

Cartesian Gantry Robot 3-Axis Combinations ICSB/ICSPB3-G

IS(P)B configuration type with battery-less absolute encoder equipped as standard



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Industry first! Cartesian Robot with Battery-less Absolute Encoder

[MERIT]

Now Equipped with a Battery-less Absolute Encoder as Standard

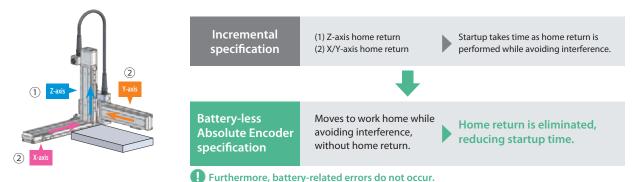
IS(P)B configuration type with battery-less absolute encoder equipped as standard.

The advantages of using an absolute encoder.

- 1 Home return is not necessary since the current position is always known.
- **2** No external home sensor is required since home return is not necessary.
- **3** Removal of current workpieces is not necessary even in an emergency stop.
- No Battery-less Absolute Encoder No Battery, No Maintenance, No Homing, and No Price Increase. No Going Back to Incremental.

Furthermore, there is no need for regular battery replacement.

4 The troublesome creation of home-return programs is not necessary even when stopping inside of a complex machine.



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The battery-less absolute encoder type costs the same as the incremental encoder type. Without a battery, the price is less than the conventional absolute encoder specification.

Example ICSB3-BA+MSCON Controller



Extensive Variations

A wide range of configurations is available, from 2-axis to 6-axis specifications and small to large models. Select a model suited to the payload, travel stroke and installation space.

926 variations are available, including 726 models compatible with the battery-less absolute encoder.

		Configuration specifications										
Encoder type	2-axis	3-axis	4-axis	6-axis								
Battery-less Absolute Encoder	[7 types] 202 versions	[7 types] 524 versions										
Incremental Encoder/ Absolute Encoder	[1 type] 56 versions	[2 types] 136 versions	[1 type] 2 versions	[2 types] 6 versions								

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Variations



Cartesian Robot 2-axis Combinations

XYB Type (Y-axis Base Mount)

	-	Encoder Stroke (mm)				Payload	Max	. speed (mm	n/s)	Reference
Series	Туре	type	X-axis maximum	Y-axis maximum	Z-axis maximum	(kg)*	X-axis	Y-axis	Z-axis	page
	BA□H	WA	900	400	—	6.1	960	960		P.13
	BA□M	WA	900	400	—	19.4	480	480	_	P.15
	BB □H	WA	1100	400	—	12	1200	960	_	P.17
	BB□M	WA	1100	400	—	25	600	480	_	P.19
	BC□H	WA	1100	500	—	20	1200	1200	_	P.21
	BC□M	WA	1100	500	—	30	600	600	_	P.23
ICS (P)B2	BD□H	WA	2000	500	—	20	1200	1200	_	P.25
2-axis Combinations	BE 🗆 S	WA	1300	700	—	25.7	2400	1800	—	P.27
	BE 🗆 H	WA	1300	700	—	45	1200	1200		P.29
	BE□M	WA	1300	700	—	60	600	600	—	P.31
	BF□S	WA	2500	700	—	25.7	2400	1800	_	P.33
	BF□H	WA	2500	700	—	45	1200	1200	—	P.35
	BG□S	WA	1300	700	_	20.9	2400	2400	_	P.37
	BH□S	WA	2500	700	—	20.9	2400	2400	—	P.39
	ВК□Н	I/A	1300	700	_	36.6	2400	2400		P.41
ICS (P)B2	BK□M	I/A	1300	700	—	65	1200	1200	—	P.43
2-axis Combinations	BL□H	I/A	2500	700	—	36.6	2400	2400		P.45
	BL□M	I/A	2500	700	—	65	1200	1200	—	P.47
ICS (P)B2	BM□H	I/A	1500	700	—	36.4	2500	2400	—	P.49
2-axis Combinations	ВМ□М	I/A	1500	700	—	78.6	1250	1200	_	P.51
ICS (P)A2	BP□H	I/A	1300	700	—	31.7	2000	2400	—	P.53
(IS(P)A+IS(P)A)	BP□M	I/A	1300	700	—	62.3	1250	1200	—	P.55
2-axis Combinations	BQ□H	I/A	2500	700	—	31.7	2000	2400	—	P.57
	BQ□M	I/A	2500	700	—	62.3	1250	1200	—	P.59
ICSPA2	B1N □H	I/A	2200	700	—	21.2	2400	1200	—	P.61
(NS+ISPA	B1N □M	I/A	2200	700	—	40	1300	1200	—	P.63
2-axis	B2N □H	I/A	3000	700	—	21.2	2400	1200	—	P.65
Combinations	B2N □M	I/A	3000	700	—	40	1300	1200	—	P.67

* The payload shown is the maximum value for the rated acceleration.

