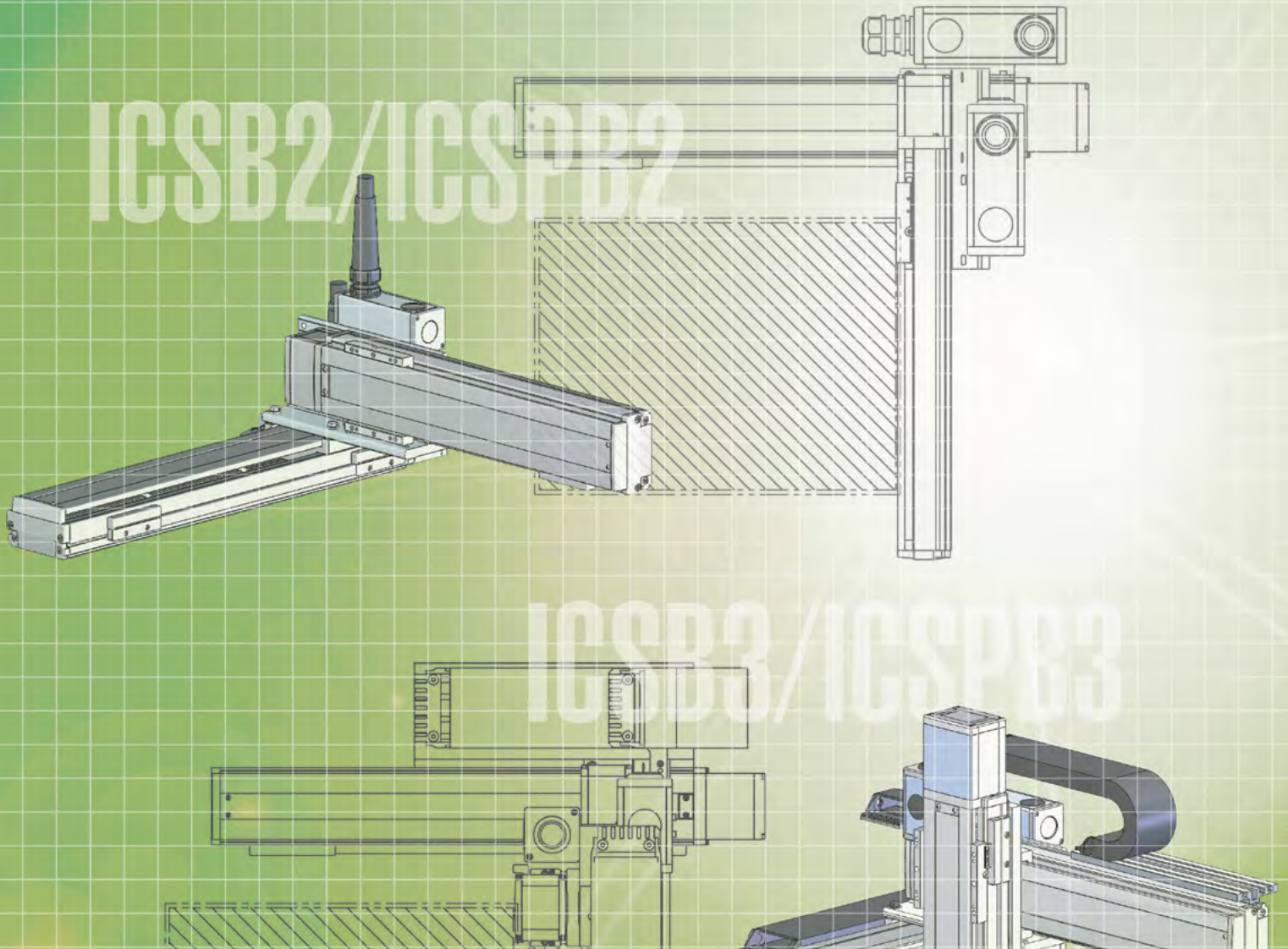
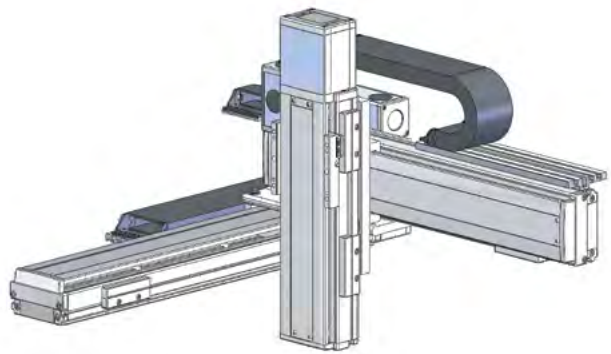


# Cartesian Robot **ICSB/ICSPB**



# The ICSA Series Cartesian Robots Have Been Totally Upgraded!



The ICSB/ICSPB Cartesian robots are pre-configured units based on the seven 2-axis configurations and seven 3-axis configurations that are frequently used. These robots are ready to be assembled and include the cabling and brackets so that they can be installed in your equipment and used immediately after delivery.

## ICSB Series [Standard Specifications] / ICSPB Series [High-Precision Specifications]

### Features

#### 1 Great Improvements in Performance

Great improvements in precision, payload, acceleration and deceleration compared to the conventional ICSA series models.

##### Positioning repeatability

Standard Specifications

**$\pm 0.02\text{mm} \rightarrow \pm 0.01\text{mm}$**

High-Precision Specifications

**$\pm 0.01\text{mm} \rightarrow \pm 0.005\text{mm}$**

##### Payload

Cantilevered 3-axis Configuration  
Maximum payload

**19kg**

**$\rightarrow 36.4\text{kg}$**

##### Acceleration and deceleration

Rated acceleration/deceleration

**$0.3\text{G} \rightarrow 0.4\text{G}$**

Maximum acceleration/deceleration

**$1.0\text{G} \rightarrow 1.2\text{G}$**

Note: Positioning repeatability conforms to the specification of each configured axis.

#### 2 Many variations available

Seven types of configurations are provided for 2-axis and 3-axis units; a total of 834 types of variations including axis size and configuration direction can be selected.

2-axis configuration types

**226**

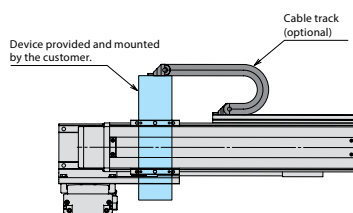
3-axis configuration types

**608**

#### 3 Cable track option made available

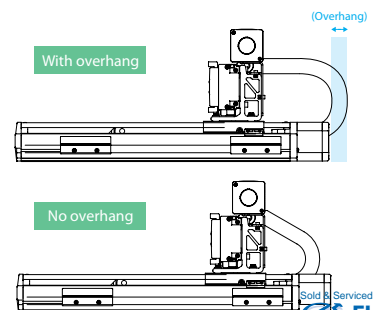
A cable track for wiring of a customer provided device is an option that is available with the XYB/XYBG types.

For details, see page 14



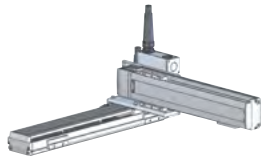
#### 4 No cable track overhang

No overhang from the main body caused by changes in the cable track mounting position; no need to worry about interference from peripheral devices.



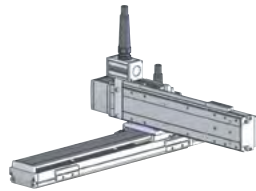
# Variations

## 2-axis Configurations



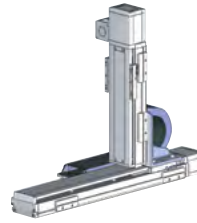
Y-axis base mount

**XYB type**  
(→ P. 17)



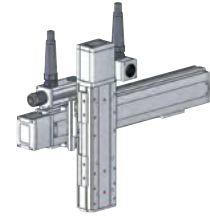
Y-axis slider mount

**XYs type**  
(→ P. 57)



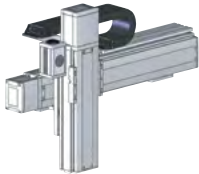
Z-axis upright mount

**XZ type**  
(→ P. 71)



Z-axis slider mount

**YZs type**  
(→ P. 87)



Z-axis base mount

**YZB type**  
(→ P. 97)



Y-axis flat-mounted gantry

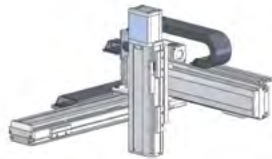
**XYG type**  
(→ P. 109)



Y-axis side-mounted gantry

**XYBG type**  
(→ P. 113)

## 3-axis Configurations



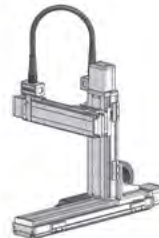
Y-axis base mount  
Z-axis base mount

**XYB + Z base mount type**  
(→ P. 135)



Y-axis base mount  
Z-axis slider mount

**XYB + Z slider mount type**  
(→ P. 189)



Z-axis upright mount  
Y-axis slider mount

**XZ + Y slider mount type**  
(→ P. 225)



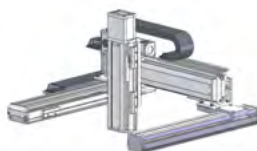
Y-axis flat-mounted gantry  
Z-axis base mount

**XYG + Z base mount type**  
(→ P. 229)



Y-axis flat-mounted gantry  
Z-axis slider mount

**XYG + Z slider mount type**  
(→ P. 241)



Y-axis side-mounted gantry  
Z-axis base mount

**XYBG + Z base mount type**  
(→ P. 253)



Y-axis side-mounted gantry  
Z-axis slider mount

**XYBG + Z slider mount type**  
(→ P. 285)

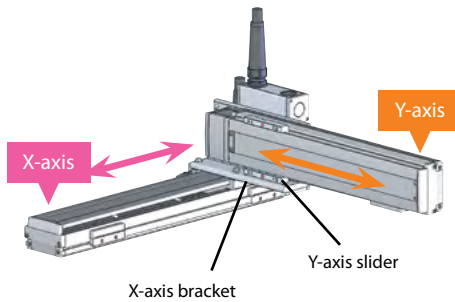
## 2-axis Configuration Explanation of Types of Robots

A selection of configurations for seven frequently used types which include the cabling and brackets ready to be assembled.

The line up ranges from lightweight to heavyweight, short stroke to long stroke; the optimal type can be selected according to use for each configuration.

### 1 XYB (Y-axis Base Mount) Type

→ P. 17



A basic configuration type where the Y-axis base is mounted to the X-axis bracket. This actuator operates with a device or Z-axis attached to the Y-axis slider.

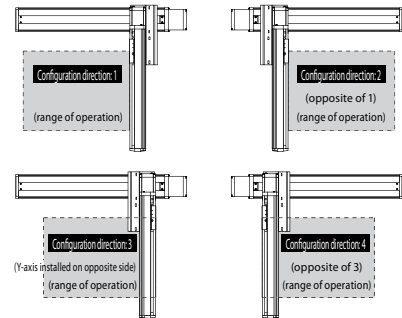
#### ● Point 1

The Y-axis configuration direction can be selected from one of four patterns (see the diagram at right).

