke. For details, refer to the Maximum Speed by Stroke table on P.80.

Maximum Stroke



Max. Speed (Ultra High-speed type)



Applicable Controllers

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

□ X-axis: SA7R, Y-axis: SA6R, Z-axis: SA4R

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options

Type	Option code	Reference page	X-axis	Y-axis	Z-axis
Brake	B	See P.77	○	○	Standard equipment *
Cable exit direction (Outside)	CJO	See P.77	Cannot be selected		Standard equipment *
Non-motor end specification	NM	See P.78	○	○	○
Slider roller specification	SR	See P.78	○	○	○

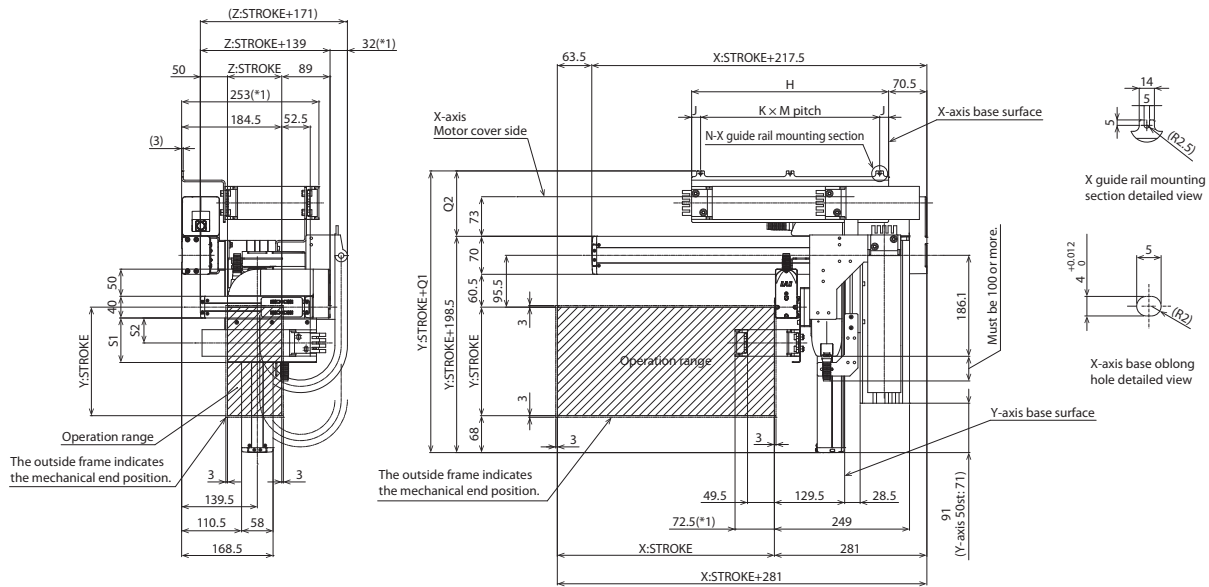
* Be sure to specify.

Dimensions

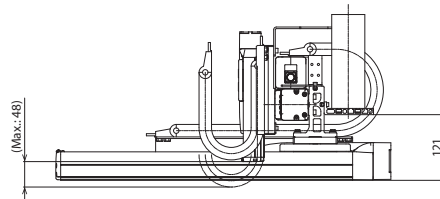
CAD drawings can be downloaded from our website.
www.robocylinder.de



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.79.

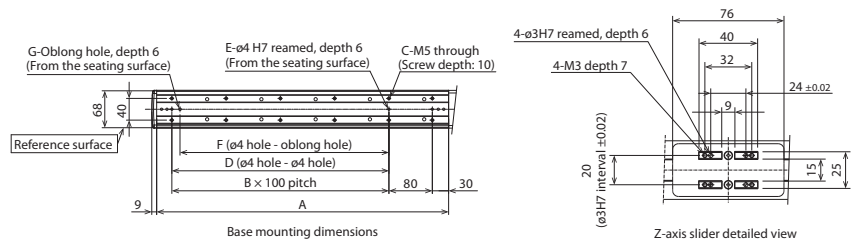


*1: The cable track may swell, becoming slightly larger than the indicated dimensions.



(*) Notes

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

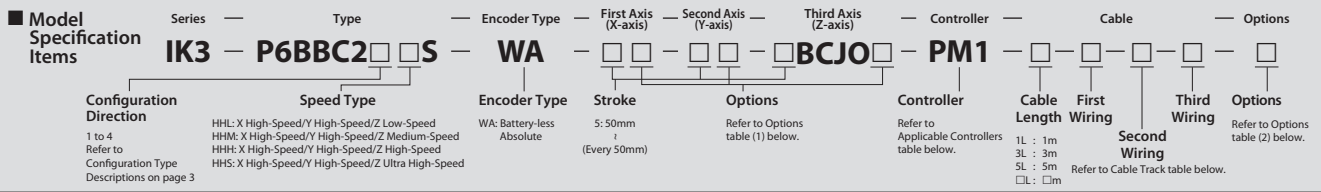
X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
A	188	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938
B	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8
C	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20
D	0	0	100	200	200	300	300	400	400	500	500	600	600	700	700	800
E	2	2	3	3	3	3	3	3	3	3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

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

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

IK3-P6BBC2□□S

RCP6 3-axis combination (XYB + Z-axis, base mount)
 X-axis: SA7C (Straight)
 Y-axis: SA6R (Side-mounted) Z-axis: SA4R (Side-mounted)



The photograph above shows the configuration direction "1" where all axes have cable tracks. Please refer to P3 for other configuration directions.

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	HHL	HHM	HHH	HHS
Acceleration/deceleration (G)				
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.

Cable Length

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

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

Type	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)	Third wiring (Z-axis lateral)
Without cable track (cable only)	N	See P.79	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cable track S size (inner width: 38mm)	CT		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cable track M size (inner width: 50mm)	CTM		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cable track L size (inner width: 63mm)	CTL		<input type="radio"/>	<input type="radio"/>	Cannot be selected *1
Cable track XL size (inner width: 80mm)	CTXL		<input type="radio"/>	Cannot be selected *2	

*1 Only the first and second wiring can be selected

*2 Only the first wiring can be selected

Specifications

Item	X-axis	Y-axis	Z-axis
Axis model	RCP6-SA7C	RCP6-SA6R	RCP6-SA4R
Stroke (Every 50mm)	50~800mm	50~200mm	50~150mm
Max. speed *	HHL	560mm/s	150mm/s
	HHM		305mm/s
	HHH		525mm/s
	HHS		560mm/s
Motor size	56□ Pulse motor	42□ Pulse motor	35□ Pulse motor
Ball screw lead	HHL	12mm	2.5mm
	HHM		5mm
	HHH		10mm
	HHS		16mm
Drive system	Ball screw ø12mm rolled C10	Ball screw ø10mm rolled C10	Ball screw ø8mm rolled C10
Positioning repeatability	±0.01mm		
Base material	Aluminum		
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)		

Maximum Stroke

X axis 800 mm Y axis 200 mm

Z axis 150 mm

Max. Speed (Ultra High-speed type)

X axis 420 mm/s Y axis 560 mm/s

Z axis 560 mm/s

* The max. 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.80.

Applicable Controllers

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

□ X-axis: SA7C, Y-axis: SA6R, Z-axis: SA4R

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options (1)

Type	Option code	Reference page	X-axis	Y-axis	Z-axis
Brake	B	See P.77	<input type="radio"/>	<input type="radio"/>	Standard equipment *
Cable exit direction (Top)	CJT	See P.77	<input type="radio"/>	Cannot be selected	
Cable exit direction (Right)	CJR	See P.77	<input type="radio"/>		
Cable exit direction (Left)	CJL	See P.77	<input type="radio"/>		
Cable exit direction (Bottom)	CJB	See P.77	<input type="radio"/>		
Cable exit direction (Outside)	CJO	See P.77	Cannot be selected		Standard equipment *
Non-motor end specification	NM	See P.78	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Slider roller specification	SR	See P.78	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

* Be sure to specify.

Options (2)

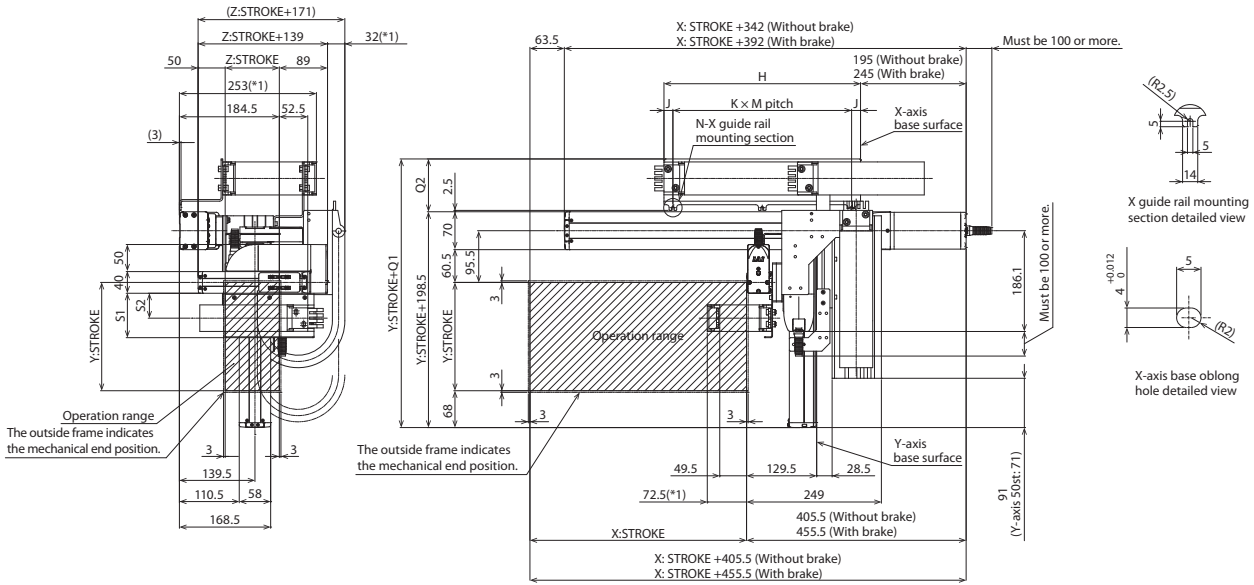
Type	Option code	Reference page
Foot plate	FTP	See P.77

Dimensions

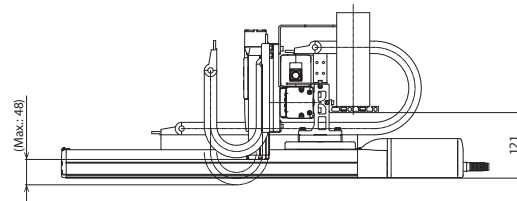
CAD drawings can be downloaded from our website.
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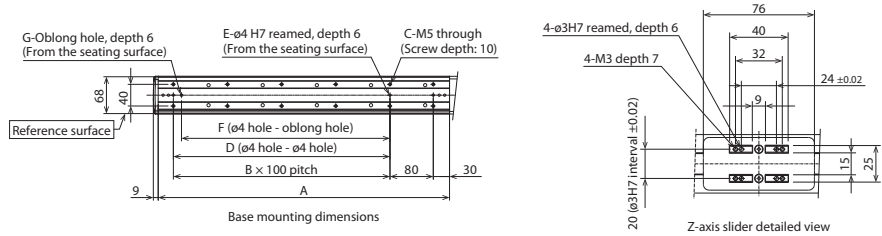
Note 1. The configuration position in the figure is home.
Note 2. The diagram shows first, second and third wirings all with cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



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



(* Notes)
The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer.
When the foot plate option is selected, the unit will be shipped fixed on the foot plate. (See P.77)
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

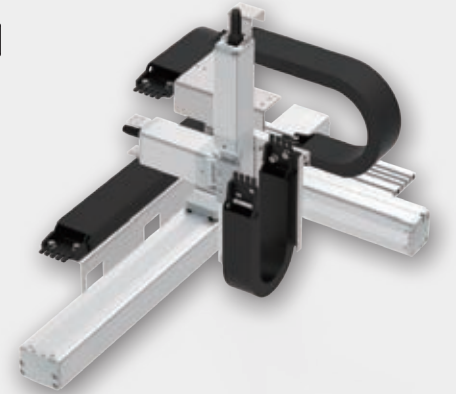
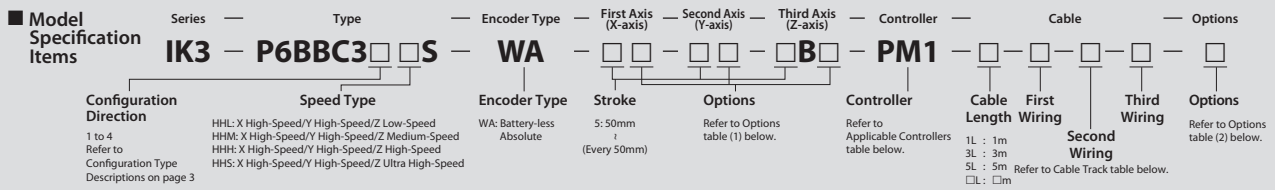
X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
A	188	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938
B	0	1	1	2	2	3	3	3	4	4	5	5	6	6	7	8
C	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20
D	0	0	100	200	200	300	300	400	400	500	500	600	600	700	700	800
E	2	2	3	3	3	3	3	3	3	3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

Cable track size	CT	CTM	CTL	CTLX
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-P6BBC3□□S

RCP6 3-axis combination (XYB + Z-axis, base mount)
 X-axis: SA7C (Straight) Y-axis: SA6C (Straight) Z-axis: SA4C (Straight)



The photograph above shows the configuration direction "1" where all axes have cable tracks. Please refer to P3 for other configuration directions.