XYS Type (Y-axis Slider Mount)

Series	Туре	Encoder		Stroke (mm)		Payload	Max	. speed (mm	1/s)	Reference
Series	туре	type	X-axis maximum	Y-axis maximum	Z-axis maximum	(kg)*	X-axis	Y-axis	Z-axis	page
	SA□H	WA	600	400	—	6.6	960	960	_	P.69
	$SA \square M$	WA	600	400	—	19.9	480	480	—	P.71
IS(P)B+IS(P)B 2-axis	S1C□H	WA	800	500	_	10	1200	1200	—	P.73
	S1C □M	WA	800	500	—	30	600	600	—	P. 75
	S2C □H	WA	800	500	_	31.7	1200	1200	—	P. 77
	SG □S	WA	800	600	—	22.6	2400	2400	—	P. 79
	SG □H	WA	800	600	_	27.5	1200	1200	_	P.81

* The payload shown is the maximum value for the rated acceleration.

XZ Type (Z-axis Upright Mount)

Series	Turne	Encoder		Stroke (mm)		Payload	Max	. speed (mm	n/s)	Reference
Series	Туре	type	X-axis maximum	Y-axis maximum	Z-axis maximum	(kg)*	X-axis	Y-axis	Z-axis	page
	ZA□H	WA	900	—	300	7.0	960	—	480	P. 83
	ZA□M	WA	900	—	300	13	480	—	240	P. 85
ICS (P)B2 (IS(P)B+IS(P)B 2-axis Combinations	Z1C □H	WA	1100	—	400	10	1200	—	600	P. 87
	Z1C □M	WA	1100	—	400	20	600	—	300	P. 89
	Z2C □H	WA	1100	—	400	18.3	1200	—	600	P.91
	ZD□H	WA	2000	—	400	18.3	1200	—	600	P.93
	ZG□S	WA	1300	—	500	20	2400	—	1200	P.95
	ZH□S	WA	2500	_	500	20	2400	—	1200	P. 97

* The payload shown is the maximum value for the rated acceleration.

YZS Type (Z-axis Slider Mount)

Series	Tupo	pe Encoder type		Stroke (mm)				Max. speed (mm/s)			
Series	Туре		X-axis maximum	Y-axis maximum	Z-axis maximum	(kg)*	X-axis	Y-axis	Z-axis	page	
	YSA □H	WA	_	500	400	3.9	_	960	480	P. 99	
ICS (P)B2	$YSA \square M$	WA	_	500	400	11	—	480	240	P.101	
IS(P)B+IS(P)B 2-axis	YSC □H	WA	_	700	500	13.6	—	1200	600	P.103	
Combinations	YSC □M	WA	_	700	500	13.3	—	600	300	P.105	
	YSG □H	WA	_	700	500	28.8	_	1200	600	P.107	

 * The payload shown is the maximum value for the rated acceleration.

YZB Type (Z-axis Base Mount)

Series	Turne	Encoder		Stroke (mm)		Payload	Max	. speed (mr	n/s)	Reference
Series	Туре	type	X-axis maximum	Y-axis maximum	Z-axis maximum	(kg)*	X-axis	Y-axis	Z-axis	page
	YBA □H	WA	_	900	400	7.0	_	960	480	P.109
	YBA □M	WA	_	900	400	14	_	480	240	P.111
ICS (P)B2	YBC □H	WA	_	1100	500	20	_	1200	600	P.113
2-axis Combinations	YBC □M	WA	_	1100	500	20	—	600	300	P.115
	YBG □S	WA	_	1300	500	20	—	2400	1200	P.117
	YBG □H	WA	_	1300	500	40	_	1200	600	P.119

* The payload shown is the maximum value for the rated acceleration.