#### ● Point 2

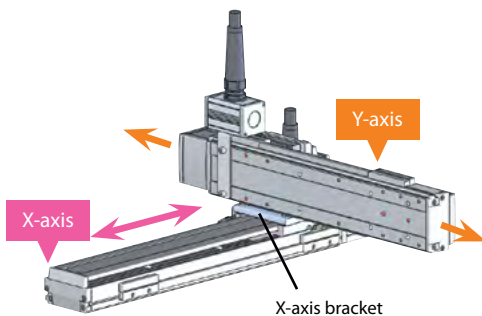
Select the Y-axis wiring specification from the two options of self-standing cable and cable track.

#### ● Configuration direction



### 2 YYS (Y-axis Slider Mount) Type

→ P. 57



The Y-axis slider is mounted to the X-axis bracket in a manner allowing the Y-axis to move. Use this type when the Y-axis itself must be moved back and forth to avoid an obstacle, etc.

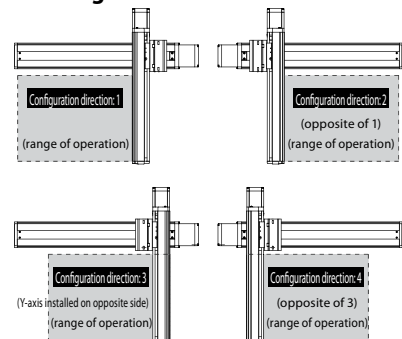
#### ● Point 1

Y-axis configuration direction can be selected from one of four patterns (see the diagram at right).

#### ● Point 2

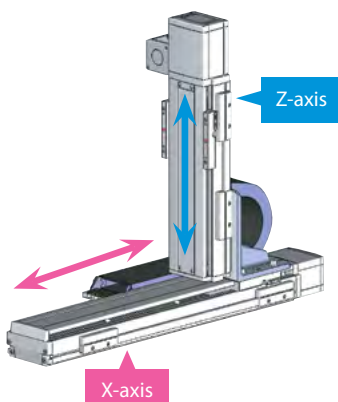
Only the self-standing cable option is available for the Y-axis wiring specification.

#### ● Configuration direction



### 3 XZ (Z-axis Upright Mount) Type

→ P. 71



The Z-axis (vertical axis) is positioned vertically on the X-axis. Use this type in such applications as inserting loads into a stacker or moving a pallet up and down.

#### ● Point 1

The Z-axis configuration direction can be selected from one of six patterns (see the diagram at right).

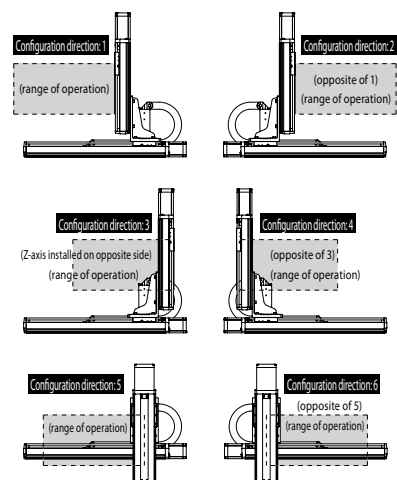
#### ● Point 2

Since the Z-axis comes standard with a brake, the slider will not drop even when the power is turned off.

#### ● Point 3

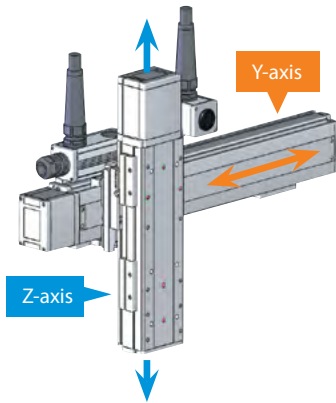
The maximum stroke is 2500mm for the X-axis and 500mm for the Z-axis. (Consult IAI if you need a longer stroke.)

#### ● Configuration direction



## 4 YZS (Z-axis Slider Mount) Type

→ P. 87

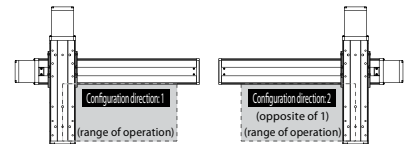


The Y-axis is oriented horizontally on its side and its slider is connected to the slider of the Z-axis (vertical axis). Since the body of the Z-axis moves vertically, this type can be fitted with tooling or other devices on the Z-axis to transfer loads or perform other operations.

### ● Point 1

Since the Z-axis comes standard with a brake, the slider will not drop even when the power is turned off.

### ● Configuration direction

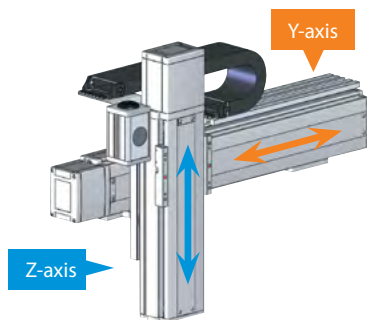


### ● Point 2

A self-standing cable comes as standard for the Y-axis wiring specification, however, a cable track can also be accommodated (as a custom order).

## 5 YZB (Z-axis Base Mount) Type

→ P. 97



The Y-axis is horizontally oriented on its side and its slider is mounted to the slider of the Z-axis (vertical axis). Since the Z-axis moves vertically, this type can be fitted with tooling or other devices on the Z-axis to transfer loads or perform other operations.

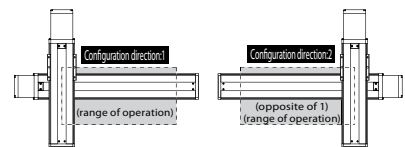
### ● Point 1

This type has a greater payload capacity than the YZS (Z-axis slider mount) type.

### ● Point 2

Since the Z-axis comes standard with a brake, the slider will not drop even when the power is turned off.

### ● Configuration direction

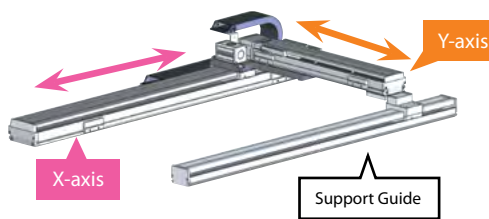


### ● Point 3

Select the Z-axis wiring specification from the two options of self-standing cable and cable track.

## 6 XYG (Y-axis Flat-mounted Gantry) Type

→ P. 109

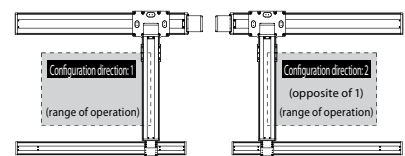


The Y-axis of the XYB type is placed flat and a support guide is attached at the end of the Y-axis. Use this type for transferring heavy objects or when the Y-axis stroke is long and the end might sag.

### ● Point 1

A maximum of 45 kg can be transferred.

### ● Configuration direction

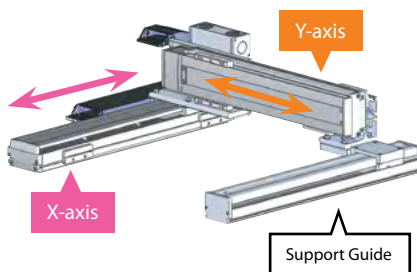


### ● Point 2

The maximum stroke is 2500mm for the X-axis and 1200mm for the Y-axis. (Consult IAI if you need a longer stroke.)

## 7 XYBG (Y-axis Side-mounted Gantry) Type

→ P. 113



The Y-axis of the XYB type is placed side-mounted and a support guide is attached at the end of the Y-axis. Use this type for transferring heavy objects or when sagging at the end of the Y-axis would become a problem.

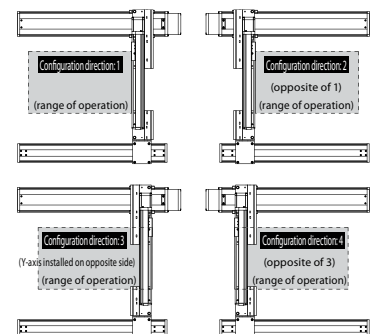
### ● Point 1

A maximum of 60 kg can be transferred.

### ● Point 2

A shorter stroke than the XYG type can be set for both the X-axis and Y-axis.

### ● Configuration direction

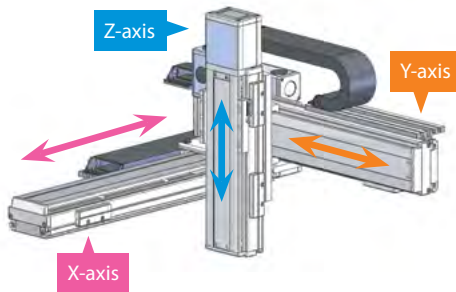


## 3-axis Configuration Explanation of Types of Robots

Based on the 2-axis configuration XYB (XY base fixed) type and XYG/XYBG (XY gantry) type, this is a 3-axis configuration with an additional vertical Z-axis. An XZY type with an added Y-axis based on the XZ (Z-axis upright mount) type is also included in the line-up.

### 1 XYB (Y-axis Base Mount) + Z-axis Base Mount Type

→ P. 135

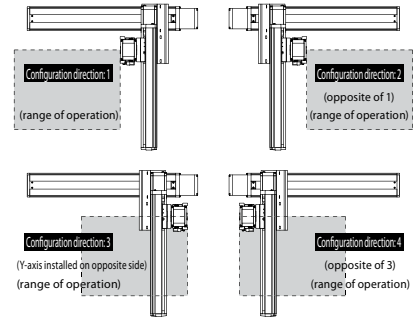


With this type, the base of the Z-axis is mounted to the Y-axis slider of the XYB type (The Y-axis base is mounted to the X-axis bracket).

#### ● Point

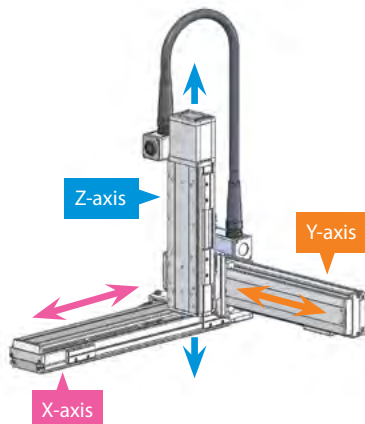
The main body of the Z-axis is mounted and the slider moves up and down. It has a greater load capacity vertically than the Z-axis slider mounted type.