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	HHL	HHM	HHH	HHS
Acceleration/deceleration (G)				
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.

Cable Length

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

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

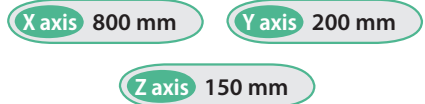
Type	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)	Third wiring (Z-axis lateral)
Without cable track (cable only)	N	See P.79	○	○	○
Cable track S size (inner width: 38mm)	CT		○	○	○
Cable track M size (inner width: 50mm)	CTM		○	○	○
Cable track L size (inner width: 63mm)	CTL		○	○	Cannot be selected *1
Cable track XL size (inner width: 80mm)	CTXL		○	Cannot be selected *2	

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

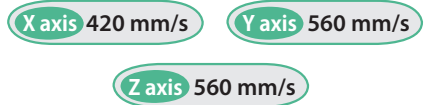
Specifications

Item	X-axis	Y-axis	Z-axis
Axis model	RCP6-SA7C	RCP6-SA6C	RCP6-SA4C
Stroke (Every 50mm)	50~800mm	50~200mm	50~150mm
Max. speed *	HHL	560mm/s	150mm/s
	HHM		305mm/s
	HHH		525mm/s
	HHS		560mm/s
Motor size	56□ Pulse motor	42□ Pulse motor	35□ Pulse motor
Ball screw lead	HHL	12mm	2.5mm
	HHM		5mm
	HHH		10mm
	HHS		16mm
Drive system	Ball screw ø12mm rolled C10	Ball screw ø10mm rolled C10	Ball screw ø8mm rolled C10
Positioning repeatability	±0.01mm		
Base material	Aluminum		
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)		

Maximum Stroke



Max. Speed (Ultra High-speed type)



* The max. 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.80.

Applicable Controllers

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

□ X-axis: SA7C, Y-axis: SA6C, Z-axis: SA4C

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options (1)

Type	Option code	Reference page	X-axis	Y-axis	Z-axis
Brake	B	See P.77	○	○	Standard equipment *
Cable exit direction (Top)	CJT	See P.77	○	Cannot be selected	
Cable exit direction (Right)	CJR	See P.77	○		
Cable exit direction (Left)	CJL	See P.77	○		
Cable exit direction (Bottom)	CJB	See P.77	○		
Non-motor end specification	NM	See P.78	○	○	○
Slider roller specification	SR	See P.78	○	○	○

* Outside as standard. Be sure to specify.

Options (2)

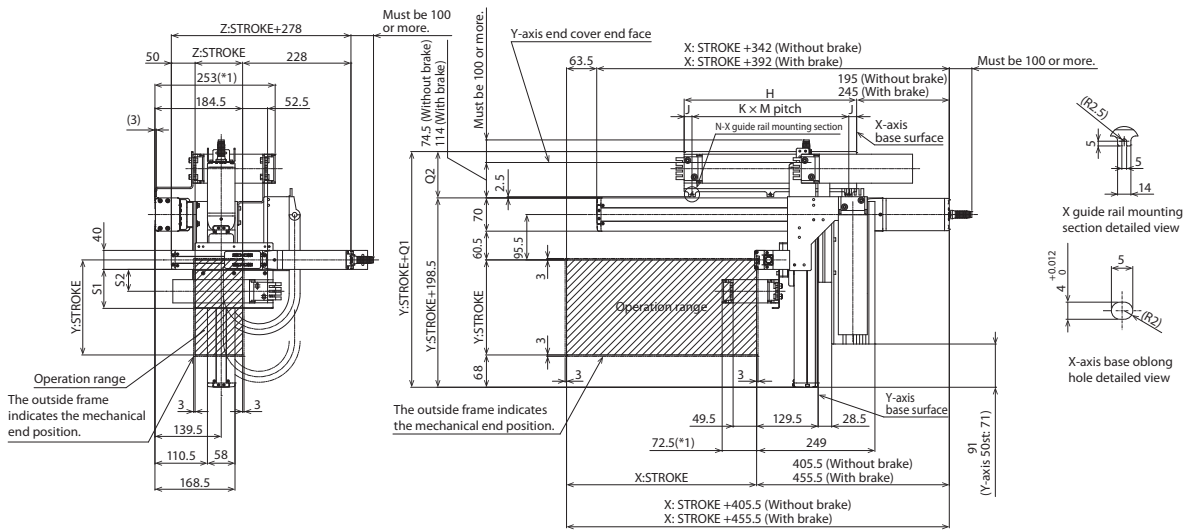
Type	Option code	Reference page
Foot plate	FTP	See P.77

Dimensions

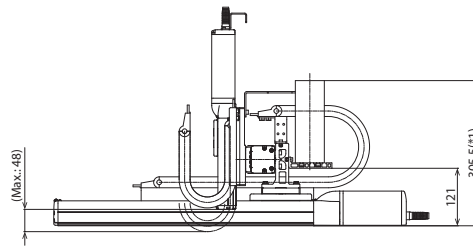
CAD drawings can be downloaded from our website.
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Note 1. The configuration position in the figure is home.
Note 2. The diagram shows first, second and third wirings all with cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.

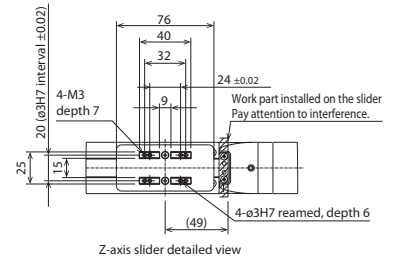
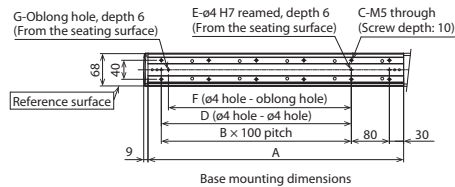


*1: The cable track may swell, becoming slightly larger than the indicated dimensions.



(*) Notes

The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer.
When the foot plate option is selected, the unit will be shipped fixed on the foot plate. (See P.77)
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

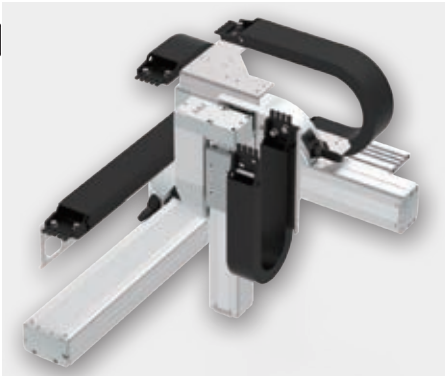
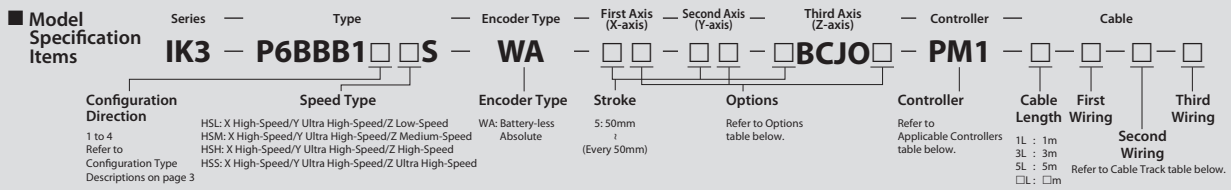
X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
A	188	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938
B	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8
C	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20
D	0	0	100	200	200	300	300	400	400	500	500	600	600	700	700	800
E	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	0	85	85	185	185	285	285	385	385	485	485	585	585	685	685	785
G	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
H	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	2	2	2	2	3
M	155	180	210	115	127.5	140	155	165	180	127	136	110	200	200	200	177
N	2	2	2	3	3	3	3	3	3	4	4	4	3	3	3	4

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

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

IK3-P6BBB1□□S

RCP6 3-axis combination (XYB + Z-axis, base mount)
 X-axis: SA8R (Side-mounted)
 Y-axis: SA7R (Side-mounted) Z-axis: SA6R (Side-mounted)



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

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
- (Unit: kg)

Acceleration/ deceleration (G)	Speed Type			
	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.

Cable Length

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

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

Type	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)	Third wiring (Z-axis lateral)
Without cable track (cable only)	N	See P.79	○	○	○
Cable track S size (inner width: 38mm)	CT		○	○	○
Cable track M size (inner width: 50mm)	CTM		○	○	○
Cable track L size (inner width: 63mm)	CTL		○	○	Cannot be selected*1
Cable track XL size (inner width: 80mm)	CTXL		○	○	Cannot be selected*2

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

Specifications

Item	X-axis	Y-axis	Z-axis
Axis model	RCP6-SA8R	RCP6-SA7R	RCP6-SA6R
Stroke (Every 50mm)	50~1100mm	50~250mm	50~200mm
Max. speed *	300mm/s	640mm/s	HSL 170mm/s
			HSM 340mm/s
			HSH 680mm/s
			HSS 800mm/s
Motor size	56□ High-thrust pulse motor	56□ Pulse motor	42□ Pulse motor
Ball screw lead	20mm	24mm	HSL 3mm
			HSM 6mm
			HSH 12mm
			HSS 20mm
Drive system	Ball screw ø16mm rolled C10	Ball screw ø12mm rolled C10	Ball screw ø10mm rolled C10
Positioning repeatability	±0.01mm		
Base material	Aluminum		
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)		

Maximum Stroke



Max. Speed (Ultra High-speed type)



* The max. 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.80.

Applicable Controllers

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

□ X-axis: SA8R

Type	Reference page
PCON-CFB/CGFB	Please see the RCP6 catalog or PCON-CB/CFB manual.

□ Y-axis: SA7R, Z-axis: SA6R

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options

Type	Option code	Reference page	X-axis	Y-axis	Z-axis
Brake	B	See P.77	○	○	Standard equipment*
Cable exit direction (Outside)	CJO	See P.77	Cannot be selected		Standard equipment*
Non-motor end specification	NM	See P.78	○	○	○
Slider roller specification	SR	See P.78	○	○	○

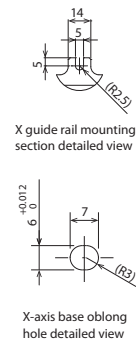
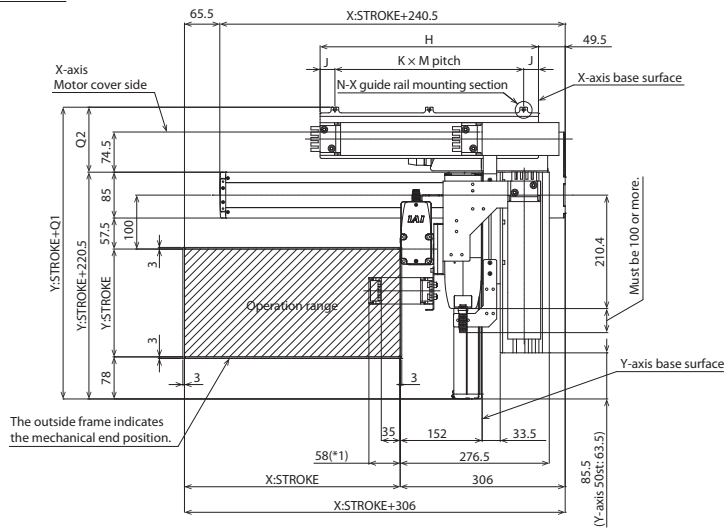
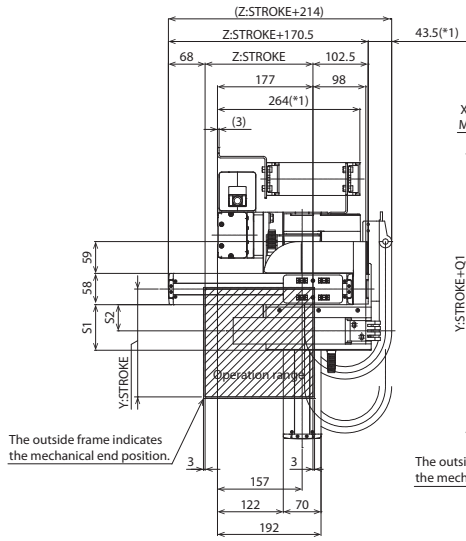
* Be sure to specify.

Dimensions

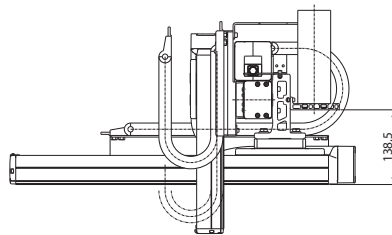
CAD drawings can be downloaded from our website.
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Note 1. The configuration position in the figure is home.
 Note 2. The diagram shows first, second and third wirings all with cable tracks.
 Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.

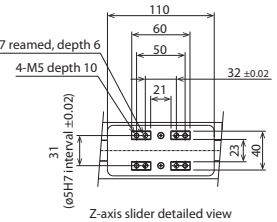
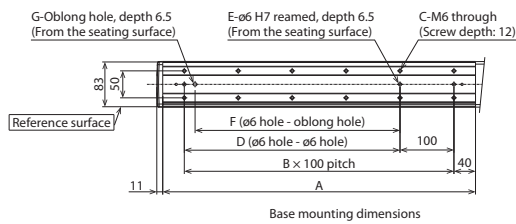


*1: The cable track may swell, becoming slightly larger than the indicated dimensions.