XYG Type (Y-axis Horizontal Gantry)

Series	Turne	Type Encoder		Stroke (mm)				. speed (mr	n/s)	Reference
Series	туре	type	X-axis maximum	Y-axis maximum	Z-axis maximum	(kg)*	X-axis	Y-axis	Z-axis	page
ICS (P)B2	G1J □H	WA	2500	700	—	45	1200	1200	_	P.121
2-axis Combinations	G2J □H	WA	2500	1200	_	45	1200	1200	—	P. 123

 * The payload shown is the maximum value for the rated acceleration.

XYBG Type (Y-axis Side-mounted Gantry)

Series		Encoder		Stroke (mm)		Payload	Max	. speed (mn	n/s)	Reference
Series	Туре	type	X-axis maximum	Y-axis maximum	Z-axis maximum	(kg)*	X-axis	Y-axis	Z-axis	page
	GB □H	WA	1100	600	—	12.9	1200	960	_	P.125
GE	GB □M	WA	1100	600	—	27	600	480	—	P.127
	GC□H	WA	1100	700	—	23	1200	1200	—	P.129
GC	$GC \square M$	WA	1100	700	_	26.6	600	600	—	P.131
ICS (P)B2	GD □H	WA	2000	700	_	23	1200	1200	—	P.133
IS(P)B+IS(P)B 2-axis	GE □H	WA	1300	900	_	45	1200	1200	—	P.135
Combinations	GE □M	WA	1300	900	_	60	600	600	—	P.137
GG 🗆	$GF \Box H$	WA	2500	900	_	45	1200	1200	—	P.139
	GG □H	WA	1300	1100	_	34.5	1200	1200	_	P.141
	GG □M	WA	1300	1100	_	34.5	600	600	_	P.143
	GH □H	WA	2500	1100	_	34.5	1200	1200	_	P.145

* The payload shown is the maximum value for the rated acceleration.

Cartesian Robot 3-axis Combinations

XYB+ZB Type (Y-axis Base Mount/Z-axis Base Mount)

Carita	Ture	Encoder		Stroke (mm)			٨	∕lax. spee	ed (mm/s)*	Reference
Series	Туре	type	X-axis maximum	Y-axis maximum	Z-axis maximum	Payload (kg)*	X-axis	Y-axis	Z-axis	page
	BA 🗆 MB1 🗆	WA	900	400	300	3.5/7.0/8.9	480	480	960/480/240	P.147
	BB 🗆 HB1 🗆	WA	1100	400	300	3.5/7.0/7.7	1200	960	960/480/240	P.149
	BB 🗆 MB1 🗆	WA	1100	400	300	3.5/7/14	600	480	960/480/240	P.151
	BC 🗆 HB1 🗆	WA	1100	500	400	3.5/7/14	1200	1200	960/480/240	P.153
	BC 🗆 HB2 🗆	WA	1100	500	400	5/10/13.1	1200	1200	1200/600/300	P.155
	BC 🗆 HB3 🗆	WA	1100	500	400	10/12.6	1200	1200	1200/600	P.157
	BC □MB2 □	WA	1100	500	400	5/10/19	600	600	1200/600/300	P.159
ICS (P)B3	BC 🗆 MB3 🗆	WA	1100	500	400	10/18.5	600	600	1200/600	P.161
IS(P)B+IS(P)B+IS(P)B	BD 🗆 HB1 🗆	WA	2000	500	400	3.5/7/14	1200	1200	960/480/240	P.163
3-axis Combinations	BD 🗆 HB2 🗆	WA	2000	500	400	5/10/13.1	1200	1200	1200/600/300	P. 165
	BD 🗆 HB3 🗆	WA	2000	500	400	10/12.6	1200	1200	1200/600	P.167
	BE 🗆 HB1 🗆	WA	1300	700	500	3.5/7/14	1200	1200	960/480/240	P.169
	BE 🗆 HB2 🗆	WA	1300	700	500	5/10/20	1200	1200	1200/600/300	P.171
	BE 🗆 HB3 🗆	WA	1300	700	500	10/20	1200	1200	1200/600	P.173
	BF 🗆 HB1 🗆	WA	2500	700	500	3.5/7/14	1200	1200	960/480/240	P.175
	BF 🗆 HB2 🗆	WA	2500	700	500	5/10/20	1200	1200	1200/600/300	P.177
	BF 🗆 HB3 🗆	WA	2500	700	500	10/20	1200	1200	1200/600	P.179
	ВК 🗆 НВЗ 🗆	I/A	1300	700	500	10/20	2400	2400	1200/600	P.181
	BK 🗆 HB4H	I/A	1300	700	500	20	2400	2400	1200	P.183
	ВК ПМВЗМ	I/A	1300	700	500	20	1200	1200	600	P.185
ICS(P)B3	BK 🗆 MB4 M	I/A	1300	700	500	36.4	1200	1200	600	P.187
[IS(P)A+IS(P)B+IS(P)B	BL 🗆 HB3 🗆	I/A	2500	700	500	10/20	2400	2400	1200/600	P.189
3-axis Combinations	BL□HB4H	I/A	2500	700	500	20	2400	2400	1200	P.191
	BL DMB3M	I/A	2500	700	500	20	1200	1200	600	P.193
	BL IMB4M	I/A	2500	700	500	36.4	1200	1200	600	P.195
	BM 🗆 HB4H	I/A	1500	700	500	20	2500	2400	1200	P. 197
SSPA+IS(P)B+IS(P)B 3-axis Combination	BM 🗆 MB4M	I/A	1500	700	500	33.1	1250	1200	600	P. 199
	B1N 🗆 HB3 🗆	I/A	2200	700	500	9/11.2	2400	1200	1200/600	P. 201
ICSPA3	B1N □MB3 □	I/A	2200	700	500	9/19	1300	1200	1200/600	P. 203
3-axis Combinations	B2N 🗆 HB3 🗆	I/A	3000	700	500	9/11.2	2400	1200	1200/600	P. 205
	B2N □MB3 □	I/A	3000	700	500	9/19	1300	1200	1200/600	P. 207