#### ● Configuration direction



### 2 XYB (Y-axis Base Mount) + Z-axis Slider Mount Type

→ P. 189

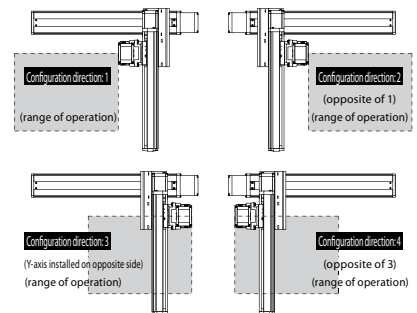


With this type, the slider of the Z-axis is mounted to the Y-axis slider of the XYB type (The Y-axis base is mounted to the X-axis bracket).

#### ● Point

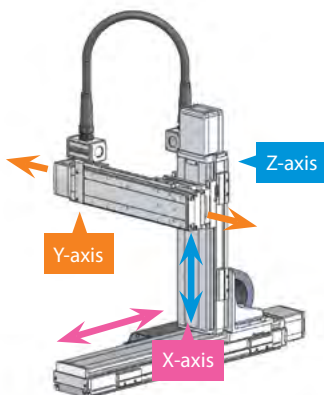
The main body of the Z-axis moves up and down, making it suitable when there are obstacles to the movement.

#### ● Configuration direction



### 3 XZ (Z-axis Upright Mount) + Y-axis Slider Mount Type

→ P. 225

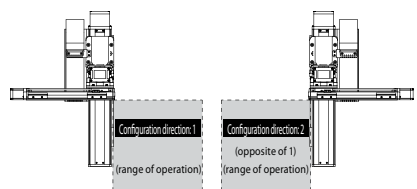


This is a type where the slider of the Y-axis is mounted to the slider of the Z-axis of the XZ type (Z-axis is upright mounted on the X-axis).

#### ● Point

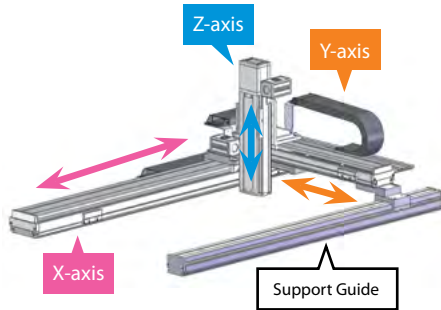
Suitable for insertion, movement of work parts to a stacker and moving of objects placed on the surface of a wall.

#### ● Configuration direction



#### 4 XYG (Y-axis Flat-Mounted Gantry) + Z-axis Base Mount Type

→ P. 229

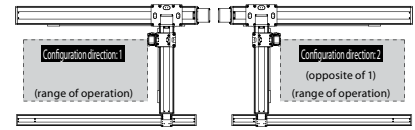


With this type, the base of the Z-axis is mounted on the Y-axis slider of the XYG type (a guide is placed parallel to the X-axis and the Y-axis is supported by the X-axis and the guide).

##### ● Point

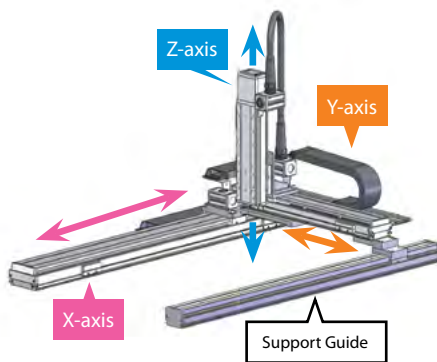
The main body of the Z-axis is mounted and the slider moves up and down. It has a greater load capacity vertically than the Z-axis slider mounted type.

##### ● Configuration direction



#### 5 XYG (Y-axis Flat-mounted Gantry) + Z-axis Slider Mount Type

→ P. 241

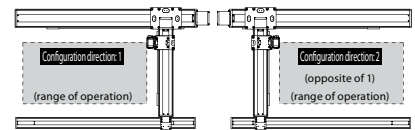


With this type, the slider of the Z-axis is mounted on the slider of the Y-axis of the XYG type (a guide is placed parallel to the X-axis and the Y-axis is supported by the X-axis and the guide).

##### ● Point

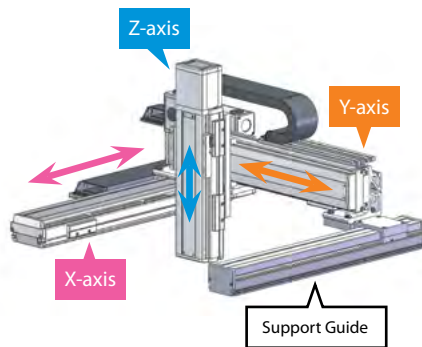
The main body of the Z-axis moves up and down, making it suitable when there are obstacles to the movement.

##### ● Configuration direction



#### 6 XYBG (Y-axis Side-mounted Gantry) + Z-axis Base Mount Type

→ P. 253

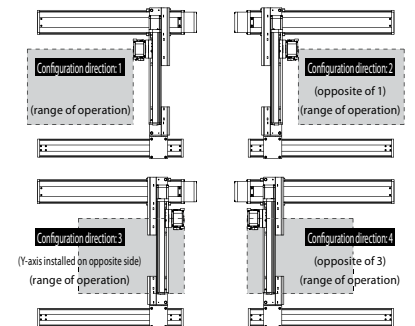


With this type, the base of the Z-axis is mounted on the slider of the Y-axis of the XYBG type (a support guide is attached at the end of the Y-axis of the XYB type).

##### ● Point

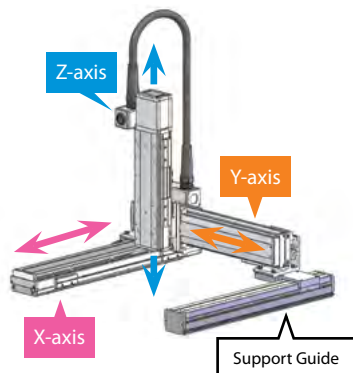
The main body of the Z-axis is mounted and the slider moves up and down. It has a greater load capacity vertically than Z-axis slider mounted type.

##### ● Configuration direction



#### 7 XYBG (Y-axis Side-mounted Gantry) + Z-axis Slider Mount Type

→ P. 285

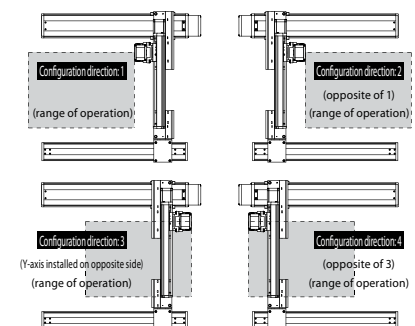


With this type, the slider of the Z-axis is mounted on the slider of the Y-axis of the XYBG type (a support guide is attached at the end of the Y-axis of the XYB type).

##### ● Point

The main body of the Z-axis moves up and down, making it suitable when there are obstacles to the movement.


##### ● Configuration direction



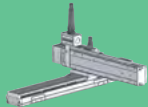
## 2-axis Configuration Model Selection Tables by Type

In the following Model Specification Tables by Type, please select the best suitable model by comparing the stroke, speed and payload.


### Cartesian Robot XYB (Y-axis Base Mount) Type

Classification	X-axis stroke (mm)	Payload by Y-axis stroke (kg)												Max. speed (mm/s)		Model	Page	
		100 (mm)	150 (mm)	200 (mm)	250 (mm)	300 (mm)	350 (mm)	400 (mm)	450 (mm)	500 (mm)	550 (mm)	600 (mm)	650 (mm)	700 (mm)	X-axis			Y-axis
<b>B□□□</b> [ XY 2-axis configuration ] Y-axis base mount 	100~900	6.1	5.8	5.5	5.3	5.0	4.7	4.5	-						960	960	BA□H	→ P. 17
		19.4	19.0	16.4	13.9	12.0	10.3	9.0	-						480	480	BA□M	→ P. 19
	100~1100	12.0	12.0	12.0	11.8	11.5	11.3	11.0	-						1200	960	BB□H	→ P. 21
		20.0	20.0	20.0	20.0	20.0	20.0	20.0	18.6	16.6	-				1200	1200	BC□H	→ P. 25
		25.0	25.0	25.0	25.0	25.0	23.0	22.0	-						600	480	BB□M	→ P. 23
		30.0	30.0	29.5	29.2	26.7	23.5	20.9	18.6	16.6	-				600	600	BC□M	→ P. 27
	100~1300	20.9	20.1	19.3	18.5	17.7	16.9	16.2	15.4	14.6	13.8	13.1	12.2	11.5	2400	2400	BG□S	→ P. 41
		23.1	22.3	21.5	20.7	20.0	19.2	18.5	17.6	16.8	16.0	15.3	14.5	13.8	2400	2400	BK□H	→ P. 45
		25.7	25.1	24.6	23.9	23.4	22.9	22.3	21.7	21.2	20.5	20.0	19.4	18.9	2400	1800	BE□S	→ P. 31
		45.0	45.0	45.0	45.0	43.4	38.8	34.9	31.5	28.6	26.0	23.7	21.6	19.7	1200	1200	BE□H	→ P. 33
		60.0	60.0	55.6	48.8	43.4	38.8	34.9	31.5	28.6	26.0	23.7	21.6	19.7	600	600	BE□M	→ P. 35
		64.5	63.7	62.9	62.1	59.9	54.1	49.8	44.8	40.9	37.4	34.3	31.5	28.9	1200	1200	BK□M	→ P. 47
	100~1500	36.4	35.6	34.8	34.0	33.3	32.4	31.7	30.9	30.1	27.4	24.6	22.0	19.6	2500	2400	BM□H	→ P. 53
		78.6	70.9	61.8	54.2	48.0	42.7	38.2	34.1	30.6	27.4	24.6	22.0	19.6	1250	1200	BM□M	→ P. 55
	800~2000	20.0	20.0	20.0	20.0	20.0	20.0	20.0	18.6	18.6	-				1200	1200	BD□H	→ P. 29
		20.9	20.1	19.3	18.5	17.7	16.9	16.2	15.4	14.6	13.8	13.1	12.2	11.5	2400	2400	BH□S	→ P. 43
	1000~2500	25.7	25.1	24.6	23.9	23.4	22.9	22.3	21.7	21.2	20.5	20.0	19.4	18.9	2400	1800	BF□S	→ P. 37
		45.0	45.0	45.0	45.0	43.4	38.8	34.9	31.5	28.6	26.0	23.7	21.6	19.7	1200	1200	BF□H	→ P. 39
	900~2500	36.6	35.8	35.0	34.2	33.5	32.7	32.0	31.1	30.3	29.5	28.8	28.0	27.3	2400	2400	BL□H	→ P. 49
		65.0	65.0	65.0	65.0	62.3	55.9	50.7	46.1	42.0	38.4	35.2	32.2	29.6	1200	1200	BL□M	→ P. 51