(*) Notes

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

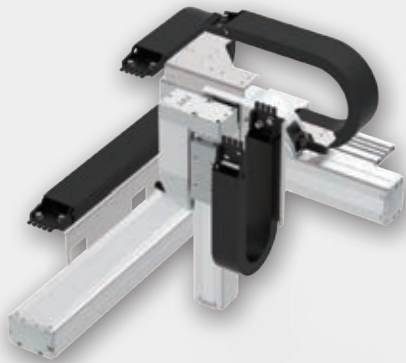
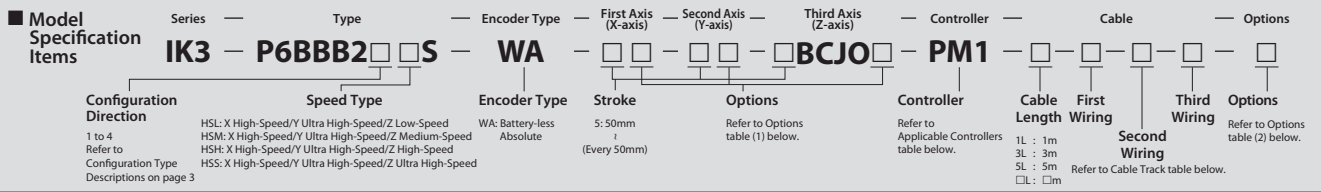
X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
A	230	280	330	380	430	480	530	580	630	680	730	780	830	880	930	980	1030	1080	1130	1180	1230	1280
B	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12
C	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22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

Cable track size	CT	CTM	CTL	CTXL
Q1	328	341	354	371
Q2	107.5	120.5	133.5	150.5
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-P6BBB2□□S

RCP6 3-axis combination (XYB + Z-axis, base mount)
 X-axis: SA8C (Straight)
 Y-axis: SA7R (Side-mounted) Z-axis: SA6R (Side-mounted)



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

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
- (Unit: kg)

Speed Type	HSL	HSM	HSH	HSS
Acceleration/deceleration (G)				
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.

Cable Length

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

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

Type	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)	Third wiring (Z-axis lateral)
Without cable track (cable only)	N	See P.79	○	○	○
Cable track S size (inner width: 38mm)	CT		○	○	○
Cable track M size (inner width: 50mm)	CTM		○	○	○
Cable track L size (inner width: 63mm)	CTL		○	○	Cannot be selected *1
Cable track XL size (inner width: 80mm)	CTXL		○	Cannot be selected *2	

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

Specifications

Item	X-axis	Y-axis	Z-axis
Axis model	RCP6-SA8C	RCP6-SA7R	RCP6-SA6R
Stroke (Every 50mm)	50~1100mm	50~250mm	50~200mm
Max. speed *	HSL	300mm/s	640mm/s
	HSM		
	HSH		
	HSS		
	HSS		
Motor size	56□ High-thrust pulse motor	56□ Pulse motor	42□ Pulse motor
Ball screw lead	HSL	20mm	24mm
	HSM		
	HSH		
	HSS		
Drive system	Ball screw ø16mm rolled C10	Ball screw ø12mm rolled C10	Ball screw ø10mm rolled C10
Positioning repeatability	±0.01mm		
Base material	Aluminum		
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)		

Maximum Stroke

X axis 1100 mm Y axis 250 mm
 Z axis 200 mm

Max. Speed (Ultra High-speed type)

X axis 300 mm/s Y axis 640 mm/s
 Z axis 800 mm/s

* The max. 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.80.

Applicable Controllers

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

□ X-axis: SA8C

Type	Reference page
PCON-CFB/CGFB	Please see the RCP6 catalog or PCON-CB/CFB manual.

□ Y-axis: SA7R, Z-axis: SA6R

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options (1)

Type	Option code	Reference page	X-axis	Y-axis	Z-axis
Brake	B	See P.77	—	—	Standard equipment *
Cable exit direction (Top)	CJT	See P.77	—	Cannot be selected	
Cable exit direction (Right)	CJR	See P.77	—		
Cable exit direction (Left)	CJL	See P.77	—		
Cable exit direction (Bottom)	CJB	See P.77	—		
Cable exit direction (Outside)	CJO	See P.77	Cannot be selected		Standard equipment *
Non-motor end specification	NM	See P.78	—	—	—
Slider roller specification	SR	See P.78	—	—	—

* Be sure to specify.

Options (2)

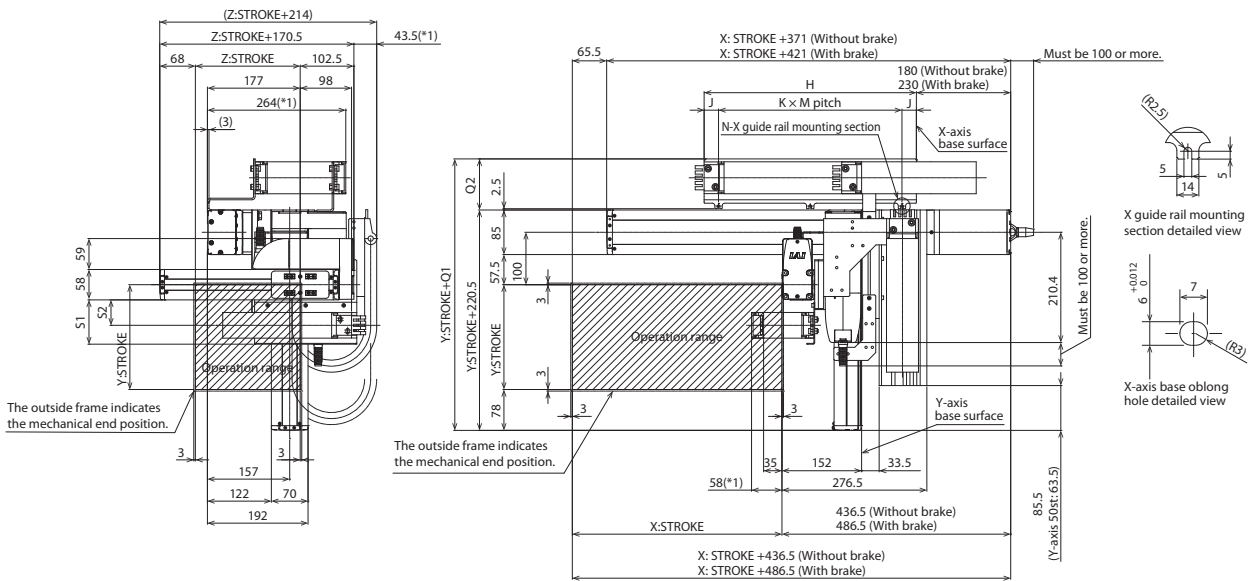
Type	Option code	Reference page
Foot plate	FTP	See P.77

Dimensions

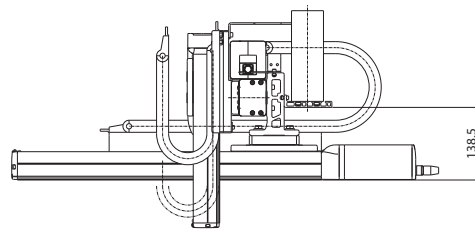
CAD drawings can be downloaded from our website.
www.robocylinder.de



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.79.

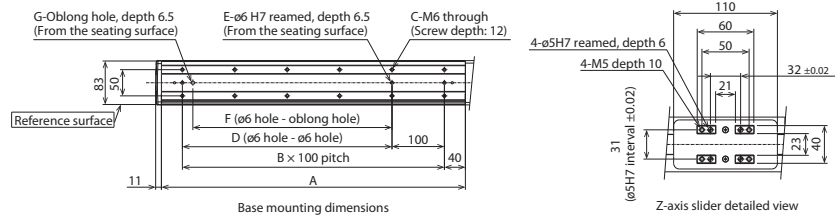


*1: The cable track may swell, becoming slightly larger than the indicated dimensions.



(*) Notes

The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer. When the foot plate option is selected, the unit will be shipped fixed on the foot plate. (See P.77) 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

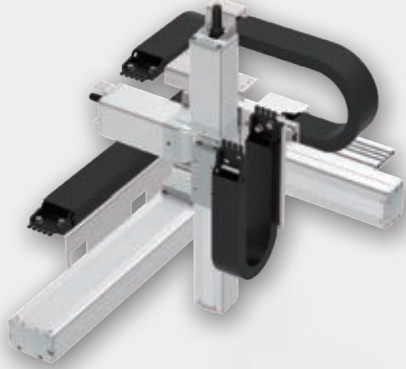
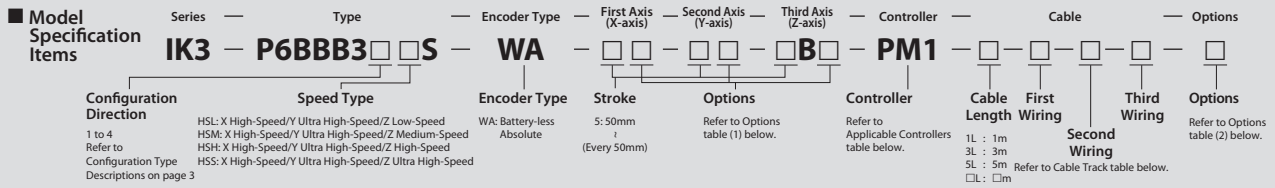
X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
A	230	280	330	380	430	480	530	580	630	680	730	780	830	880	930	980	1030	1080	1130	1180	1230	1280
B	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12
C	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22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

Cable track size	CT	CTM	CTL	CTXL
Q1	305	318	331	348
Q2	84.5	97.5	110.5	127.5
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-P6BBB3□□S

RCP6 3-axis combination (XYB + Z-axis, base mount)
 X-axis: SA8C (Straight)
 Y-axis: SA7C (Straight) Z-axis: SA6C (Straight)



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

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

(Unit: kg)

Speed Type	HSL	HSM	HSH	HSS
Acceleration/deceleration (G)				
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.

Cable Length

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

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

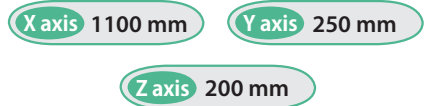
Type	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)	Third wiring (Z-axis lateral)
Without cable track (cable only)	N	See P.79	○	○	○
Cable track S size (inner width: 38mm)	CT		○	○	○
Cable track M size (inner width: 50mm)	CTM		○	○	○
Cable track L size (inner width: 63mm)	CTL		○	○	Cannot be selected *1
Cable track XL size (inner width: 80mm)	CTXL		○	Cannot be selected *2	

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

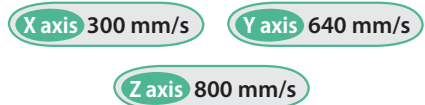
Specifications

Item	X-axis	Y-axis	Z-axis	
Axis model	RCP6-SA8C	RCP6-SA7C	RCP6-SA6C	
Stroke (Every 50mm)	50~1100mm	50~250mm	50~200mm	
Max. speed *	300mm/s	640mm/s	HSL	170mm/s
			HSM	340mm/s
			HSH	680mm/s
			HSS	800mm/s
Motor size	56□ High-thrust pulse motor	56□ Pulse motor	42□ Pulse motor	
Ball screw lead	20mm	24mm	HSL	3mm
			HSM	6mm
			HSH	12mm
			HSS	20mm
Drive system	Ball screw ø16mm rolled C10	Ball screw ø12mm rolled C10	Ball screw ø10mm rolled C10	
Positioning repeatability	±0.01mm			
Base material	Aluminum			
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)			

Maximum Stroke



Max. Speed (Ultra High-speed type)



* The max. 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.80.

Applicable Controllers

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

□ X-axis: SA8C

Type	Reference page
PCON-CFB/CGFB	Please see the RCP6 catalog or PCON-CB/CFB manual.

□ Y-axis: SA7C, Z-axis: SA6C

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options (1)

Type	Option code	Reference page	X-axis	Y-axis	Z-axis
Brake	B	See P.77	○	○	Standard equipment *
Cable exit direction (Top)	CJT	See P.77	○	Cannot be selected	
Cable exit direction (Right)	CJR	See P.77	○		
Cable exit direction (Left)	CJL	See P.77	○		
Cable exit direction (Bottom)	CJB	See P.77	○		
Non-motor end specification	NM	See P.78	○	○	○
Slider roller specification	SR	See P.78	○	○	○

* Outside as standard. Be sure to specify.

Options (2)

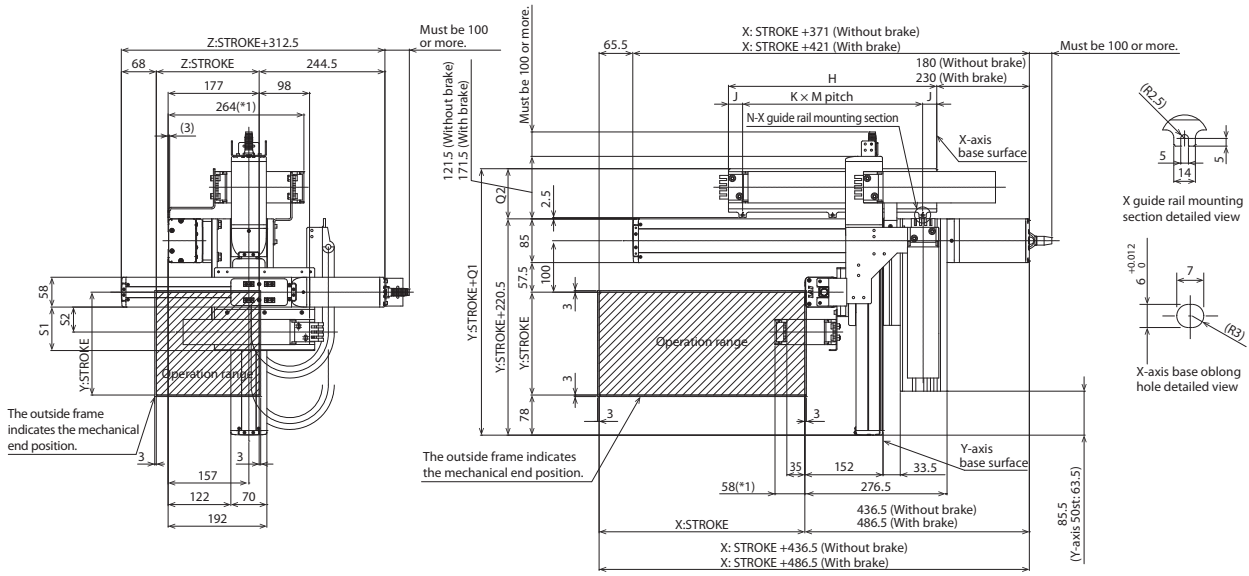
Type	Option code	Reference page
Foot plate	FTP	See P.77

Dimensions

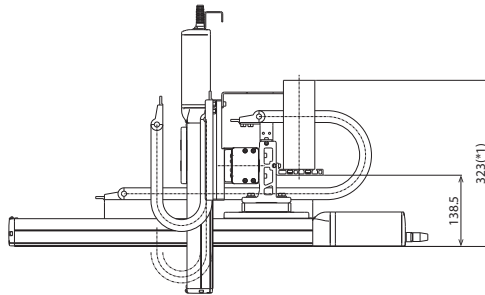
CAD drawings can be downloaded from our website.
www.robycylinder.de



- 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.79.