* The payload shown is the maximum value for the rated acceleration. * For those with multiple lead types, the payload and maximum speed are listed in the order of high lead/medium lead/low lead.

XYB+ZS Type (Y-axis Base Mount/Z-axis Slider Mount)

Series	Tumo	Encoder		Stroke (mm)		Payload (kg)*	٨	Max. spee	d (mm/s)*	Reference
Series	Туре	type	X-axis maximum	Y-axis maximum	Z-axis maximum	Payload (kg)"	X-axis	Y-axis	Z-axis	page
	BA □MS1 □	WA	700	400	300	4.3/11.3	480	480	480/240	P. 209
	BB 🗆 HS1 🗆	WA	1000	400	300	4.3/8.1	1200	960	480/240	P.211
	BB □MS1 □	WA	1000	400	300	4.3/11.3	600	480	480/240	P.213
	BC 🗆 HS1 🗆	WA	1000	500	400	4.3/11.3	1200	1200	480/240	P.215
0	BC 🗆 HS3M	WA	1000	500	400	13.2	1200	1200	600	P.217
ICS (P)B3	BC 🗆 MS3M	WA	1000	500	400	14.3	600	600	600	P.219
IS(P)B+IS(P)B+IS(P)B 3-axis Combinations	BD 🗆 HS1 🗆	WA	2000	500	400	4.3/11.3	1200	1200	480/240	P.221
	BD 🗆 HS3M	WA	2000	500	400	13.2	1200	1200	600	P. 223
	BE 🗆 HS1 🗆	WA	1000	700	400	4.3/11.3	1200	1200	480/240	P. 225
	BE 🗆 HS3M	WA	1000	700	400	14.3	1200	1200	600	P.227
	BF □HS1 □	WA	2500	700	400	4.3/11.3	1200	1200	480/240	P.229
	BF 🗆 HS3M	WA	2500	700	400	14.3	1200	1200	600	P.231
\cap	BK □HS4 □	I/A	1000	700	500	12/25.1	2400	2400	1200/600	P.233
ICS (P)B3	BK □MS4 □	I/A	1000	700	500	12/32	1200	1200	1200/600	P.235
IS(P)A+IS(P)B+IS(P)B 3-axis Combinations	BL□HS4□	I/A	2500	700	500	12/25.1	2400	2400	1200/600	P.237
	BL□MS4 □	I/A	2500	700	500	12/32	1200	1200	1200/600	P.239
ICS (P)B3	BM 🗆 HS4H	I/A	1000	700	500	12	2500	2400	1200	P. 241
3-axis Combinations	BM 🗆 MS4M	I/A	1000	700	500	32	1250	1200	600	P. 243
ICSPA3	B1N 🗆 HS3M	I/A	2200	700	400	11.5	2400	1200	600	P. 245
(NS+ISPA+ISPA	B1N MS3M	I/A	2200	700	400	13	1300	1200	600	P. 247
3-axis Combinations	B2N 🗆 HS3M	I/A	3000	700	400	11.5	2400	1200	600	P. 249
	B2N MS3M	I/A	3000	700	400	13	1300	1200	600	P. 251