### Cartesian Robot XYS (Y-axis Slider Mount) Type


Classification	X-axis stroke (mm)	Payload by Y-axis stroke (kg)												Max. speed (mm/s)		Model	Page	
		100 (mm)	150 (mm)	200 (mm)	250 (mm)	300 (mm)	350 (mm)	400 (mm)	450 (mm)	500 (mm)	550 (mm)	600 (mm)	650 (mm)	700 (mm)	X-axis			Y-axis
<b>S□□□</b> [ XY 2-axis configuration ] Y-axis slider mount 	100~600	6.6	6.3	6.1	5.8	5.5	4.9	3.9	-						960	960	SA□H	→ P. 57
		19.9	15.1	10.8	8.1	6.3	4.9	3.9	-						480	480	SA□M	→ P. 59
	100~800	10.0	9.4	8.7	8.2	7.7	7.2	6.7	6.2	5.6	-				1200	1200	S1C□H	→ P. 61
		22.6	21.8	21.0	20.2	19.5	18.7	16.9	13.8	11.3	9.2	7.4	-		2400	2400	SG□S	→ P. 67
		27.5	26.7	26.0	25.2	24.4	20.8	17.1	14.0	11.6	9.4	7.6	-		1200	1200	SG□H	→ P. 69
		30.0	29.0	27.4	21.0	16.6	13.4	10.9	8.9	7.3	-				600	600	S1C□M	→ P. 63
		31.7	31.1	27.1	20.7	16.4	13.2	10.7	8.7	7.0	-				1200	1200	S2C□H	→ P. 65

### Cartesian Robot XZ (Z-axis Upright Mount) Type


Classification	X-axis stroke (mm)	Payload by Z-axis stroke (kg)												Max. speed (mm/s)		Model	Page	
		100 (mm)	150 (mm)	200 (mm)	250 (mm)	300 (mm)	350 (mm)	400 (mm)	450 (mm)	500 (mm)	550 (mm)	600 (mm)	650 (mm)	700 (mm)	X-axis			Z-axis
<b>Z□□□</b> [ XZ 2-axis configuration ] Z-axis upright mount 	100~900	7.0	7.0	6.6	5.6	4.8	-						960	480	ZA□H	→ P. 71		
		9.2	7.8	6.7	5.7	4.8	-						480	240	ZA□M	→ P. 73		
	100~1100	10.0	10.0	10.0	10.0	10.0	9.7	8.4	-				1200	600	Z1C□H	→ P. 75		
		18.3	16.0	14.1	12.3	10.7	9.3	8.0	-				1200	600	Z2C□H	→ P. 79		
		18.9	16.7	14.8	12.9	11.4	9.8	9.0	-				600	300	Z1C□M	→ P. 77		
	100~1300	20.0	19.7	17.4	15.2	13.3	11.4	9.8	8.2	6.7	-				2400	1200	ZG□S	→ P. 83
	800~2000	18.3	16.0	14.1	12.3	10.7	9.3	8.0	-				1200	600	ZD□H	→ P. 81		
	1000~2500	20.0	19.7	17.4	15.2	13.3	11.4	9.8	8.2	6.7	-				2400	1200	ZH□S	→ P. 85




## Cartesian Robot YZS (Z-axis Slider Mount) Type

Classification	Y-axis stroke (mm)	Payload by Z-axis stroke (kg)												Max. speed (mm/s)		Model	Page	
		100 (mm)	150 (mm)	200 (mm)	250 (mm)	300 (mm)	350 (mm)	400 (mm)	450 (mm)	500 (mm)	550 (mm)	600 (mm)	650 (mm)	700 (mm)	Y-axis			Z-axis
<b>YS□□□</b> [ YZ 2-axis configuration Z-axis slider mount ] 	100~500	3.9	3.5	3.2	2.8	2.5	2.2	1.9	-						960	480	YSA□H	→ P. 87
		11.0	10.6	10.3	9.9	9.6	8.9	8.6	-						480	240	YSA□M	→ P. 89
	100~700	13.3	12.8	12.2	11.6	11.1	10.4	9.9	9.4	8.8	-				600	300	YSC□M	→ P. 93
		13.6	12.9	12.4	11.7	11.1	10.5	10.0	9.3	8.7	-				1200	600	YSC□H	→ P. 91
		28.8	28.0	27.2	26.4	25.7	24.8	24.1	23.3	22.5	-				1200	600	YSG□H	→ P. 95


## Cartesian Robot YZB (Z-axis Base Mount) Type

Classification	Y-axis stroke (mm)	Payload by Z-axis stroke (kg)												Max. speed (mm/s)		Model	Page	
		100 (mm)	150 (mm)	200 (mm)	250 (mm)	300 (mm)	350 (mm)	400 (mm)	450 (mm)	500 (mm)	550 (mm)	600 (mm)	650 (mm)	700 (mm)	Y-axis			Z-axis
<b>YB□□□</b> [ YZ 2-axis configuration Z-axis base mount ] 	100~900	7.0	7.0	6.7	6.3	6.1	5.7	5.4	-						960	480	YBA□H	→ P. 97
		14.0	14.0	14.0	14.0	14.0	14.0	14.0	-						480	240	YBA□M	→ P. 99
	100~1100	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	-				1200	600	YBC□H	→ P. 101
		20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	-				600	300	YBC□M	→ P. 103
	100~1300	20.0	20.0	20.0	20.0	20.0	20.0	19.7	18.9	18.0	-				2400	1200	YBG□S	→ P. 105
40.0		40.0	40.0	40.0	40.0	40.0	40.0	40.0	40.0	-				1200	600	YBG□H	→ P. 107	

## Cartesian Robot XYG (Y-axis Flat-mounted Gantry) Type

Classification	X-axis stroke (mm)	Payload by Y-axis stroke (kg)												Max. speed (mm/s)		Model	Page
		500 (mm)	550 (mm)	600 (mm)	650 (mm)	700 (mm)	800 (mm)	900 (mm)	1000 (mm)	1100 (mm)	1200 (mm)	X-axis	Y-axis				
<b>G□□□□</b> [ XY 2-axis gantry configuration Y-axis flat-mounted gantry ] 	1000~2500	45.0						-						1200	1200	G1J□H	→ P. 109
		-						45.0	43.6	38.3	33.7	29.6	1200	1200	G2J□H	→ P. 111	


## Cartesian Robot XYBG (Y-axis Side-mounted Gantry) Type

Classification	X-axis stroke (mm)	Payload by Y-axis stroke (kg)															Max. speed (mm/s)		Model	Page				
		300 (mm)	350 (mm)	400 (mm)	450 (mm)	500 (mm)	550 (mm)	600 (mm)	650 (mm)	700 (mm)	750 (mm)	800 (mm)	850 (mm)	900 (mm)	950 (mm)	1000 (mm)	1050 (mm)	1100 (mm)			X-axis	Y-axis		
<b>G□□□□</b> [ XY 2-axis configuration Y-axis side-mounted gantry ] 	100~1100	12.9	12.5	12.3	11.9	11.6	11.2	10.9	-												1200	960	GB□H	→ P. 113
		27.0						26.8	-												600	480	GB□M	→ P. 115
		23.0						21.8	19.5	17.5	15.7	-						1200	1200	GC□H	→ P. 117			
		26.6	26.0	25.4	24.9	24.3	21.8	19.5	17.5	15.7	-						600	600	GC□M	→ P. 119				
	100~1300	45.0				41.5	37.8	34.6	31.7	29.1	26.7	24.5	22.5	20.7	-			1200	1200	GE□H	→ P. 123			
		60.0	55.8	50.3	45.6	41.5	37.8	34.6	31.7	29.1	26.7	24.5	22.5	20.7	-			600	600	GE□M	→ P. 125			
	100~1300	-				34.5	31.1	28.1	25.3	22.8	20.4	18.3	16.3	14.5	12.7	11.1	9.5	8.1	1200	1200	GG□H	→ P. 129		
		-				34.5	31.1	28.1	25.3	22.8	20.4	18.3	16.3	14.5	12.7	11.1	9.5	8.1	600	600	GG□M	→ P. 131		
	800~2000	23.0						21.8	19.5	17.5	15.7	-						1200	1200	GD□H	→ P. 121			
	1000~2500	45.0				41.5	37.8	34.6	31.7	29.1	26.7	24.5	22.5	20.7	-			1200	1200	GF□H	→ P. 127			
		-				34.5	31.1	28.1	25.3	22.8	20.4	18.3	16.3	14.5	12.7	11.1	9.5	8.1	1200	1200	GH□H	→ P. 133		


## 3-axis Configuration Model Selection Tables by Type

In the following Model Specification Tables by Type, please select the best suitable model by comparing the stroke, speed and payload.


### Cartesian Robot XYB + Z-axis Base Mount Type

Classification	X-axis stroke (mm)	Y-axis stroke (mm)	Z-axis stroke (mm)	Payload (kg)	Maximum speed (mm/s)			Model	Page						
					X-axis	Y-axis	Z-axis								
<b>B□□□B□□</b> [ XYB + Z-axis 3-axis configuration Z-axis base mount ] 	100~900	100~400	100~300	3.5	480	480	960	BA□MB1H	→ P. 135						
	7~3.6			480			BA□MB1M								
	8.9~3.6			240			BA□MB1L								
	3.5			1200	960	960	960	960	960	BB□HB1H	→ P. 137				
	7~6.2					480			BB□HB1M						
	7.7~6.2					240			BB□HB1L						
	3.5			600	480	960	600	480	960	BB□MB1H	→ P. 139				
	7.0					480			BB□MB1M						
	14.0					240			BB□MB1L						
	3.5	1200	1200	1200	1200	1200	960	BC□HB1H	→ P. 141						
	7.0						480	BC□HB1M							
	14~11						240	BC□HB1L							
	5.0	1200	1200	1200	1200	1200	600	BC□HB2H	→ P. 143						
	10~5.4						600	BC□HB2M							
	13.1~5.4						300	BC□HB2L							
	10~4.9	1200	1200	1200	1200	1200	1200	BC□HB3H	→ P. 145						
	12.6~4.9						600	BC□HB3M							
	5.0						1200	BC□MB2H							
	10~5.4	600	600	600	600	600	600	BC□MB2M	→ P. 147						
	19~5.4						300	BC□MB2L							
	10~4.9						1200	BC□MB3H							
	18.5~4.9	600	600	600	600	600	600	BC□MB3M	→ P. 149						
	3.5						1200	1200		1200	1200	1200	960	BD□HB1H	→ P. 151
	7.0												480	BD□HB1M	
	14~11	240	BD□HB1L												
	5.0	1200	1200	1200	1200	1200	1200	BD□HB2H	→ P. 153						
	10~5.4						600	BD□HB2M							
	13.1~5.4						300	BD□HB2L							
	10~4.9	1200	1200	1200	1200	1200	1200	BD□HB3H	→ P. 155						
	12.6~4.9						600	BD□HB3M							
	3.5						1200	1200		1200	1200	1200	960	BE□HB1H	→ P. 157
	7.0	480	BE□HB1M												
	14.0	240	BE□HB1L												
	5.0	1200	1200	1200	1200	1200	960	BE□HB2H	→ P. 159						
	10~7.2						480	BE□HB2M							
	20~7.2						240	BE□HB2L							
	10~6.6	1200	1200	1200	1200	1200	1200	BE□HB3H	→ P. 161						
	20~6.6						600	BE□HB3M							
	3.5						1200	1200		1200	1200	1200	960	BF□HB1H	→ P. 163
	7.0	480	BF□HB1M												
	14.0	240	BF□HB1L												
	5	1200	1200	1200	1200	1200	1200	BF□HB2H	→ P. 165						
	10~7.2						600	BF□HB2M							
	20~7.2						300	BF□HB2L							
	10~6.6	1200	1200	1200	1200	1200	1200	BF□HB3H	→ P. 167						
	20~6.6						600	BF□HB3M							
	10.0						2400	2400		2400	2400	2400	1200	BK□HB3H	→ P. 169
	20~13.6	600	BK□HB3M												
	20~8.6	1200	BK□HB4H												
	20~17.5	1200	1200	1200	1200	1200	600	BK□MB3M	→ P. 173						
36.4~11.6	600						BK□MB4M								
10.0	2400						2400	2400		2400	2400	1200	BL□HB3H	→ P. 177	
20~13.6		600	BL□HB3M												
20~8.6		2400	BL□HB4H												
20~17.5	1200	1200	1200	1200	1200	600	BL□MB3M	→ P. 181							
36.4~11.6						600	BL□MB4M								
20~6.0						2500	BM□HB4H								
33.1~6.0	1250	1200	1200	1200	1200	600	BM□MB4M	→ P. 187							