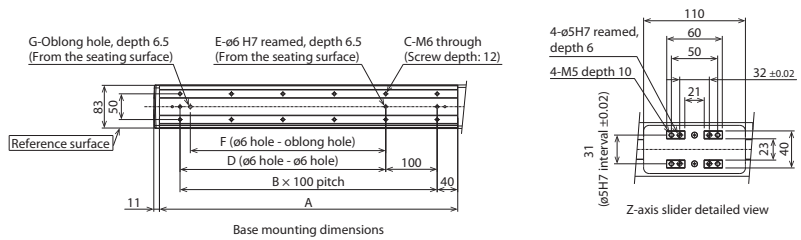


*1: The cable track may swell, becoming slightly larger than the indicated dimensions.



(*) Notes

The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer.
When the foot plate option is selected, the unit will be shipped fixed on the foot plate. (See P.77)
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	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
B	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12
C	4	6	6	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26
D	0	100	100	200	200	300	300	400	400	500	500	600	600	700	700	800	800	900	900	1000	1000	1100
E	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
F	0	0	80	180	180	280	280	380	380	480	480	580	580	680	680	780	780	880	880	980	980	1080
G	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
H	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	2	3	3	3	3	3	3	3	3	3	4	4
M	170	200	225	125	137.5	150	162.5	175	187.5	200	145	150	125	150	150	175	200	175	165	155	175	175
N	2	2	2	3	3	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5	5	5

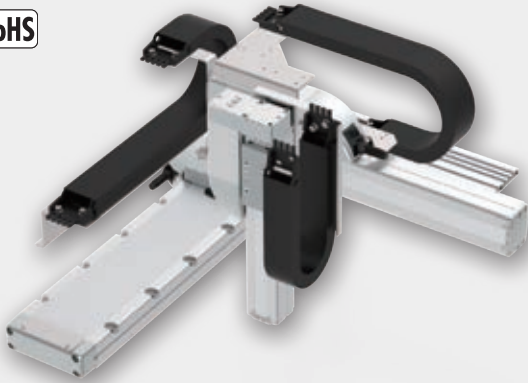
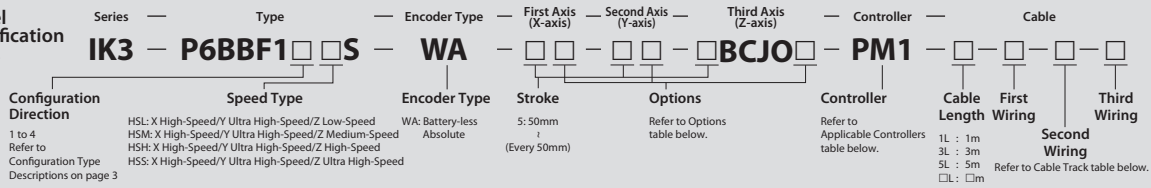
Cable track size	CT	CTM	CTL	CTLX
Q1	305	318	331	348
Q2	84.5	97.5	110.5	127.5
S1	84.5	96.5	-	-
S2	48.5	55	-	-

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

IK3-P6BBF1□□S

RCP6 3-axis combination (XYB + Z-axis, base mount)
 X-axis: WSA14R (Side-mounted)
 Y-axis: SA7R (Side-mounted) Z-axis: SA6R (Side-mounted)

Model Specification Items



The photograph above shows the configuration direction "1" where all axes have cable tracks. Please refer to P3 for other configuration directions.

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
- (Unit: kg)

Speed Type	HSL	HSM	HSH	HSS
Acceleration/deceleration (G)				
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.

Cable Length

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

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

Type	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)	Third wiring (Z-axis lateral)
Without cable track (cable only)	N	See P.79	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cable track S size (inner width: 38mm)	CT		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cable track M size (inner width: 50mm)	CTM		<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cable track L size (inner width: 63mm)	CTL		<input type="radio"/>	<input type="radio"/>	Cannot be selected *1
Cable track XL size (inner width: 80mm)	CTXL		<input type="radio"/>	Cannot be selected *2	

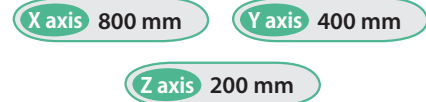
*1 Only the first and second wiring can be selected

*2 Only the first wiring can be selected

Specifications

Item	X-axis	Y-axis	Z-axis	
Axis model	RCP6-WSA14R	RCP6-SA7R	RCP6-SA6R	
Stroke (Every 50mm)	50~800mm	50~400mm	50~200mm	
Max. speed *	280mm/s	640mm/s	HSL	170mm/s
			HSM	340mm/s
			HSH	680mm/s
			HSS	800mm/s
Motor size	56□ Pulse motor	56□ Pulse motor	42□ Pulse motor	
Ball screw lead	16mm	24mm	HSL	3mm
			HSM	6mm
			HSH	12mm
			HSS	20mm
Drive system	Ball screw ø12mm rolled C10	Ball screw ø12mm rolled C10	Ball screw ø10mm rolled C10	
Positioning repeatability	±0.01mm			
Base material	Aluminum			
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)			

Maximum Stroke



Max. Speed (Ultra High-speed type)



* The max. 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.80.

Applicable Controllers

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

□ X-axis: WSA14R, Y-axis: SA7R, Z-axis: SA6R

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options

Type	Option code	Reference page	X-axis	Y-axis	Z-axis
Brake	B	See P.77	<input type="radio"/>	<input type="radio"/>	Standard equipment *
Cable exit direction (Outside)	CJO	See P.77	Cannot be selected		Standard equipment *
Non-motor end specification	NM	See P.78	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Slider roller specification	SR	See P.78	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

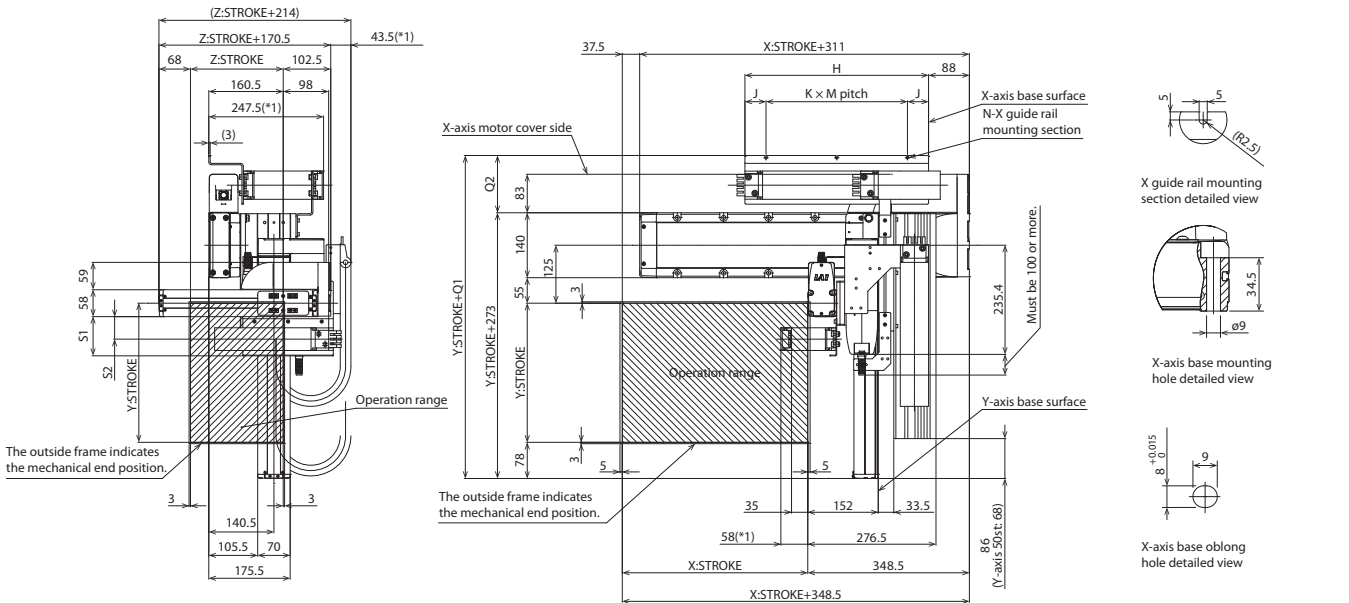
* Be sure to specify.

Dimensions

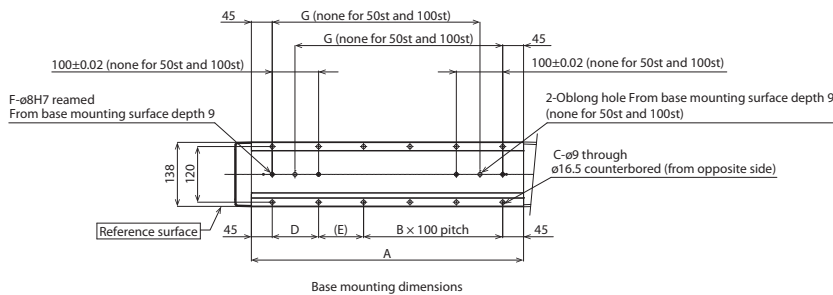
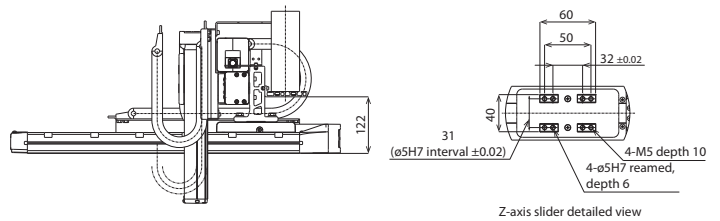
CAD drawings can be downloaded from our website.
www.robocylinder.de



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.79.



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



(*) Notes

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

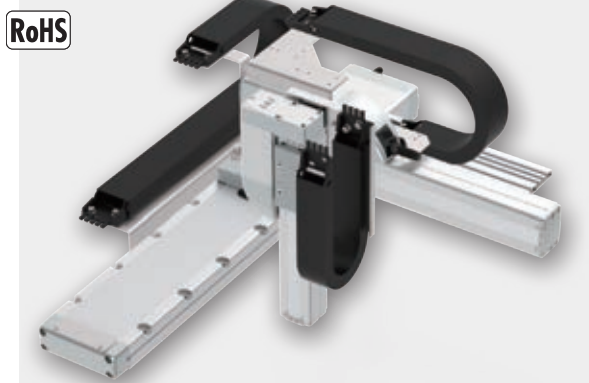
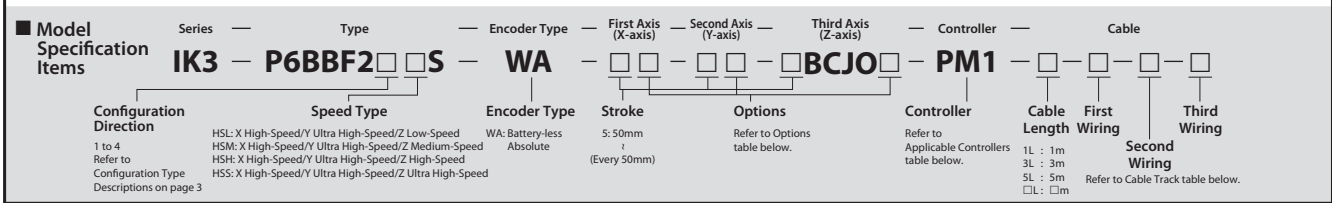
X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
A	237	287	337	387	437	487	537	587	637	687	737	787	837	887	937	987
B	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
C	4	4	8	8	10	10	12	12	14	14	16	16	18	18	20	20
D	-	-	100	100	100	100	100	100	100	100	100	100	100	100	100	100
E	147	197	47	97	47	97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

Cable track size	CT	CTM	CTL	CTXL
Q1	383.5	396.5	409.5	426.5
Q2	110.5	123.5	136.5	153.5
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-P6BBF2□□S

RCP6 3-axis combination (XYB + Z-axis, base mount)
 X-axis: WSA14C (Straight)
 Y-axis: SA7R (Side-mounted) Z-axis: SA6R (Side-mounted)



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

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** (Unit: kg)

Speed Type	HSL	HSM	HSH	HSS
Acceleration/deceleration (G)				
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.