* The payload shown is the maximum value for the rated acceleration. * For those with multiple lead types, the payload and maximum speed are listed in the order of high lead/medium lead/low lead.

XZ+YS Type (Z-axis Upright Mount/Y-axis Slider Mount)

Series		Туре	Encoder	Stroke (mm)			Payload (kg)		ed (mm/s)	Reference	
Jenes	Jelles Type	туре	type	X-axis maximum	Y-axis maximum	Z-axis maximum	rayidau (ky)	X-axis	Y-axis	Z-axis	page
ICS (P)B3	4	Z3C 🗆 HS1 H	WA	1070	400	400	9.5	1200	960	600	P. 253
IS(P)B+IS(P)B+IS(P)B 3-axis Combinations	and a	Z3G 🗆 HS2H	WA	1270	500	500	16.5	2400	1200	600	P. 255

* The payload shown is the maximum value for the rated acceleration.

XYG+ZB Type (Y-axis Horizontal Gantry/Z-axis Base Mount)

Series	Туре	Encoder		Stroke (mm)		Payload (kg)*	٨	1 ax. spee	ed (mm/s)*	Reference
261162	Type	type	X-axis maximum	Y-axis maximum	Z-axis maximum	r dylodd (kg)	X-axis	Y-axis	Z-axis	page
	G1J □HB1 □	WA	2500	700	600	3.5/7/14	1200	1200	960/480/240	P.257
ICS (P)B3	G1J □HB2 □	WA	2500	700	600	5/10/20	1200	1200	1200/600/300	P.259
(IS(P)B+IS(P)B+	G1J □HB3 □	WA	2500	700	600	10/20	1200	1200	1200/600	P. 261
IS(P)B 3-axis	G2J □HB1 □	WA	2500	1200	600	3.5/7/14	1200	1200	960/480/240	P. 263
Combinations	G2J □HB2 □	WA	2500	1200	600	5/10/20	1200	1200	1200/600/300	P. 265
	G2J □HB3 □	WA	2500	1200	600	10/20	1200	1200	1200/600	P.267

* The payload shown is the maximum value for the rated acceleration. * For those with multiple lead types, the payload and maximum speed are listed in the order of high lead/medium lead/low lead.

XYG+ZS Type (Y-axis Horizontal Gantry/Z-axis Slider Mount)

Series	Turne	Type Encoder		Stroke (mm)		Payload (kg)*	٨	Reference		
Jenes	туре	type	X-axis maximum	Y-axis maximum	Z-axis maximum	r ayload (kg)	X-axis	Y-axis	Z-axis	page
	G1J □HS1 □	WA	2500	700	400	4.3/11.3	1200	1200	480/240	P. 269
ICS (P)B3	G 1J 🗆 HS2L	WA	2500	700	500	14.8	1200	1200	300	P. 271
IS(P)B+IS(P)B+	G1J □HS3M	WA	2500	700	500	14.3	1200	1200	600	P. 273
IS(P)B 3-axis	G2J □HS1 □	WA	2500	1200	400	4.3/11.3	1200	1200	480/240	P. 275
Combinations	G2J □HS2L	WA	2500	1200	500	14.8	1200	1200	300	P. 277
	G2J □HS3M	WA	2500	1200	500	14.3	1200	1200	600	P. 279

* The payload shown is the maximum value for the rated acceleration. * For those with multiple lead types, the payload and maximum speed are listed in the order of high lead/medium lead/low lead.