## Cartesian Robot XYB + Z-axis Slider Mount Type

Classification	X-axis stroke (mm)	Y-axis stroke (mm)	Z-axis stroke (mm)	Payload (kg)	Maximum speed (mm/s)			Model	Page		
					X-axis	Y-axis	Z-axis				
<b>B□□□S□□</b> [ XYB + Z-axis 3-axis configuration Z-axis slider mount ] 	100~900	100~400	100~300	4.3~2.8	480	480	480	BA□MS1M	→ P. 189		
				11.3~4.0			240	BA□MS1L			
	100~1000			100~500	4.3~2.8	1200	960	480	BB□HS1M	→ P. 191	
					8.1~6.6			240	BB□HS1L		
		4.3~2.8	600		480	480	BB□MS1M	→ P. 193			
		11.3~9.8				240	BB□MS1L				
	800~2000	100~500	100~400	4.3~2.1	1200	1200	480	BC□HS1M	→ P. 195		
				11.3~9.1			240	BC□HS1L			
				13.2~5.5	1200	1200	600	BC□HS3M	→ P. 197		
				14.3~5.5			600	600		600	BC□MS3M
				100~1000	100~700	4.3~2.1	1200	1200	480	BD□HS1M	→ P. 201
						11.3~9.1			240	BD□HS1L	
						13.2~5.5	1200	1200	600	BD□HS3M	→ P. 203
						4.3~2.1			1200	1200	
	11.3~9.1	240	BE□HS1L								
	1000~2500	100~700	100~500	14.3~8.5	1200	1200	600	BE□HS3M	→ P. 207		
				4.3~2.1			1200	1200		480	BF□HS1M
				11.3~9.1	240	BF□HS1L					
	100~1000	100~700	100~500	12~5.0	2400	2400	1200	BK□HS4H	→ P. 213		
				25.1~9.0			600	BK□HS4M			
12~5.0				1200	1200	1200	BK□MS4H	→ P. 215			
32~12.1						600	BK□MS4M				
900~2500	100~700	100~500	12~5.0	2400	2400	1200	BL□HS4H	→ P. 217			
			25.1~9.0			600	BL□HS4M				
			12~5.0	1200	1200	1200	BL□MS4H	→ P. 219			
			32~12.1			600	BL□MS4M				
100~1000	100~700	100~500	12~5.0	2500	2400	1200	BM□HS4H	→ P. 221			
			32~6.5			1250	1200		600	BM□MS4M	→ P. 223

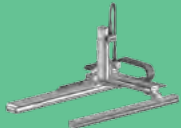
## Cartesian Robot XZ + Y-axis Slider Mount Type

Classification	X-axis stroke (mm)	Y-axis stroke (mm)	Z-axis stroke (mm)	Payload (kg)	Maximum speed (mm/s)			Model	Page
					X-axis	Y-axis	Z-axis		
<b>Z3□□HS□□</b> [ XZ + Y-axis 3-axis configuration Y-axis slider mount ] 	120~1070	100~400	100~400	13~8.7	1200	600	960	Z3C□HS1H	→ P. 225
	120~1270	100~500	100~500	21.2~7.0	1200	600	1200	Z3G□HS2H	→ P. 227


## Cartesian Robot XYG + Z-axis Base Mount Type

Classification	X-axis stroke (mm)	Y-axis stroke (mm)	Z-axis stroke (mm)	Payload (kg)	Maximum speed (mm/s)			Model	Page
					X-axis	Y-axis	Z-axis		
<b>G□□HB□□</b> [ XYG + Z-axis 3-axis configuration Z-axis base mount ] 	1000~2500	500~700	100~600	3.5	1200	1200	960	G1□HB1H	→ P. 229
				7.0			480	G1□HB1M	
				14.0			240	G1□HB1L	
				5.0	1200	1200	1200	G1□HB2H	→ P. 231
				10.0			600	G1□HB2M	
				20~18.0			300	G1□HB2L	
		10.0	1200	1200	1200	G1□HB3H	→ P. 233		
		20~18.0			600	G1□HB3M			
		800~1200	100~600	3.5	1200	1200	960	G2□HB1H	→ P. 235
				7.0			480	G2□HB1M	
				14.0			240	G2□HB1L	
				5.0	1200	1200	1200	G2□HB2H	→ P. 237
				10.0			600	G2□HB2M	
				20~15.1			300	G2□HB2L	
10.0	1200			1200	1200	G2□HB3H	→ P. 239		
20~14.5					600	G2□HB3M			


## Cartesian Robot XYG + Z-axis Slider Mount Type

Classification	X-axis stroke (mm)	Y-axis stroke (mm)	Z-axis stroke (mm)	Payload (kg)	Maximum speed (mm/s)			Model	Page
					X-axis	Y-axis	Z-axis		
<b>G□□HS□□</b> [ XYG + Z-axis 3-axis configuration Z-axis slider mount ] 	1000~2500	500~700	100~400	4.3~2.1	1200	1200	480	G1□HS1M	→ P. 241
				11.3~9.1			240	G1□HS1L	
			100~500	14.8~9.8	1200	1200	300	G1□HS2L	→ P. 243
				14.3~9.2	1200	1200	600	G1□HS3M	→ P. 245
		800~1200	100~400	4.3~2.1	1200	1200	480	G2□HS1M	→ P. 247
				11.3~9.1			240	G2□HS1L	
			100~500	14.8~9.8	1200	1200	300	G2□HS2L	→ P. 249
				14.3~9.2	1200	1200	600	G2□HS3M	→ P. 251

## Cartesian Robot XYBG + Z-axis Base Mount Type

Classification	X-axis stroke (mm)	Y-axis stroke (mm)	Z-axis stroke (mm)	Payload (kg)	Maximum speed (mm/s)			Model	Page	
					X-axis	Y-axis	Z-axis			
<b>G□□□B□□</b> [ XYBG + Z-axis 3-axis configuration Z-axis base mount ] 	100~1100	300~600	100~300	7~3.6	1200	960	480	GB□HB1M	→ P. 253	
				7.6~4.5			240	GB□HB1L		
				7.0	600	480	480	GB□MB1M	→ P. 255	
				14.0			240	GB□MB1L		
				7.0	1200	1200	480	GC□HB1M	→ P. 257	
				14~13.6			240	GC□HB1L		
		10~8.0	1200	1200			600	GC□HB2M	→ P. 259	
		13~8.0					300	GC□HB2L		
		10~7.5	1200	1200			1200	GC□HB3H	→ P. 261	
		17.6~8					600	600		300
		17.1~7.5	600	600	600	GC□MB3M	→ P. 265			
		800~2000	300~700	100~400	7.0	1200	1200	480	GD□HB1M	→ P. 267
	14~13.6				240			GD□HB1L		
	10~8.0				1200	1200	600	GD□HB2M	→ P. 269	
	13~8.0						300	GD□HB2L		
	10~7.5				1200	1200	1200	GD□HB3H	→ P. 271	
	14.0						1200	1200		240
	100~1300		300~900	100~500	10.0	1200	1200	600	GE□HB2M	→ P. 275
					20~11.8			300	GE□HB2L	
					10.0	1200	1200	1200	GE□HB3H	→ P. 277
					20~11.2			600	GE□HB3M	
					31.8~11.2	300	GE□HB3L	→ P. 279		
					14.0	1200	1200		240	GF□HB1L
		10	600	GF□HB2M	→ P. 281					
1000~2500		300~900	100~500	20~11.8	1200	1200	300	GF□HB2L	→ P. 283	
				10.0			1200	1200		1200
				20~11.2	1200	1200	600	GF□HB3M	→ P. 283	
				31.8~11.2			300	GF□HB3L		

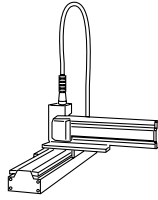
## Cartesian Robot XYBG + Z-axis Slider Mount Type

Classification	X-axis stroke (mm)	Y-axis stroke (mm)	Z-axis stroke (mm)	Payload (kg)	Maximum speed (mm/s)			Model	Page	
					X-axis	Y-axis	Z-axis			
<b>G□□□S□□</b> [ XYBG + Z-axis 3-axis configuration Z-axis slider mount ] 	100~1000	300~600	100~300	4.3~2.8	1200	960	480	GB□HS1M	→ P. 285	
				8~4.8			240	GB□HS1L		
				4.3~2.8	600	480	480	GB□MS1M	→ P. 287	
				11.3~9.8			240	GB□MS1L		
				4.3~2.1	1200	1200	480	GC□HS1M	→ P. 289	
				11.3~9.1			240	GC□HS1L		
		13.1~8.1	1200	1200			600	GC□HS3M	→ P. 291	
		4.3~2.1					480	GC□MS1M		
		11.3~9.1	600	600			240	GC□MS1L	→ P. 293	
		14.3~8.1					600	600		600
		800~2000	300~700	100~400	4.3~2.1	1200	1200	480	GD□HS1M	→ P. 297
					11.3~9.1			240	GD□HS1L	
	13.1~8.1				1200	1200	600	GD□HS3M	→ P. 299	
	4.3~2.1						480	GE□HS1M		→ P. 301
	11.3~9.1				1200	1200	240	GE□HS1L		
	14.3~10.5						600	GE□HS3M	→ P. 303	
	32.9~13.1		300	GE□HS3L	→ P. 305					
	4.3~2.1		600	600		480	GE□MS1M			
	11.3~9.1				240	GE□MS1L				
	34.3~13.1		600	600	300	GE□MS3L	→ P. 307			
	4.3~2.1				1200	1200	480	GF□HS1M	→ P. 309	
	11.3~9.1		240	GF□HS1L						
	1000~2500	300~900	100~400	14.3~10.5	1200	1200	600	GF□HS3M	→ P. 311	
				32.9~13.1			300	GF□HS3L		

# Cartesian Robot Cable Wiring

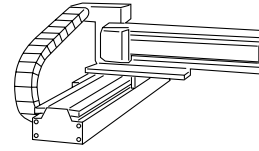
## Methods of Wiring and Characteristics

The following two methods can be selected for the wiring cable for the motor/encoder for the second and third axes of Cartesian robots. Please select the type which is suitable for the particular use.