Cable Length

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

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

Type	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)	Third wiring (Z-axis lateral)
Without cable track (cable only)	N	See P.79	○	○	○
Cable track S size (inner width: 38mm)	CT		○	○	○
Cable track M size (inner width: 50mm)	CTM		○	○	○
Cable track L size (inner width: 63mm)	CTL		○	○	Cannot be selected *1
Cable track XL size (inner width: 80mm)	CTXL		○	Cannot be selected *2	

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

Specifications

Item	X-axis	Y-axis	Z-axis
Axis model	RCP6-WSA14C	RCP6-SA7R	RCP6-SA6R
Stroke (Every 50mm)	50~800mm	50~400mm	50~200mm
Max. speed *	280mm/s	640mm/s	HSL 170mm/s
			HSM 340mm/s
			HSH 680mm/s
			HSS 800mm/s
Motor size	56□ Pulse motor	56□ Pulse motor	42□ Pulse motor
Ball screw lead	16mm	24mm	HSL 3mm
			HSM 6mm
			HSH 12mm
			HSS 20mm
Drive system	Ball screw ø12mm rolled C10	Ball screw ø12mm rolled C10	Ball screw ø10mm rolled C10
Positioning repeatability	±0.01mm		
Base material	Aluminum		
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)		

■ **Maximum Stroke**

X axis 800 mm Y axis 400 mm

Z axis 200 mm

■ **Max. Speed (Ultra High-speed type)**

X axis 280 mm/s Y axis 640 mm/s

Z axis 800 mm/s

* The max. 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.80.

Applicable Controllers

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

□ X-axis: WSA14C, Y-axis: SA7R, Z-axis: SA6R

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options

Type	Option code	Reference page	Standard Price		
			X-axis	Y-axis	Z-axis
Brake	B	See P.77	○	○	Standard equipment *
Cable exit direction (Top)	CJT	See P.77	○	Cannot be selected	
Cable exit direction (Right)	CJR	See P.77	○		
Cable exit direction (Left)	CJL	See P.77	○		
Cable exit direction (Bottom)	CJB	See P.77	○		
Cable exit direction (Outside)	CJO	See P.77	Cannot be selected		Standard equipment *
Non-motor end specification	NM	See P.78	○	○	○
Slider roller specification	SR	See P.78	○	○	○

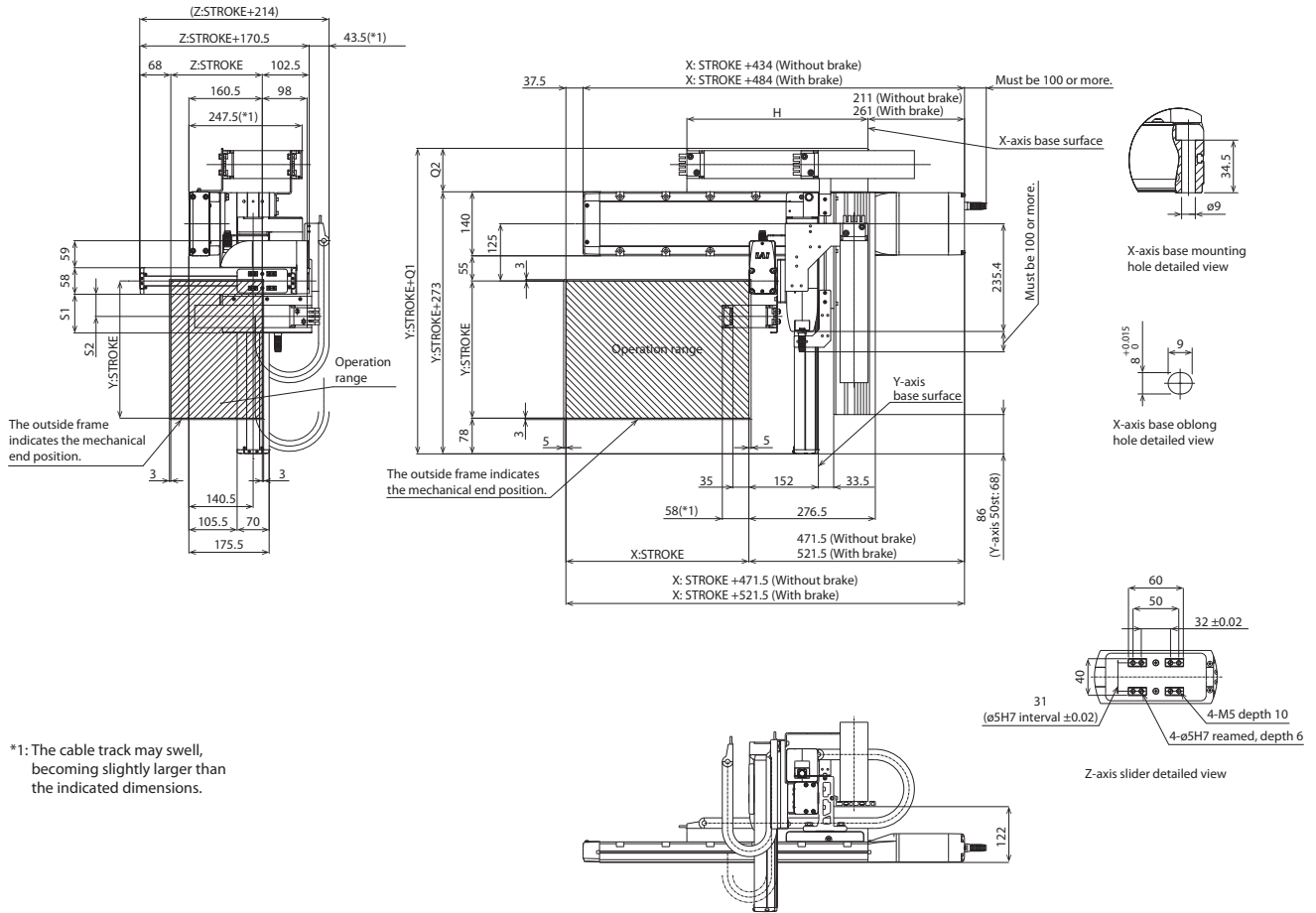
* Be sure to specify.

Dimensions

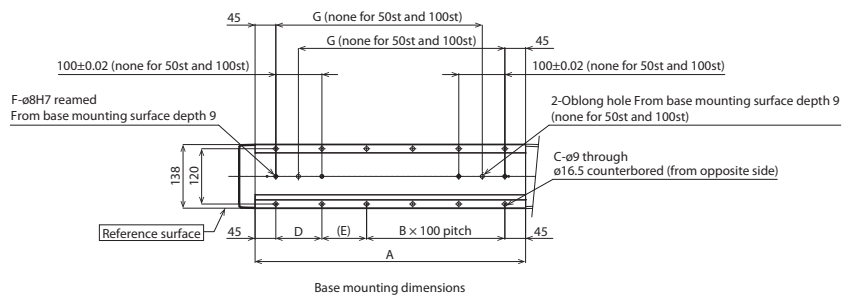
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Note 1. The configuration position in the figure is home.
Note 2. The diagram shows first, second and third wirings all with cable tracks.
Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



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



(*) Notes 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

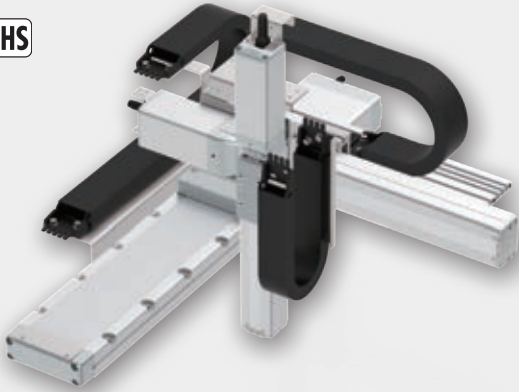
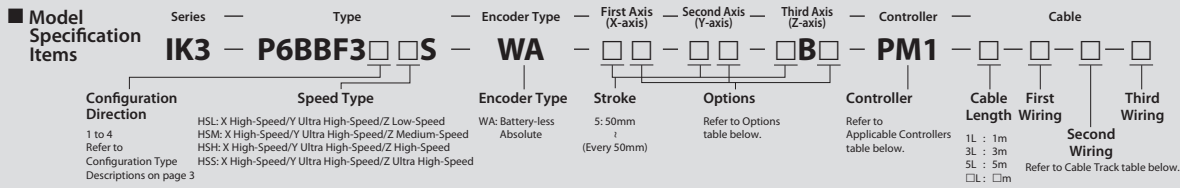
X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
A	237	287	337	387	437	487	537	587	637	687	737	787	837	887	937	987
B	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
C	4	4	8	8	10	10	12	12	14	14	16	16	18	18	20	20
D	-	-	100	100	100	100	100	100	100	100	100	100	100	100	100	100
E	147	197	47	97	47	97	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
H	221	246	271	296	321	346	371	396	421	446	471	496	521	546	571	596

Cable track size	CT	CTM	CTL	CTXL
Q1	356	368	383	401
Q2	83	95	110	128
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-P6BBF3□□S

RCP6 3-axis combination (XYB + Z-axis, base mount)
 X-axis: WSA14C (Straight)
 Y-axis: SA7C (Straight) Z-axis: SA6C (Straight)



The photograph above shows the configuration direction "1" where all axes have cable tracks. Please refer to P3 for other configuration directions.

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
- (Unit: kg)

Speed Type	HSL	HSM	HSH	HSS
Acceleration/deceleration (G)				
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.

Cable Length

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

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

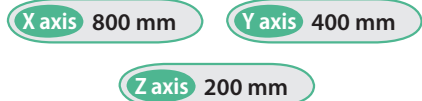
Type	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)	Third wiring (Z-axis lateral)
Without cable track (cable only)	N	See P.79	○	○	○
Cable track S size (inner width: 38mm)	CT		○	○	○
Cable track M size (inner width: 50mm)	CTM		○	○	○
Cable track L size (inner width: 63mm)	CTL		○	○	Cannot be selected *1
Cable track XL size (inner width: 80mm)	CTLXL		○	Cannot be selected *2	

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

Specifications

Item	X-axis	Y-axis	Z-axis	
Axis model	RCP6-WSA14C	RCP6-SA7C	RCP6-SA6C	
Stroke (Every 50mm)	50~800mm	50~400mm	50~200mm	
Max. speed *	280mm/s	640mm/s	HSL	170mm/s
			HSM	340mm/s
			HSH	680mm/s
			HSS	800mm/s
Motor size	56□ Pulse motor	56□ Pulse motor	42□ Pulse motor	
Ball screw lead	16mm	24mm	HSL	3mm
			HSM	6mm
			HSH	12mm
			HSS	20mm
Drive system	Ball screw ø12mm rolled C10	Ball screw ø12mm rolled C10	Ball screw ø10mm rolled C10	
Positioning repeatability	±0.01mm			
Base material	Aluminum			
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)			

Maximum Stroke



Max. Speed (Ultra High-speed type)



* The max. 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.80.

Applicable Controllers

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

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

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options

Type	Option code	Reference page	X-axis	Y-axis	Z-axis
Brake	B	See P.77	○	○	Standard equipment *
Cable exit direction (Top)	CJT	See P.77	○	Cannot be selected	
Cable exit direction (Right)	CJR	See P.77	○		
Cable exit direction (Left)	CJL	See P.77	○		
Cable exit direction (Bottom)	CJB	See P.77	○		
Non-motor end specification	NM	See P.78	○	○	○
Slider roller specification	SR	See P.78	○	○	○

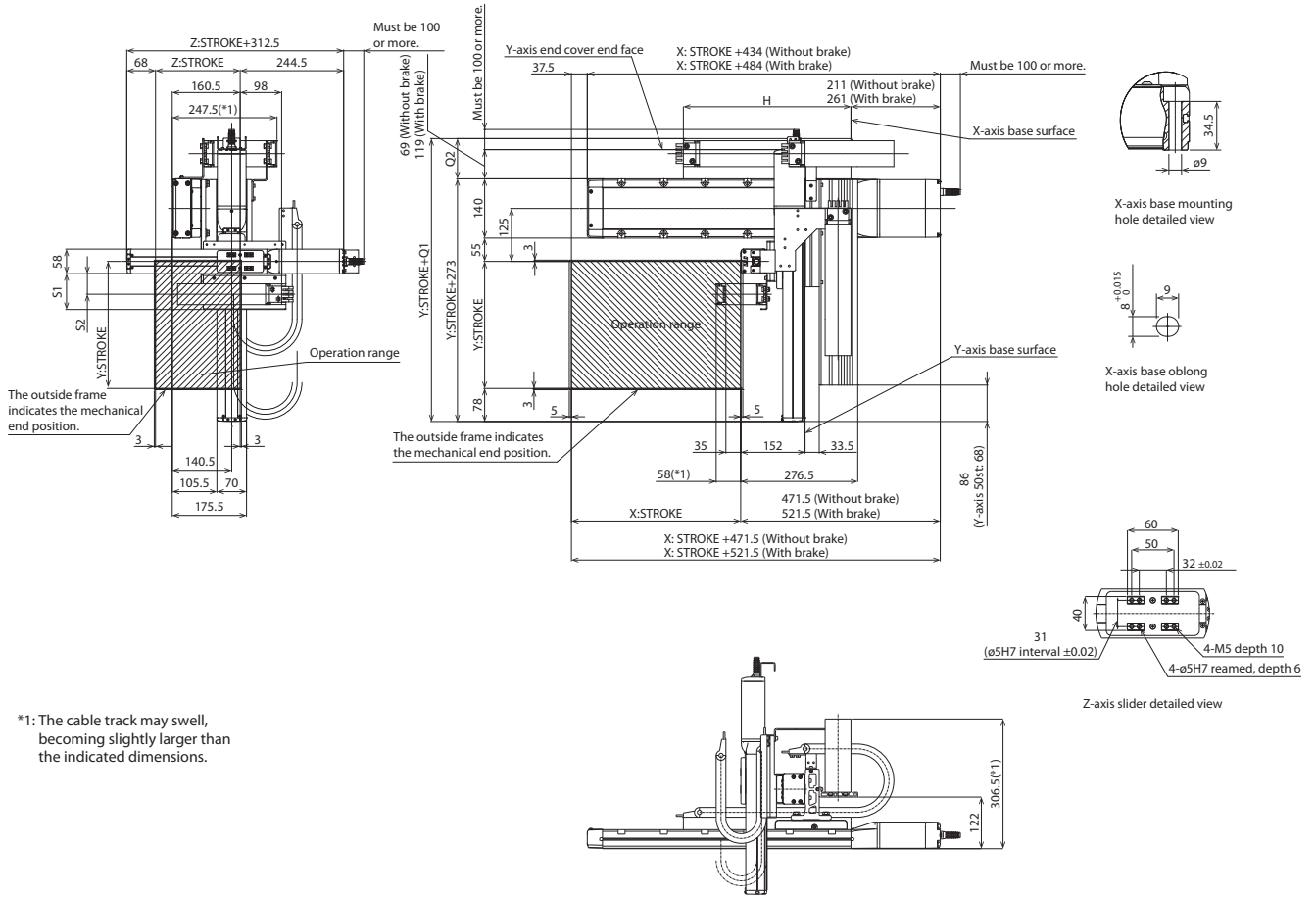
* Outside as standard. Be sure to specify.