### Self-standing cable model: SC

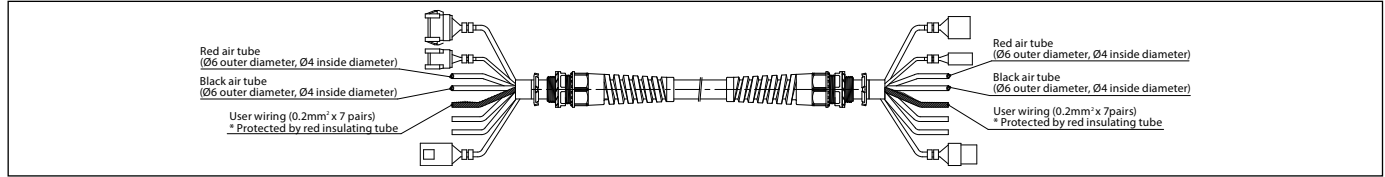
- The radius of flexure is large so that it does not readily disconnect.
- Space is required in the height direction.
- Provides user wiring and tubing inside the composite cable.



### Cable track model: CT

- Height is kept low and does not require space.
- Wiring for devices mounted on the Y-axis and Z-axis can be contained inside the cable track.

## Diagram of the Self-standing Cable Wiring



## Wiring Details by Type of Configuration

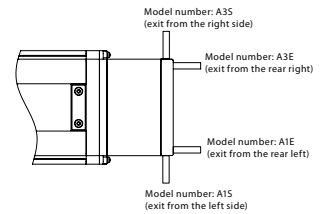
Cartesian robot configured axis cable exit direction and installation direction of sensor differs depending on the type of configuration and the configuration direction. See the following tables for details.

Cable exit direction of the first axis can be changed as an option. (YZS/YZB are excluded)

### Explanation of Symbols in the Tables

- |     |   |       |   |
|-----|---|-------|---|
| A1E | Actuator cable exit direction from the rear left  | C/L   | Creep sensor/limit switch mounting direction on the right side of the main body (standard)              |
| A3E | Actuator cable exit direction from the rear right | CL/LL | Creep sensor/limit switch mounting direction on the left side of the main body (symmetrically opposite) |
| A1S | Actuator cable exit direction from the left side  | NC    | No motor/encoder cable wiring   |
| A3S | Actuator cable exit direction from the right side | SC    | Self-standing cable   |
|     |   | CT    | Cable track   |

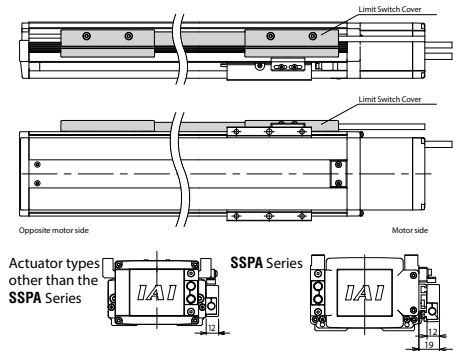
### Cable exit direction



## 2-axis Configuration

Type	Configuration direction	First axis		Second axis		Wiring on second axis
		Cable exit direction	Limit switch	Cable exit direction	Limit switch	
XYB XYBG	1	A3S	CL/LL	A1S	C/L	NC SC CT
	2	A1S	C/L	A3S	CL/LL	
	3	A3S	CL/LL	A3S	CL/LL	
	4	A1S	C/L	A1S	C/L	
XYS	1	A3S	CL/LL	A3S	C/L	NC/SC
	2	A1S	C/L	A1S	CL/LL	
	3	A3S	CL/LL	A1S	CL/LL	
	4	A1S	C/L	A3S	C/L	
XZ	1	A3S	CL/LL	A3S	CL/LL	NC/CT
	2	A1S	C/L	A1S	C/L	
	3	A3S	CL/LL	A1S	C/L	
	4	A1S	C/L	A3S	CL/LL	
	5	A3S	CL/LL	A1S	C/L	
	6	A1S	C/L	A3S	CL/LL	
YZS	1	A1E	C/L	A3E	CL/LL	NC/SC
	2	A3E	CL/LL	A1E	C/L	
YZB	1	A1E	C/L	A3S	CL/LL	NC/CT SC
				A1E	C/L	
	2	A3E	CL/LL	A3E	CL/LL	
XYG	1	A3S	CL/LL	A3E	C/L	NC/CT
	2	A1S	C/L	A1E	CL/LL	

### Limit Switch Position



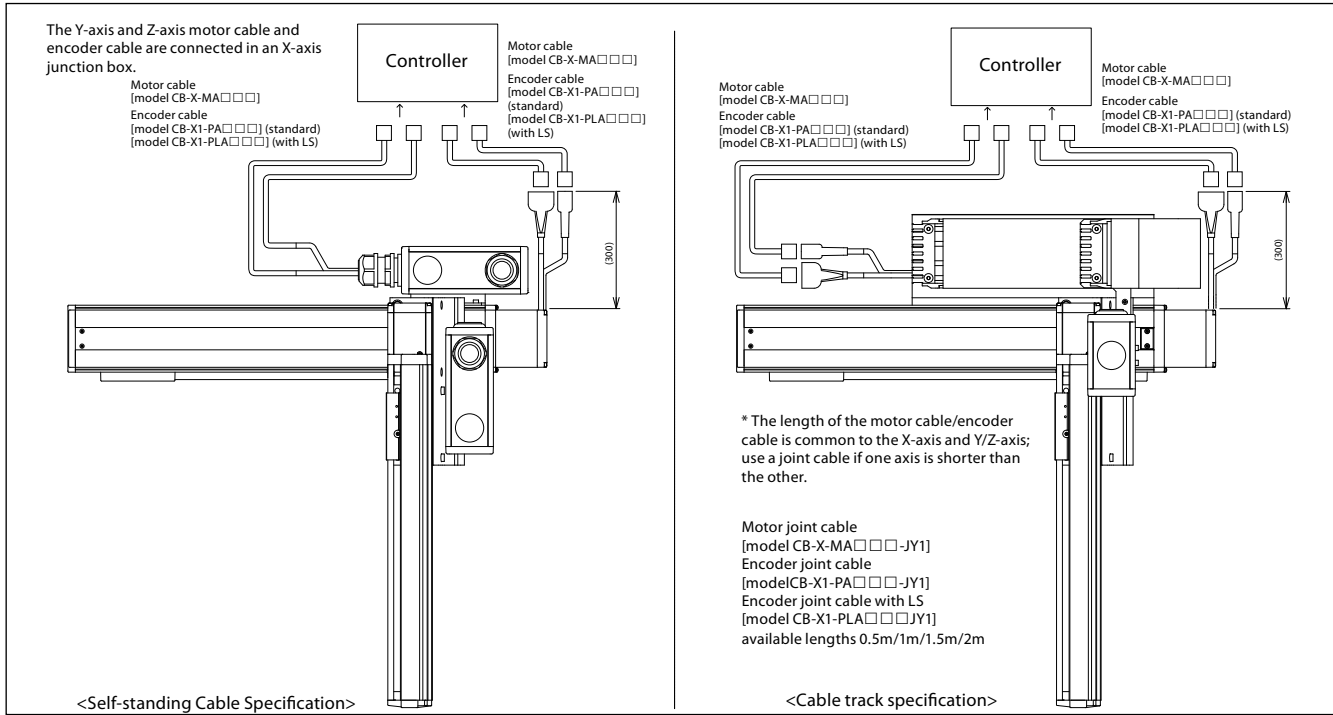
## 3-axis Configuration

Type	Configuration direction	First axis		Second axis		Third axis		Wiring for second axis
		Cable exit direction	Limit switch	Cable exit direction	Limit switch	Cable exit direction	Limit switch	
XYB + Z-axis base mount	1	A3S	CL/LL	A1S	C/L	A3S	CL/LL	NC/CT SC
	2	A1S	C/L	A3S	CL/LL	A1S	C/L	
	3	A3S	CL/LL	A3S	CL/LL	A1E	C/L	
	4	A1S	C/L	A1S	C/L	A3S	CL/LL	
XYB + Z-axis slider mount	1	A3S	CL/LL	A1S	C/L	A1E	C/L	NC/SC
	2	A1S	C/L	A3S	CL/LL	A3E	CL/LL	
	3	A3S	CL/LL	A3S	CL/LL	A3E	CL/LL	
	4	A1S	C/L	A1S	C/L	A1E	C/L	
XZ + Y-axis slider mount	1	A3S	CL/LL	A3E	CL/LL	A3S	C/L	NC/SC
	2	A1S	C/L	A1E	C/L	A1S	CL/LL	
XYG + Z-axis base mount	1	A3S	CL/LL	A3E	C/L	A3S	CL/LL	NC/CT
	2	A1S	C/L	A1E	CL/LL	A3S	CL/LL	
XYG + Z-axis slider mount	1	A3S	CL/LL	A3E	C/L	A3E	CL/LL	NC/SC
	2	A1S	C/L	A1E	CL/LL	A1E	C/L	
XYBG + Z-axis base mount	1	A3S	CL/LL	A1S	C/L	A3S	CL/LL	NC/CT SC
	2	A1S	C/L	A3S	CL/LL	A1S	C/L	
	3	A3S	CL/LL	A3S	CL/LL	A1E	C/L	
	4	A1S	C/L	A1S	C/L	A3S	CL/LL	
XYBG + Z-axis slider mount	1	A3S	CL/LL	A1S	C/L	A1E	C/L	NC/SC
	2	A1S	C/L	A3S	CL/LL	A3E	CL/LL	
	3	A3S	CL/LL	A3S	CL/LL	A3E	CL/LL	
	4	A1S	C/L	A1S	C/L	A3E	CL/LL	

# Cartesian Robot Cable Wiring

## Cables between the Cartesian Robot and the Controller

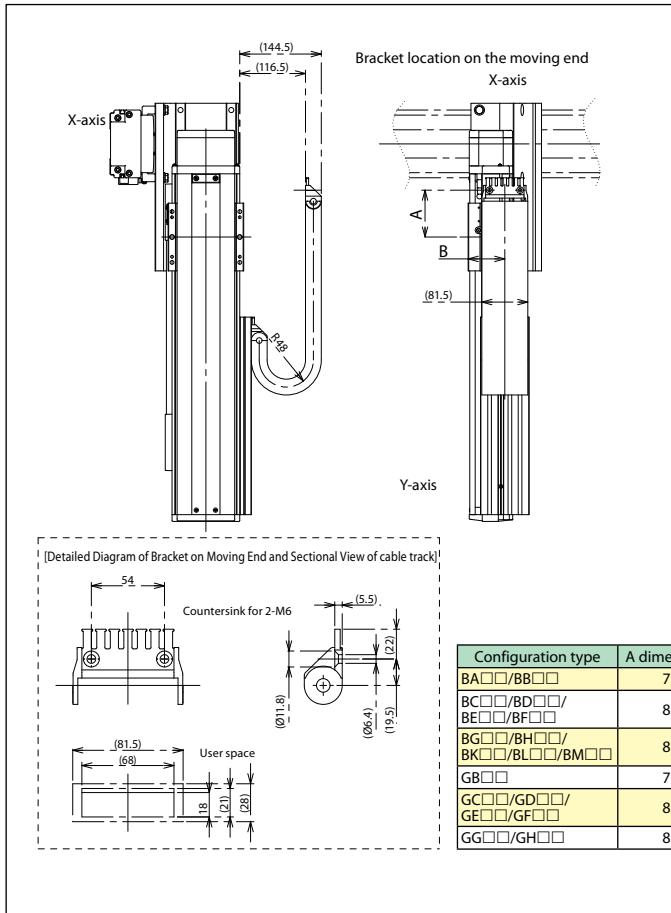
Connect each axis of the Cartesian robot using motor and encoder single axis robot cables to the controller.



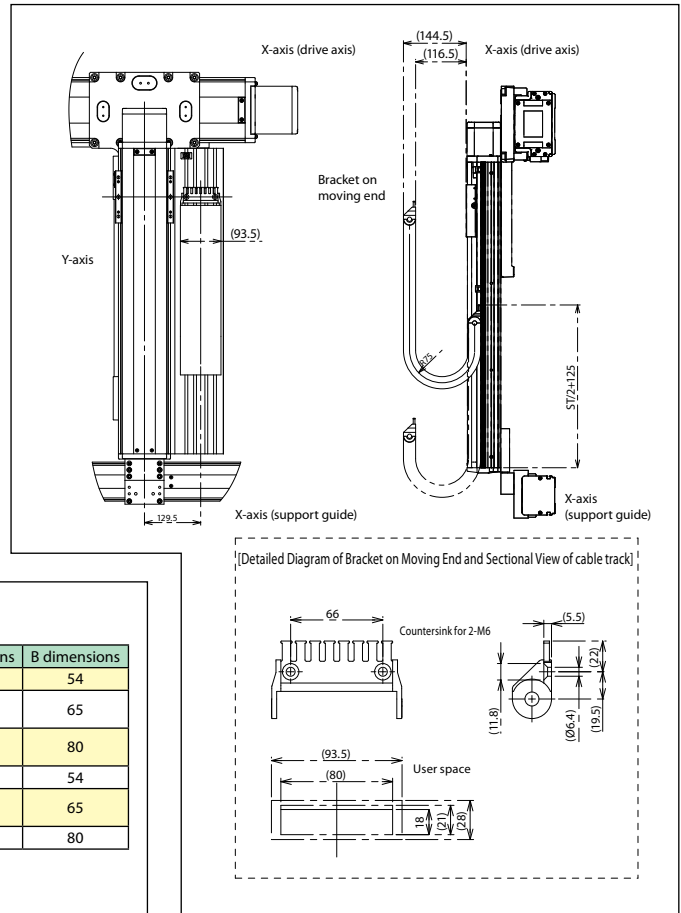
## Details of Wiring by Type of Configuration

Cable track option for wiring of the customer provided device is available for the Y-axis slider of the XYB, XYBG, and XYG types.

### Y-axis base side mounted



### Y-axis flat base mounted



# Model Specification Items

The ICSB2, ICSB3, ICSB2 and ICSB3 models are made up of the following items. The selected range for each item (stroke, cable wiring and the like) differs depending on each model. For details, please refer to each model specification page starts from page 017.

## [ICSB2/ICSPB2 Series]

① Series    ② Type    ③ Encoder type    ④ First axis details    ⑤ Second axis details    ⑥ Applicable controller    ⑦ Cable length    ⑧ Cable wiring between first and second axes    ⑨ Cable wiring between second and third axes

ICSB2 Standard Type	ICSPB2 High-Precision Type	A Absolute I Incremental	Stroke: 10, 100mm, 250, 2500mm Option: AQ, B, C, L, NM, RT	Stroke: 10, 100mm, 120, 1200mm Option: AQ, B, C, L, NM, RT	T1 XSEL-J/K T2 SSEL XSEL-P/Q/R/S	3L 3m 5L 5m Specified length	SC Self-standing cable CT Cable track
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\*When operating with SCON controllers, as the same number of single axis controllers is required. Also, a control device such as PLC is required on the top position.

<B□□□>	<S□□□>	<Z□□□>	<Y□□□□>	<G□□□>		
BA□□H XYB (S + S) high-speed BA□□M XYB (S + S) medium-speed BB□□H XYB (M + S) high-speed BB□□M XYB (M + S) medium-speed BC□□H XYB (M + M) high-speed BC□□M XYB (M + M) medium-speed BD□□H XYB (M + M) high-speed long BD□□M XYB (M + M) high-speed long	BE□□□ XYB (L + M) super-high-speed BE□□H XYB (L + M) high-speed BE□□M XYB (L + M) medium-speed BF□□□ XYB (L + M) super-high-speed long BF□□H XYB (L + M) high-speed long BF□□M XYB (L + M) medium-speed long	BK□□H XYB (SL + L) high-speed BK□□M XYB (SL + L) medium-speed BL□□H XYB (SL + L) high-speed long BL□□M XYB (SL + L) medium-speed long BM□□H XYB (HRL + L) high-speed BM□□M XYB (HRL + L) medium-speed	SA□□H XYS (S + S) high-speed SA□□M XYS (S + S) medium-speed S1□□H XYS (M + M) high-speed S1□□M XYS (M + M) medium-speed S2□□H XYS (M + M) high-speed long S2□□M XYS (M + M) high-speed long SG□□S XYS (L + L) super-high-speed SG□□H XYS (L + L) high-speed	ZA□□H XZ (S + S) high-speed ZA□□M XZ (S + S) medium-speed Z1□□H XZ (M + M) high-speed Z1□□M XZ (M + M) medium-speed Z2□□H XZ (M + M) high-speed long Z2□□M XZ (M + M) high-speed long ZH□□S XZ (L + L) super-high-speed ZH□□H XZ (L + L) high-speed	YSA□□H YZS (S + S) high-speed YSA□□M YZS (S + S) medium-speed YSC□□H YZS (M + M) high-speed YSC□□M YZS (M + M) medium-speed YSG□□H YZS (L + L) high-speed YSG□□M YZS (L + L) medium-speed YBA□□H YZB (S + S) high-speed YBA□□M YZB (S + S) medium-speed YBC□□H YZB (M + M) high-speed YBC□□M YZB (M + M) medium-speed YBG□□S YZB (L + L) super-high-speed YBG□□H YZB (L + L) high-speed	G1□□H XYG (L + M) high-speed Y-axis flat-mounted G1□□M XYG (L + M) high-speed long Y-axis side-mounted G2□□H XYG (M + S) high-speed Y-axis side-mounted G2□□M XYG (M + S) medium-speed Y-axis side-mounted GC□□H XYBG (M + M) high-speed Y-axis side-mounted GC□□M XYBG (M + M) medium-speed Y-axis side-mounted GD□□H XYBG (M + M) high-speed long Y-axis side-mounted GD□□M XYBG (M + M) high-speed long Y-axis side-mounted

S = small model  
M = medium model  
L = large model  
SL = super-large model  
HRL = high-rigidity large model

## [ICSB3/ICSPB3 Series]

① Series    ② Type    ③ Encoder type    ④ Details of first axis    ⑤ Details of second axis    ⑥ Details of third axis    ⑦ Applicable controller    ⑧ Cable length    ⑨ Cable wiring between first and second axes    ⑩ Cable wiring between second and third axes

ICSB3 Standard Type	ICSPB3 High-Precision Type	A Absolute I Incremental	Stroke: 10, 100mm, 250, 2500mm Option: AQ, B, C, L, NM, RT	Stroke: 10, 100mm, 120, 1200mm Option: AQ, B, C, L, NM, RT	Stroke: 10, 100mm, 60, 600mm Option: AQ, B, C, L, NM, RT	T1 XSEL-J/K T2 SCON XSEL-P/Q/R/S	3L 3m 5L 5m Specified length	SC Self-standing cable CT Cable track CTSC Cable track + self-standing cable
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\*When operating with SCON controllers, as the same number of axis controllers is required. Also, a control device such as PLC is required on the top position.