Dimensions

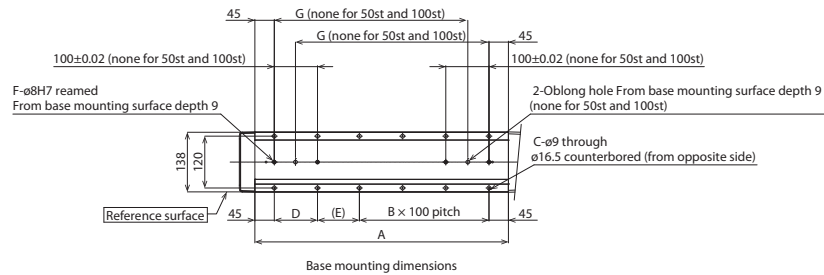
CAD drawings can be downloaded from our website.
www.robocylinder.de



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.79.



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



(*) Notes 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

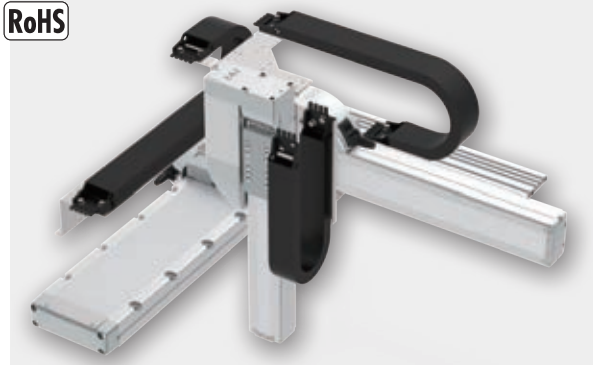
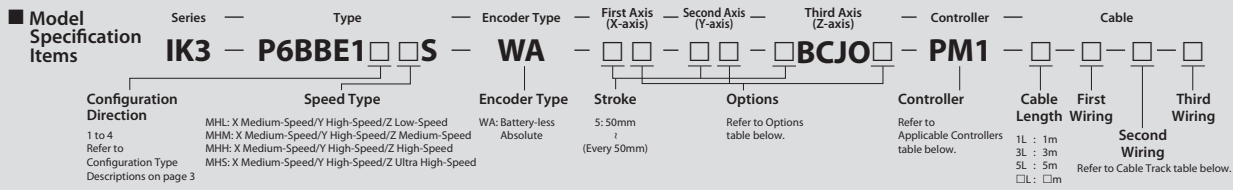
X: Stroke	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800
A	237	287	337	387	437	487	537	587	637	687	737	787	837	887	937	987
B	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7
C	4	4	8	8	10	10	12	12	14	14	16	16	18	18	20	20
D	-	-	100	100	100	100	100	100	100	100	100	100	100	100	100	100
E	147	197	47	97	47	97	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
H	221	246	271	296	321	346	371	396	421	446	471	496	521	546	571	596

Cable track size	CT	CTM	CTL	CTXL
Q1	356	368	383	401
Q2	83	95	110	128
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-P6BBE1□□S

RCP6 3-axis combination (XYB + Z-axis, base mount)
 X-axis: WSA16R (Side-mounted)
 Y-axis: SA8R (Side-mounted) Z-axis: SA7R (Side-mounted)



The photograph above shows the configuration direction "1" where all axes have cable tracks. Please refer to P3 for other configuration directions.

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	MHM	MHH	MHS	MHL	MHM	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.

Cable Length

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

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

Type	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)	Third wiring (Z-axis lateral)
Without cable track (cable only)	N	See P.79	○	○	○
Cable track S size (inner width: 38mm)	CT		○	○	○
Cable track M size (inner width: 50mm)	CTM		○	○	○
Cable track L size (inner width: 63mm)	CTL		○	○	Cannot be selected *1
Cable track XL size (inner width: 80mm)	CTLXL		○	Cannot be selected *2	

*1 Only the first and second wiring can be selected

*2 Only the first wiring can be selected

Specifications

Item	X-axis	Y-axis	Z-axis	
Axis model	RCP6-WSA16R	RCP6-SA8R	RCP6-SA7R	
Stroke (Every 50mm)	50~1100mm	50~500mm	50~300mm	
Max. speed *	MHL	210mm/s	400mm/s	
	MHM			105mm/s
	MHH			210mm/s
	MHS			420mm/s
Motor size	56□ High-thrust pulse motor	56□ High-thrust pulse motor	56□ Pulse motor	
Ball screw lead	MHL	10mm	20mm	
	MHM			4mm
	MHH			8mm
	MHS			16mm
Drive system	Ball screw ø16mm rolled C10	Ball screw ø16mm rolled C10	Ball screw ø12mm rolled C10	
Positioning repeatability	±0.01mm			
Base material	Aluminum			
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)			

Maximum Stroke

X axis 1100 mm Y axis 500 mm
 Z axis 300 mm

Max. Speed (Ultra High-speed type)

X axis 210 mm/s Y axis 400 mm/s
 Z axis 640 mm/s

* The max. 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.80.

Applicable Controllers

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

□ X-axis: WSA16R, Y-axis: SA8R

Type	Reference page
PCON-CFB/CGFB	Please see the RCP6 catalog or PCON-CB/CFB manual.

□ Z-axis: SA7R

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options

Type	Option code	Reference page	X-axis	Y-axis	Z-axis
Brake	B	See P.77	○	○	Standard equipment *
Cable exit direction (Outside)	CJO	See P.77	Cannot be selected		Standard equipment *
Non-motor end specification	NM	See P.78	○	○	○
Slider roller specification	SR	See P.78	○	○	○

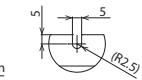
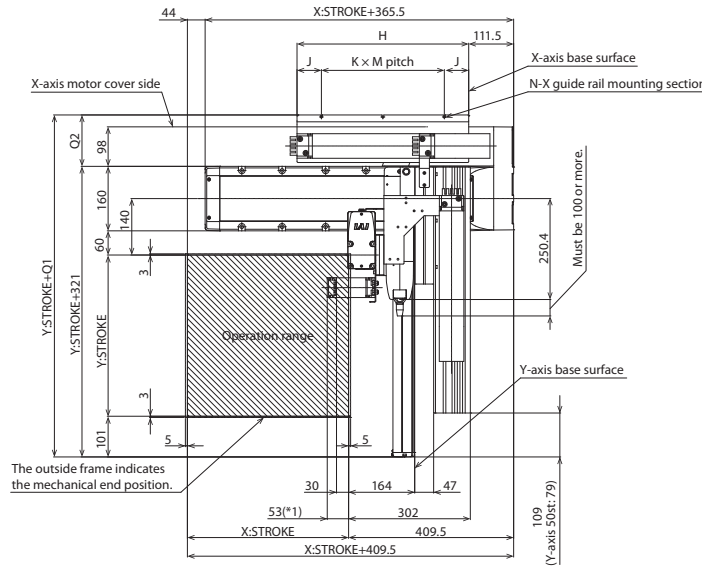
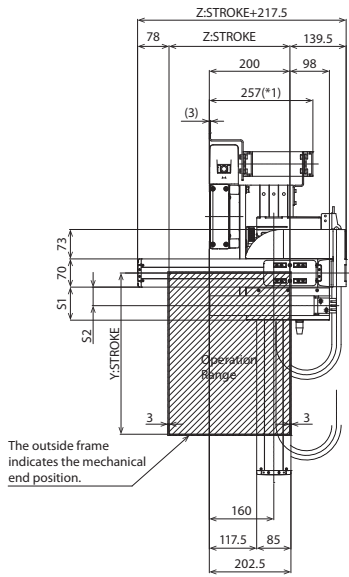
* Be sure to specify.

Dimensions

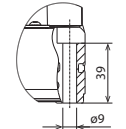
CAD drawings can be downloaded from our website.
www.robocylinder.de



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.79.



X guide rail mounting section detailed view

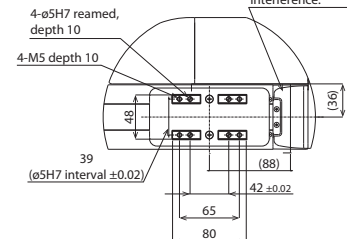


X-axis base mounting hole detailed view



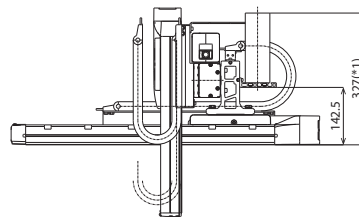
X-axis base oblong hole detailed view

Work part installed on the slider
Pay attention to interference.



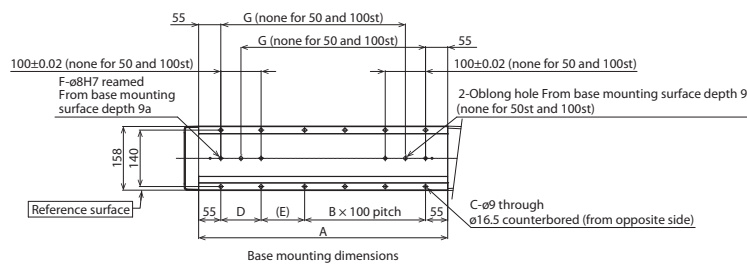
Z-axis slider detailed view

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



(* Notes

The X-axis cable track guide rail is to be fixed to the surface on which the X-axis is installed by the customer. Also, the moving end of the 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	850	900	950	1000	1050	1100
A	268	318	368	418	468	518	568	618	668	718	768	818	868	918	968	1018	1068	1118	1168	1218	1268	1318
B	0	0	1	1	2	2	3	3	3	4	5	5	6	6	7	7	8	8	9	9	10	10
C	4	4	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
D	—	—	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
E	158	208	258	308	358	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158	
F	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
G	—	—	208	258	308	358	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	
H	251	276	301	326	351	376	401	426	451	476	501	526	551	576	601	626	651	676	701	726	751	
J	60.5	60.5	60.5	60.5	60.5	60.5	60.5	60.5	60.5	58	63	60.5	58	58	60.5	58	60.5	58	60.5	58	60.5	
K	1	1	2	2	2	2	2	2	3	3	3	3	3	4	4	4	4	4	4	5	5	
M	130	155	90	102.5	115	127.5	140	152.5	110	120	125	135	145	115	120	127.5	132.5	140	145	120	125	
N	2	2	3	3	3	3	3	3	4	4	4	4	4	5	5	5	5	5	5	6	6	

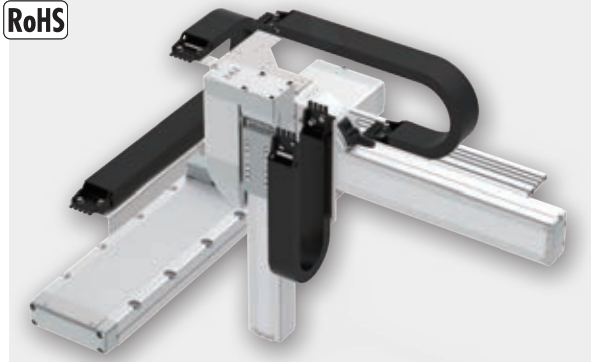
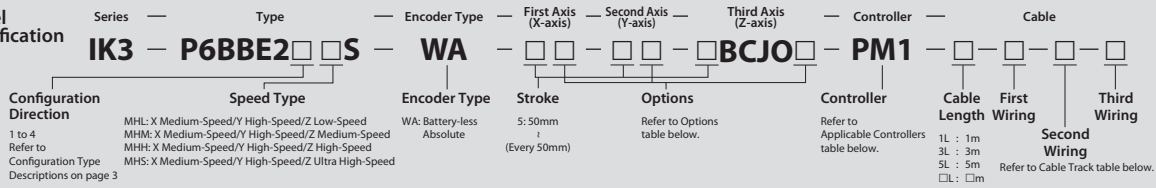
Cable track size	CT	CTM	CTL	CTLX
Q1	448.5	448.5	448.5	465.5
Q2	127.5	127.5	127.5	144.5
S1	82	94	—	—
S2	46	52.5	—	—

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

IK3-P6BBE2□□S

RCP6 3-axis combination (XYB + Z-axis, base mount)
 X-axis: WSA16C (Straight)
 Y-axis: SA8R (Side-mounted) Z-axis: SA7R (Side-mounted)

Model Specification Items



The photograph above shows the configuration direction "1" where all axes have cable tracks. Please refer to P3 for other configuration directions.

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	MHM	MHH	MHS	MHL	MHM	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.

Cable Length

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

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

Type	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)	Third wiring (Z-axis lateral)
Without cable track (cable only)	N	See P.79	-	-	-
Cable track S size (inner width: 38mm)	CT		-	-	-
Cable track M size (inner width: 50mm)	CTM		-	-	-
Cable track L size (inner width: 63mm)	CTL		-	-	Cannot be selected *1
Cable track XL size (inner width: 80mm)	CTXL		-	-	Cannot be selected *2

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

Specifications

Item	X-axis	Y-axis	Z-axis
Axis model	RCP6-WSA16C	RCP6-SA8R	RCP6-SA7R
Stroke (Every 50mm)	50~1100mm	50~500mm	50~300mm
Max. speed *	210mm/s	400mm/s	105mm/s
			210mm/s
			420mm/s
			640mm/s
Motor size	56□ High-thrust pulse motor	56□ High-thrust pulse motor	56□ Pulse motor
Ball screw lead	10mm	20mm	4mm
			8mm
			16mm
			24mm
Drive system	Ball screw ø16mm rolled C10	Ball screw ø16mm rolled C10	Ball screw ø12mm rolled C10
Positioning repeatability	±0.01mm		
Base material	Aluminum		
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)		

■ Maximum Stroke

X axis 1100 mm Y axis 500 mm

Z axis 300 mm

■ Max. Speed (Ultra High-speed type)

X axis 210 mm/s Y axis 400 mm/s

Z axis 640 mm/s

* The max. 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.80.

Applicable Controllers

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

□ X-axis: WSA16C, Y-axis: SA8R

Type	Reference page
PCON-CFB/CGFB	Please see the RCP6 catalog or PCON-CB/CFB manual.

□ Z-axis: SA7R

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options

Type	Option code	Reference page	X-axis	Y-axis	Z-axis
Brake	B	See P.77	○	○	Standard equipment *
Cable exit direction (Top)	CJT	See P.77	○	Cannot be selected	
Cable exit direction (Right)	CJR	See P.77	○		
Cable exit direction (Left)	CJL	See P.77	○		
Cable exit direction (Bottom)	CJB	See P.77	○		
Cable exit direction (Outside)	CJO	See P.77	Cannot be selected	○	Standard equipment *
Non-motor end specification	NM	See P.78	○	○	○
Slider roller specification	SR	See P.78	○	○	○

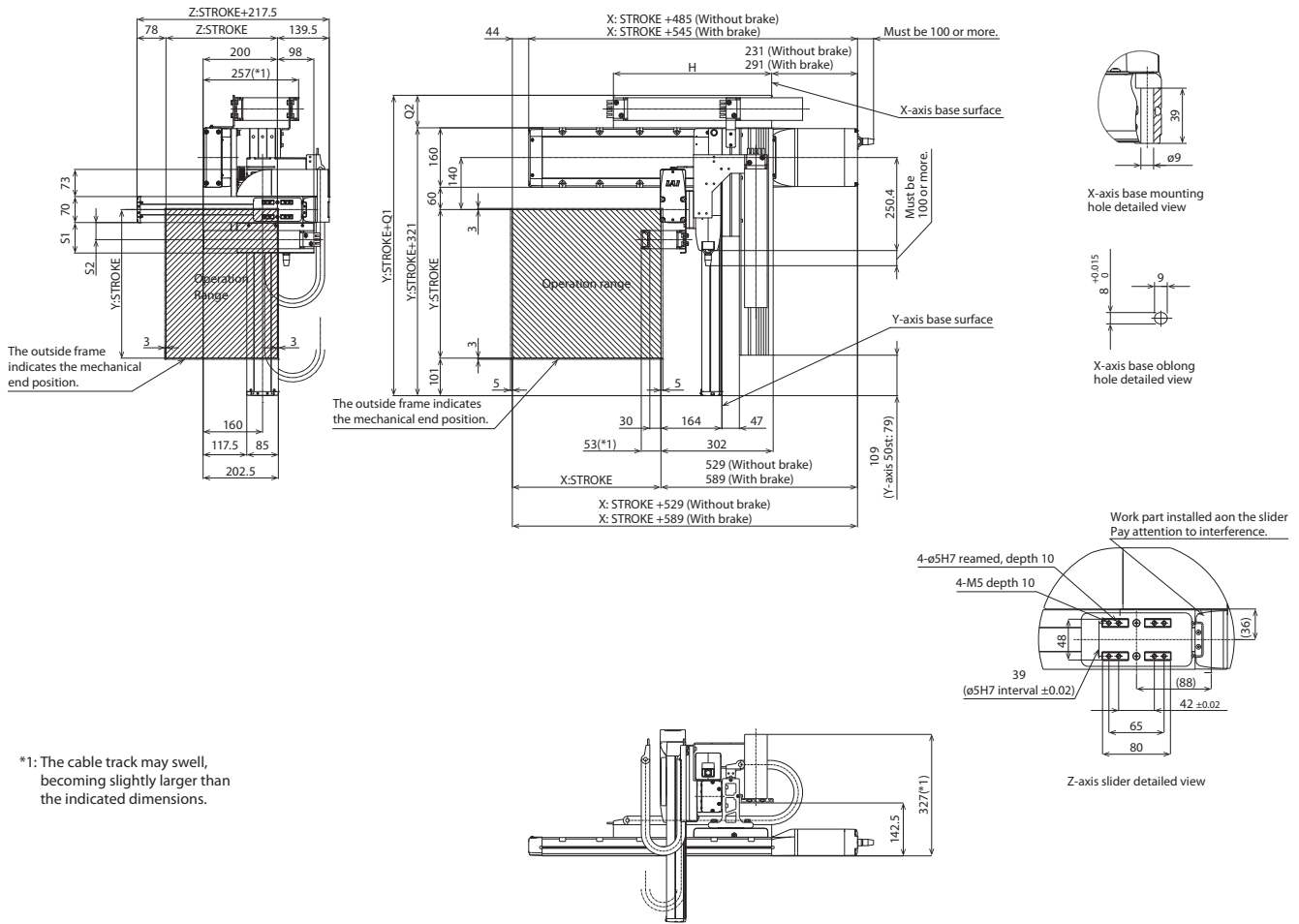
* Be sure to specify.

Dimensions

CAD drawings can be downloaded from our website.
www.robocylinder.de



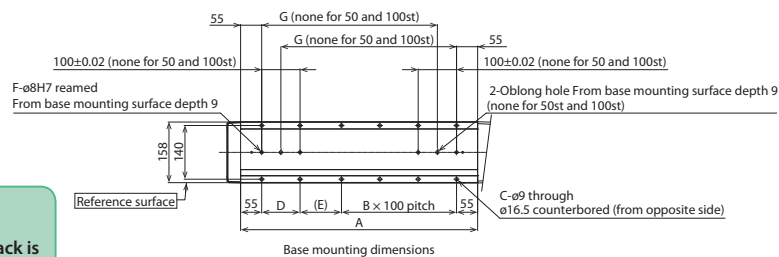
- Note 1. The configuration position in the figure is home.
- Note 2. The diagram shows first, second and third wirings all with cable tracks.
- Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



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

(* Notes

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

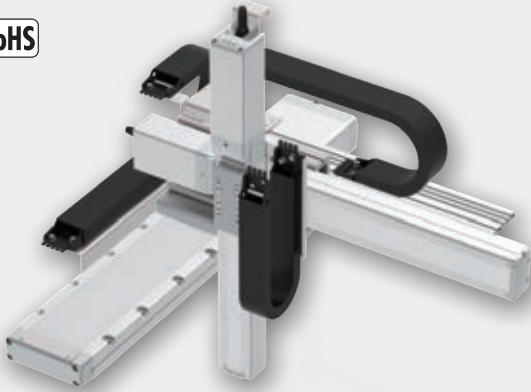
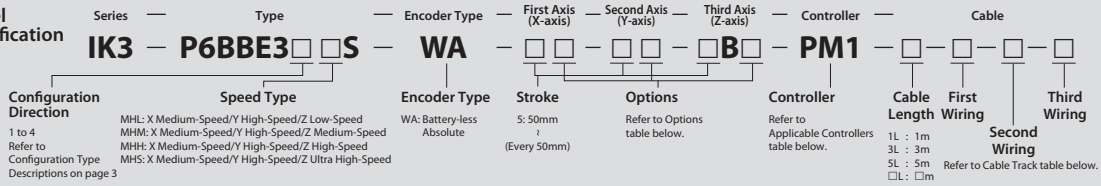
Cable track size	CT	CTM	CTL	CTXL
Q1	396.5	408.5	423.5	441.5
Q2	75.5	87.5	102.5	120.5
S1	82	94	-	-
S2	46	52.5	-	-

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

IK3-P6BBE3□□S

RCP6 3-axis combination (XYB + Z-axis, base mount)
 X-axis: WSA16C (Straight)
 Y-axis: SA8C (Straight) Z-axis: SA7C (Straight)

Model Specification Items



The photograph above shows the configuration direction "1" where all axes have cable tracks. Please refer to P3 for other configuration directions.

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	MHM	MHH	MHS	MHL	MHM	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.

Cable Length

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

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

Type	Model	Reference page	First wiring (X-axis lateral)	Second wiring (Y-axis lateral)	Third wiring (Z-axis lateral)
Without cable track (cable only)	N	See P.79	○	○	○
Cable track S size (inner width: 38mm)	CT		○	○	○
Cable track M size (inner width: 50mm)	CTM		○	○	○
Cable track L size (inner width: 63mm)	CTL		○	○	Cannot be selected *1
Cable track XL size (inner width: 80mm)	CTLXL		○	Cannot be selected *2	

*1 Only the first and second wiring can be selected

*2 Only the first wiring can be selected

Specifications

Item	X-axis	Y-axis	Z-axis	
Axis model	RCP6-WSA16C	RCP6-SA8C	RCP6-SA7C	
Stroke (Every 50mm)	50~1100mm	50~500mm	50~300mm	
Max. speed *	210mm/s	400mm/s	MHL	105mm/s
			MHM	210mm/s
			MHH	420mm/s
			MHS	640mm/s
Motor size	56□ High-thrust pulse motor	56□ High-thrust pulse motor	56□ Pulse motor	
Ball screw lead	10mm	20mm	MHL	4mm
			MHM	8mm
			MHH	16mm
			MHS	24mm
Drive system	Ball screw ø16mm rolled C10	Ball screw ø16mm rolled C10	Ball screw ø12mm rolled C10	
Positioning repeatability	±0.01mm			
Base material	Aluminum			
Ambient operating temperature, humidity	0~40°C, 85% RH or less (non-condensing)			

Maximum Stroke

X axis 1100 mm Y axis 500 mm
 Z axis 300 mm

Max. Speed (Ultra High-speed type)

X axis 210 mm/s Y axis 400 mm/s
 Z axis 640 mm/s

* The max. 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.80.

Applicable Controllers

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

□ X-axis: WSA16C, Y-axis: SA8C

Type	Reference page
PCON-CFB/CGFB	Please see the RCP6 catalog or PCON-CB/CFB manual.

□ Z-axis: SA7C

Type	Reference page
PCON-CB/CGB	Please see the dedicated catalog or manual.
PCON-CYB/PLB/POB (coming soon)	
MCON-C/CG	
MCON-LC/LCG (coming soon)	
MSEL-PC/PG	

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

Options

Type	Option code	Reference page	X-axis	Y-axis	Z-axis
Brake	B	See P.77	○	○	Standard equipment *
Cable exit direction (Top)	CJT	See P.77	○	Cannot be selected	
Cable exit direction (Right)	CJR	See P.77	○		
Cable exit direction (Left)	CJL	See P.77	○		
Cable exit direction (Bottom)	CJB	See P.77	○		
Non-motor end specification	NM	See P.78	○	○	○
Slider roller specification	SR	See P.78	○	○	○

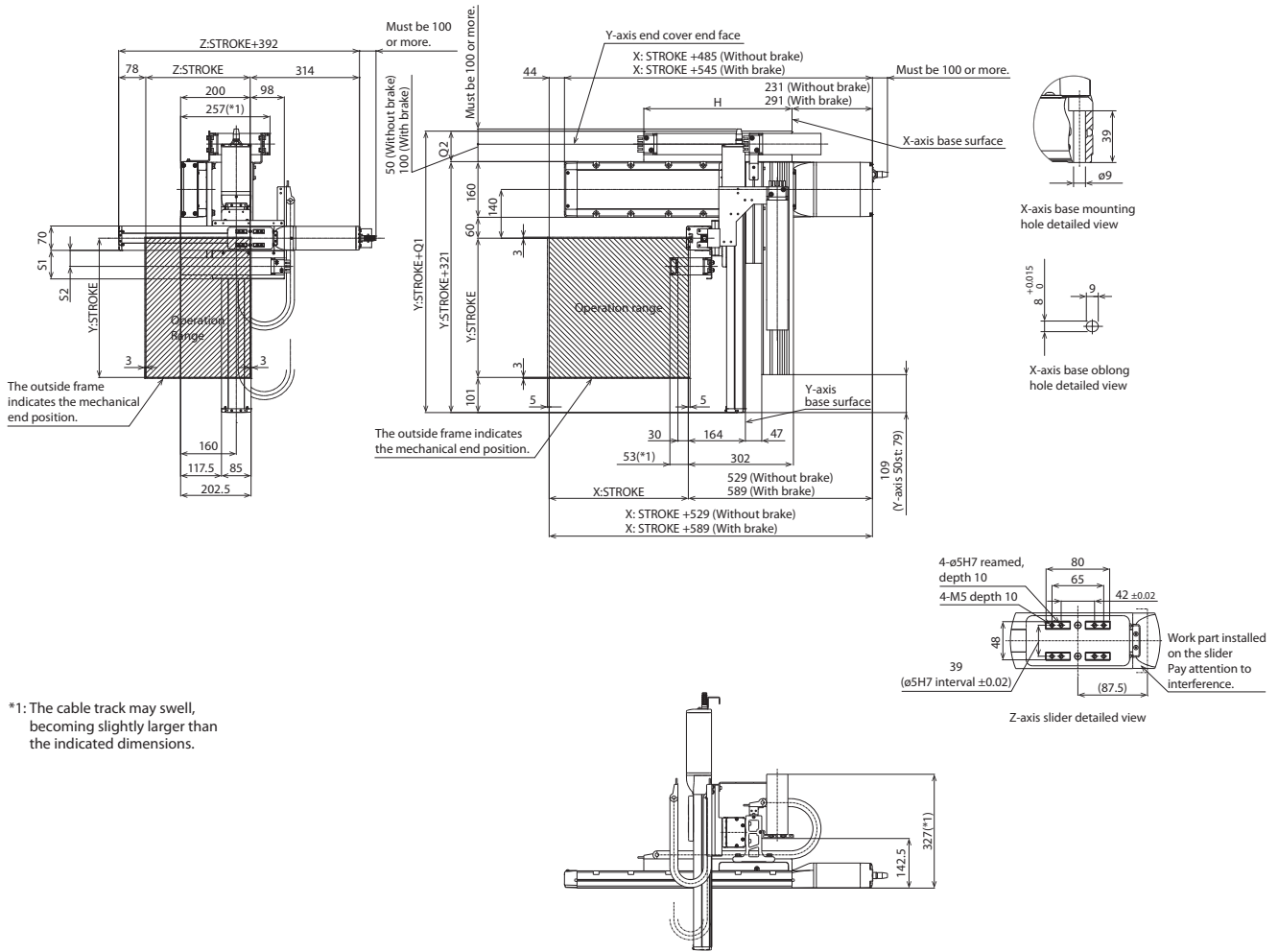
* Outside as standard. Be sure to specify.