<B□□□B□□>	<B□□□S□□>	
BA□□MB1□ XYB (small model + small model) medium-speed type + Z-axis (small model) base mount BB□□HB1□ XYB (medium model + small model) high-speed type + Z-axis (small model) base mount BB□□MB1□ XYB (medium model + small model) medium-speed type + Z-axis (small model) base mount BC□□HB1□ XYB (medium model + medium model) high-speed type + Z-axis (small model) base mount BC□□HB2□ XYB (medium model + medium model) high-speed type + Z-axis (medium model 100W) base mount BC□□HB3□ XYB (medium model + medium model) high-speed type + Z-axis (medium model 200W) base mount BC□□MB2□ XYB (medium model + medium model) medium-speed type + Z-axis (medium model 100W) base mount BC□□MB3□ XYB (medium model + medium model) medium-speed type + Z-axis (medium model 200W) base mount BD□□HB1□ XYB (medium model + medium model) high-speed long type + Z-axis (small model) base mount BD□□HB2□ XYB (medium model + medium model) high-speed long type + Z-axis (medium model 100W) base mount BD□□HB3□ XYB (medium model + medium model) high-speed long type + Z-axis (medium model 200W) base mount BE□□HB1□ XYB (large model + medium model) high-speed type + Z-axis (small model) base mount BE□□HB2□ XYB (large model + medium model) high-speed type + Z-axis (medium model 100W) base mount BE□□HB3□ XYB (large model + medium model) high-speed type + Z-axis (medium model 200W) base mount	BF□□HB1□ XYB (large model + medium model) high-speed long type + Z-axis (small model) base mount BF□□HB2□ XYB (large model + medium model) high-speed long type + Z-axis (medium model 100W) base mount BF□□HB3□ XYB (large model + medium model) high-speed long type + Z-axis (medium model 200W) base mount BK□□HB3□ XYB (super-large model + large model) high-speed type + Z-axis (medium model 200W) base mount BK□□HB4□ XYB (super-large model + large model) high-speed type + Z-axis (large model 400W) base mount BK□□MB3□ XYB (super-large model + large model) medium-speed type + Z-axis (medium model 200W) base mount BK□□MB4□ XYB (super-large model + large model) medium-speed type + Z-axis (large model 400W) base mount BL□□HB3□ XYB (super-large model + large model) high-speed long type + Z-axis (medium model 200W) base mount BL□□HB4□ XYB (super-large model + large model) high-speed long type + Z-axis (large model 400W) base mount BL□□MB3□ XYB (super-large model + large model) medium-speed long type + Z-axis (medium model 200W) base mount BL□□MB4□ XYB (super-large model + large model) medium-speed long type + Z-axis (large model 400W) base mount BM□□HB4□ XYB (high-rigidity large model + large model) high-speed type + Z-axis (large model 400W) base mount BM□□MB4M XYB (high-rigidity large model + large model) medium-speed type + Z-axis (large model 400W) base mount	BA□□MS1□ XYB (small model + small model) medium-speed type + Z-axis (small model) slider mount BB□□HS1□ XYB (medium model + small model) high-speed type + Z-axis (small model) slider mount BB□□MS1□ XYB (medium model + small model) medium-speed type + Z-axis (small model) slider mount BC□□HS1□ XYB (medium model + medium model) high-speed type + Z-axis (small model) slider mount BC□□HS3□ XYB (medium model + medium model) high-speed type + Z-axis (medium model 200W) slider mount BC□□MS3□ XYB (medium model + medium model) medium-speed type + Z-axis (medium model 200W) slider mount BD□□HS1□ XYB (medium model + medium model) high-speed long type + Z-axis (small model) slider mount BD□□HS3□ XYB (medium model + medium model) high-speed long type + Z-axis (medium model 200W) slider mount BE□□HS1□ XYB (large model + medium model) high-speed type + Z-axis (small model) slider mount BE□□HS3□ XYB (large model + medium model) high-speed type + Z-axis (medium model 200W) slider mount BF□□HS1□ XYB (large model + medium model) high-speed long type + Z-axis (small model) slider mount BF□□HS3□ XYB (large model + medium model) high-speed long type + Z-axis (medium model 200W) slider mount BK□□HS4□ XYB (super-large model + large model) high-speed type + Z-axis (large model 400W) slider mount BK□□MS4□ XYB (super-large model + large model) medium-speed type + Z-axis (large model 400W) slider mount BL□□HS4□ XYB (super-large model + large model) high-speed long type + Z-axis (large model 400W) slider mount BL□□MS4□ XYB (super-large model + large model) medium-speed long type + Z-axis (large model 400W) slider mount BM□□HS4H XYB (high-rigidity large model + large model) high-speed type + Z-axis (large model 400W) slider mount BM□□MS4M XYB (high-rigidity large model + large model) medium-speed type + Z-axis (large model 400W) slider mount



## ① Series

Series names are as follows.

ICSB2 : ISB 2-axis configuration  
 ICSPB2 : ISPB 2-axis configuration  
 ICSB3 : ISB 3-axis configuration  
 ICSPB3 : ISPB 3-axis configuration

## ② Type

Indicates the configuration patterns, configuration directions, types of model configurations and types of speeds.

2-axis configuration  $\frac{B}{(1)} \frac{B}{(2)} \frac{1}{(3)} \frac{H}{(4)}$  3-axis configuration  $\frac{B}{(1)} \frac{B}{(2)} \frac{1}{(3)} \frac{H}{(4)} \frac{B}{(5)} \frac{1}{(6)} \frac{M}{(7)}$

- (1) 1 - 2-axis configuration type (\*1) B: XYB type / S: XYS type / Z: XZ type / YS: YZS type / YB: YZB type / G: XYG type  
 (2) 1 - 2-axis configuration type A / B / C / 1C / 2C / D / E / F / G / H / K / L / M / 1J / 2J  
 (3) 1 - 2-axis configuration direction 1 / 2 / 3 / 4  
 (4) 1 - 2-axis speed type S: super-high speed type / H: high-speed type / M: medium speed type  
 (5) Z-axis mount type B: base mount / S: slider mount  
 (6) Z-axis motor output 1: 60W / 2: 100W / 3: 200W / 4: 400W  
 (7) Z-axis speed type H: high-speed type / M: medium-speed type / L: low-speed type

(\*1) For 3 axes, B (XYB type) and G (XYG type) and Z (XZ type) only

## ③ Encoder type

Indicates whether the encoder installed in the actuator is an "absolute type" or "incremental type."

A : Absolute type Since the current slider position will be retained after the power is turned off, homing is not required when the actuator is powered up.  
 I : Incremental type Since the slider position data are cleared when the power is turned off, homing must be performed every time the actuator is powered up.

## ④ First axis details

Indicate the stroke and options of the first axis in the 2-axis and 3-axis configurations. The stroke should be entered in cm units (example: 500 mm stroke → 50). When multiple options are set, entry should be made in alphabetical order with no hyphens in between.  
 (Example : AQ seal + creep sensor + limit switch + non-motor end specification → AQLCLNM)

## ⑤ Second axis details

Indicate the stroke and options of the second axis in the 2-axis and 3-axis configurations.  
 The same holds for others.

## ⑥ Third axis details

Indicate the stroke and options of the third axis in the 3-axis configuration.  
 The same holds for others.

## ⑦ Applicable controller

Indicates the type of controller which is connected.

T1: XSEL-J/K  
 T2: XSEL-P/Q/R/S, SSEL, SCOM

## ⑧ Cable length

Indicates the length of the motor/encoder cable connecting the actuator and the controller.

As standard lengths, 3L (3m) or 5L (5m) can be selected.  
 Or custom length can be specified up to 20m.

## ⑨ Cable wiring between axes 1-2

Indicates the method of cable wiring from the first axis to the second axis.

SC: Self-standing cable specification  
 CT: Cable track specification

\* Depending on the model, sometimes only either SC or CT can be specified. Please refer to each model specification page for details.

## ⑩ Cable wiring between axes 2-3

Indicates the method of cable wiring from the second axis to the third axis.

SC: Self-standing cable specification  
 CT: Cable track specification  
 CTSC: Cable track + self-standing cable

\* As a general rule, the cable wiring between axes 2-3 is carried out using the same method as for wiring between axes 1-2.

\* CTSC is restricted to G1J □ HS □ □, G2J □ HS □ □.

\* Depending on the model, sometimes only either SC or CT can be specified. Please refer to each model specification page for details.

<Z3□□HS□H/G□□□B□□/□□□□□□>

Z3C□HS1H	XZ (medium model + medium model) high-speed type + Y-axis (small model) slider mount	GB□HB1□	XYBG (medium model + small model) high-speed type + Z-axis (small model) base mount	GB□HS1□	XYBG (medium model + small model) high-speed type + Z-axis (small model) slider mount
Z3G□HS2H	XZ (large model + large model) high-speed type + Y-axis (medium model) slider mount	GB□MB1□	XYBG (medium model + small model) medium-speed type + Z-axis (small model) base mount	GB□MS1□	XYBG (medium model + small model) medium-speed type + Z-axis (small model) slider mount
G1J□HB1□	XYG (large model + medium model) high-speed long type + Z-axis (small model) base mount	GC□HB1□	XYBG (medium model + medium model) high-speed type + Z-axis (small model) base mount	GC□HS1□	XYBG (medium model + medium model) high-speed type + Z-axis (small model) slider mount
G1J□HB2□	XYG (large model + medium model) high-speed long type + Z-axis (medium model 100W) base mount	GC□HB2□	XYBG (medium model + medium model) high-speed type + Z-axis (medium model 100W) base mount	GC□HS3□	XYBG (medium model + medium model) high-speed type + Z-axis (medium model 200W) slider mount
G1J□HB3□	XYG (large model + medium model) high-speed long type + Z-axis (medium model 200W) base mount	GC□HB3□	XYBG (medium model + medium model) high-speed type + Z-axis (medium model 200W) base mount	GC□MS1□	XYBG (medium model + medium model) medium-speed type + Z-axis (small model) slider mount
G2J□HB1□	XYG (large model + medium model) high-speed long type + Z-axis (small model) base mount	GC□MB2□	XYBG (medium model + medium model) medium-speed type + Z-axis (medium model 100W) base mount	GC□MS3□	XYBG (medium model + medium model) medium-speed type + Z-axis (medium model 200W) slider mount
G2J□HB2□	XYG (large model + medium model) high-speed long type + Z-axis (medium model 100W) base mount	GC□MB3□	XYBG (medium model + medium model) medium-speed type + Z-axis (medium model 200W) base mount	GD□HS1□	XYBG (medium model + medium model) high-speed long type + Z-axis (small model) slider mount
G2J□HB3□	XYG (large model + medium model) high-speed long type + Z-axis (medium model 200W) base mount	GD□HB1□	XYBG (medium model + medium model) high-speed long type + Z-axis (small model) base mount	GD□HS3□	XYBG (medium model + medium model) high-speed long type + Z-axis (medium model 200W) slider mount
G1J□HS1□	XYG (large model + medium model) high-speed long type + Z-axis (small model) slider mount	GD□HB2□	XYBG (medium model + medium model) high-speed long type + Z-axis (medium model 100W) base mount	GE□HS1□	XYBG (large model + medium model) high-speed type + Z-axis (small model) slider mount
G1J□HS2□	XYG (large model + medium model) high-speed long type + Z-axis (medium model 100W) base mount	GD□HB3□	XYBG (medium model + medium model) high-speed long type + Z-axis (medium model 200W) base mount	GE□HS3□	XYBG (large model + medium model) high-speed type + Z-axis (medium model 200W) slider mount
G1J□HS3□	XYG (large model + medium model) high-speed long type + Z-axis (medium model 200W) slider mount	GE□HB1□	XYBG (large model + medium model) high-speed type + Z-axis (small model) base mount	GE□MS1□	XYBG (large model + medium model) medium-speed type + Z-axis (small model) slider mount
G2J□HS1□	XYG (large model + medium model) high-speed long type + Z-axis (small model) slider mount	GE□HB2□	XYBG (large model + medium model) high-speed type + Z-axis (medium model 100W) base mount	GE□MS3□	XYBG (large model + medium model) medium-speed type + Z-axis (medium model 200W) slider mount
G2J□HS2□	XYG (large model + medium model) high-speed long type + Z-axis (medium model 100W) base mount	GF□HB1□	XYBG (large model + medium model) high-speed long type + Z-axis (medium model 200W) base mount	GF□HS1□	XYBG (large model + medium model) high-speed long type + Z-axis (small model) slider mount
G2J□HS3□	XYG (large model + medium model) high-speed long type + Z-axis (medium model 200W) slider mount	GF□HB2□	XYBG (large model + medium model) high-speed long type + Z-axis (medium model 100W) base mount	GF□HS3□	XYBG (large model + medium model) high-speed long type + Z-axis (medium model 200W) slider mount
		GF□HB3□	XYBG (large model + medium model) high-speed long type + Z-axis (medium model 200W) base mount		