Dimensions

CAD drawings can be downloaded from our website.
www.robocylinder.de

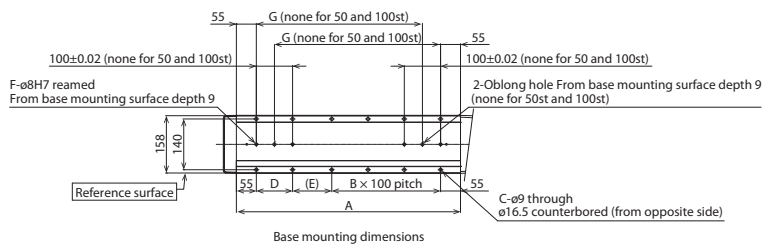


- Note 1. The configuration position in the figure is home.
- Note 2. The diagram shows first, second and third wirings all with cable tracks.
- Note 3. For details on the cable track and cable track moving end bracket, refer to P.79.



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

(*) Notes
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	850	900	950	1000	1050	1100
A	268	318	368	418	468	518	568	618	668	718	768	818	868	918	968	1018	1068	1118	1168	1218	1268	1318
B	0	0	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10
C	4	4	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26
D	-	-	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
E	158	208	58	108	58	108	58	108	58	108	58	108	58	108	58	108	58	108	58	108	58	108
F	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
G	-	-	208	258	308	358	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158
H	251	276	301	326	351	376	401	426	451	476	501	526	551	576	601	626	651	676	701	726	751	776

Cable track size	CT	CTM	CTL	CTLX
Q1	396.5	408.5	423.5	441.5
Q2	75.5	87.5	102.5	120.5
S1	82	94	-	-
S2	46	52.5	-	-

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

Cartesian RoboCylinder Options

Brake

Option Code **B**

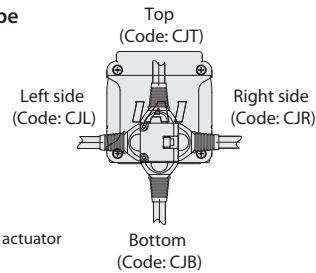
Description This is a holding mechanism that prevents the slider from falling and damaging any attached fittings when the power or servo is turned off.

Cable Exit Direction

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

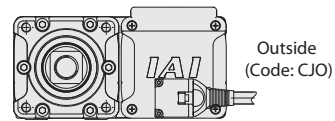
Description This option allows you to change the exit direction of the motor-encoder cable to top, bottom, left, or right.

Straight motor type



* When viewed from the actuator rear side (motor side).

Side-mounted motor type



* When viewed from the actuator front side.

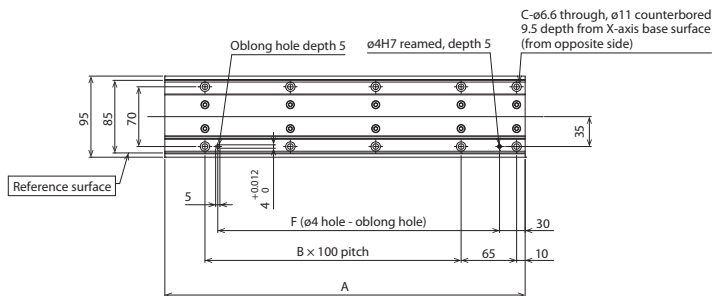
Foot Plate

Option Code **FTP**

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

IK2-P6XBD2□□S

IK2-P6XBD3□□S



Foot Plate mounting dimensions

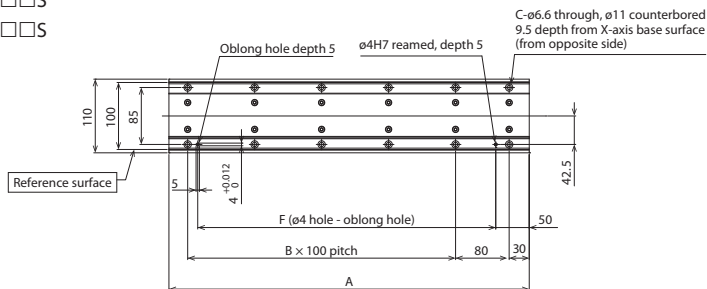
X-axis stroke	A	B	C	F
50	172	0	4	30
100	222	1	6	130
150	272	1	6	130
200	322	2	8	230
250	372	2	8	230
300	422	3	10	330
350	472	3	10	330
400	522	4	12	430
450	572	4	12	430
500	622	5	14	530
550	672	5	14	530
600	722	6	16	630
650	772	6	16	630
700	822	7	18	730
750	872	7	18	730
800	922	8	20	830

IK2-P6XBC2□□S

IK2-P6XBC3□□S

IK3-P6BBC2□□S

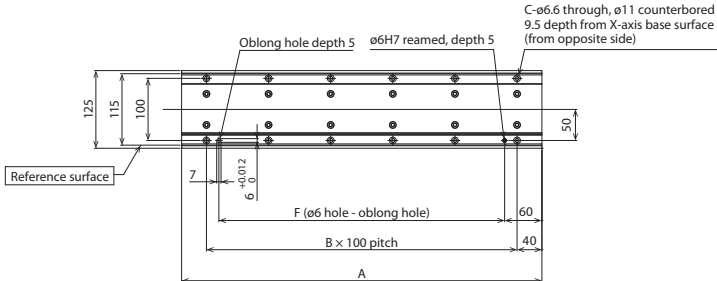
IK3-P6BBC3□□S



Foot Plate mounting dimensions

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

- IK2-P6XBB2□□S
- IK2-P6XBB3□□S
- IK3-P6BBB2□□S
- IK3-P6BBB3□□S



Foot Plate mounting dimensions

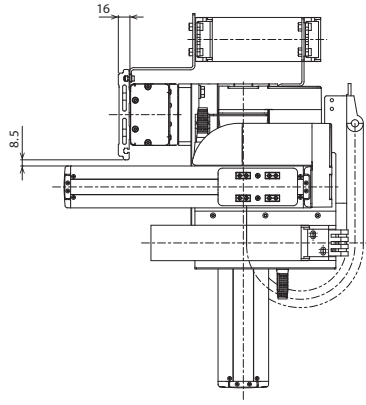
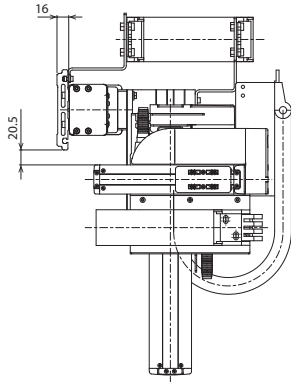
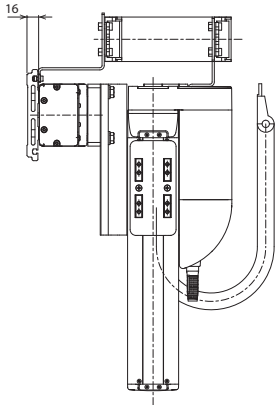
X-axis stroke	A	B	C	F
50	230	1	4	60
100	280	2	6	160
150	330	2	6	160
200	380	3	8	260
250	430	3	8	260
300	480	4	10	360
350	530	4	10	360
400	580	5	12	460
450	630	5	12	460
500	680	6	14	560
550	730	6	14	560
600	780	7	16	660
650	830	7	16	660
700	880	8	18	760
750	930	8	18	760
800	980	9	20	860
850	1030	9	20	860
900	1080	10	22	960
950	1130	10	22	960
1000	1180	11	24	1060
1050	1230	11	24	1060
1100	1280	12	26	1160

* Please refer to the dimensions below when mounting.

- IK2-P6XBD2□□S
- IK2-P6XBD3□□S
- IK2-P6XBC2□□S
- IK2-P6XBC3□□S
- IK2-P6XBB2□□S
- IK2-P6XBB3□□S

- IK3-P6BBC2□□S
- IK3-P6BBC3□□S

- IK3-P6BBB2□□S
- IK3-P6BBB3□□S



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

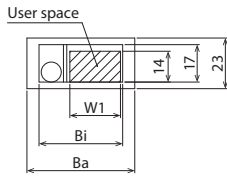
Option Code **SR**

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.

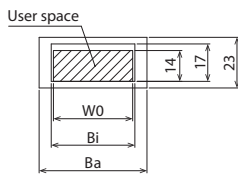
Appendix

Cable Track

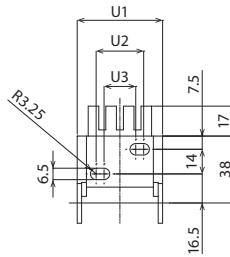
2-axis configurations | Cable storage | Detailed view



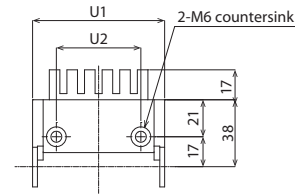
X-Y cable track sectional view



Y-Y cable track sectional view



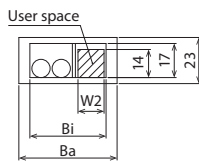
Y-Y cable track moving end detailed view (CT,CTM)



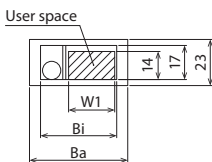
Y-Y cable track moving end detailed view (CTL)

Cable track size	CT	CTM	CTL	CTXL
U1	48.5	60.5	75	-
U2	27	39.5	48	-
U3	18	30.5	-	-
Ba	49	61	76	94
Bi	38	50	63	80
W0	36	48	61	78
W1	23	35	48	65

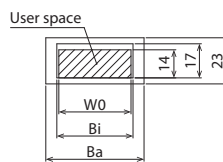
3-axis configurations | Cable storage | Detailed view



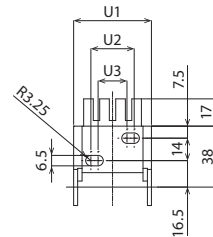
X-Y cable track sectional view



Y-Z cable track sectional view



Z-Z cable track sectional view



Z-Z cable track moving end detailed view

Cable track size	CT	CTM	CTL	CTXL
U1	48.5	60.5	-	-
U2	27	39.5	-	-
U3	18	30.5	-	-
Ba	49	61	76	94
Bi	38	50	63	80
W0	36	48	61	78
W1	23	35	48	65
W2	13	25	38	55

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	○	○
2L	2m	○	○
3L	3m	○	○
4L	4m	○	○
5L	5m	○	○
6L	6m	○	○
7L	7m	○	○
8L	8m	○	○
9L	9m	○	○
10L	10m	○	○
11L	11m	○	○
12L	12m	○	○
13L	13m	○	○
14L	14m	○	○
15L	15m	○	○

Table of Maximum Speed by Stroke

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

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

■ IK2-P6XBD1□□S X-axis: SA6R

■ IK2-P6XBD2□□S X-axis: SA6C

■ IK2-P6XBD3□□S X-axis: SA6C

(Unit: mm/s)

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

■ IK2-P6XBC1□□S X-axis: SA7R

■ IK2-P6XBC2□□S X-axis: SA7C

■ IK2-P6XBC3□□S X-axis: SA7C

(Unit: mm/s)

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

■ IK2-P6XBB1□□S X-axis: SA8R

■ IK2-P6XBB2□□S X-axis: SA8C

■ IK2-P6XBB3□□S X-axis: SA8C

(Unit: mm/s)

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

■ IK2-P6XBE1□□S X-axis: WSA16R

■ IK2-P6XBE2□□S X-axis: WSA16C

■ IK2-P6XBE3□□S X-axis: WSA16C

(Unit: mm/s)

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

■ IK2-P6YBD1□□S Y-axis: SA6R

■ IK2-P6YBD2□□S Y-axis: SA6C

■ IK2-P6YBD3□□S Y-axis: SA6C

(Unit: mm/s)

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

■ IK3-P6BBE1□□S X-axis: WSA16R

■ IK3-P6BBE2□□S X-axis: WSA16C

■ IK3-P6BBE3□□S X-axis: WSA16C

(Unit: mm/s)

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

**IK-P6 Series
Catalogue No. 0317-E**



The information contained in this catalog is subject to change without notice for the purpose of product improvement



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