Cartesian Robot 3-axis Combinations

XYGB+ZB Type (Y-axis Side-mounted Gantry/Z-axis Base Mount)

Series	Turne	Encoder		Stroke (mm)		Payload (kg)*	٨	∕lax. spee	d (mm/s)*	Reference
Series	Туре	type	X-axis maximum	Y-axis maximum	Z-axis maximum	Payloau (kg)"	X-axis	Y-axis	Z-axis	page
	GB □HB1 □	WA	1100	600	300	7/7.6	1200	960	480/240	P. 281
	GB □MB1 □	WA	1100	600	300	7/14	600	480	480/240	P. 283
	GC □HB1 □	WA	1100	700	400	7/14	1200	1200	480/240	P. 285
	GC □HB2 □	WA	1100	700	400	10/13	1200	1200	600/300	P. 287
	GC □HB3H	WA	1100	700	400	10	1200	1200	1200	P. 289
	GC □MB2L	WA	1100	700	400	17.6	600	600	300	P. 291
ICS (P)B3	GC	WA	1100	700	400	17.1	600	600	600	P. 293
(IS(P)B+IS(P)B+	GD □HB1 □	WA	2000	700	400	7/14	1200	1200	480/240	P. 295
IS(P)B 3-axis	GD □HB2 □	WA	2000	700	400	10/13	1200	1200	600/300	P. 297
Combinations	GD 🗆 HB3H	WA	2000	700	400	10	1200	1200	1200	P. 299
	GE 🗆 HB1L	WA	1300	900	500	14	1200	1200	240	P. 301
	GE □HB2 □	WA	1300	900	500	10/20	1200	1200	600/300	P. 303
	GE 🗆 HB3 🗆	WA	1300	900	500	10/20/31.8	1200	1200	1200/600/300	P. 305
	GF □HB1L	WA	2500	900	500	14	1200	1200	240	P. 307
	GF □HB2 □	WA	2500	900	500	10/20	1200	1200	600/300	P. 309
	GF 🗆 HB3 🗆	WA	2500	900	500	10/20/31.8	1200	1200	1200/600/300	P.311

* The payload shown is the maximum value for the rated acceleration. * For those with multiple lead types, the payload and maximum speed are listed in the order of high lead/medium lead/low lead.

XYGB+ZS Type (Y-axis Side-mounted Gantry/Z-axis Slider Mount)

Series	Turne	Encoder		Stroke (mm)		Payload (kg)*	٨	/lax.spee	d (mm/s)*	Reference
Series	Туре	type	X-axis maximum	Y-axis maximum	Z-axis maximum	rayioau (kg)"	X-axis	Y-axis	Z-axis	page
	GB □HS1 □	WA	1000	600	300	4.3/8	1200	960	480/240	P.313
	GB □MS1 □	WA	1000	600	300	4.3/11.3	600	480	480/240	P.315
	GC □HS1 □	WA	1000	700	400	4.3/11.3	1200	1200	480/240	P.317
	GC □HS3M	WA	1000	700	400	13.1	1200	1200	600	P.319
	GC □MS1 □	WA	1000	700	400	4.3/11.3	600	600	480/240	P.321
\bigcirc	GC 🗆 MS3M	WA	1000	700	400	14.3	600	600	600	P. 323
ICS (P)B3	GD □HS1 □	WA	2000	700	400	4.3/11.3	1200	1200	480/240	P.325
IS(P)B+IS(P)B+IS(P)B 3-axis Combinations	GD 🗆 HS3M	WA	2000	700	400	13.1	1200	1200	600	P.327
	GE 🗆 HS1 🗆	WA	1000	900	400	4.3/11.3	1200	1200	480/240	P. 329
	GE 🗆 HS3 🗆	WA	1000	900	400	14.3/32.9	1200	1200	600/300	P.331
	GE □MS1 □	WA	1000	900	400	4.3/11.3	600	600	480/240	P. 333
	GE MS3L	WA	1000	900	400	34.3	600	600	300	P. 335
	GF □HS1 □	WA	2500	900	400	4.3/11.3	1200	1200	480/240	P.337
	GF □HS3 □	WA	2500	900	400	14.3/32.9	1200	1200	600/300	P. 339

* The payload shown is the maximum value for the rated acceleration. * For those with multiple lead types, the payload and maximum speed are listed in the order of high lead/medium lead/low lead.

Cartesian Robot 4-axis Combinations

XMYB Type (X-axis Multi-Slider/Y-axis Base Mount)

Series	Turno	Encoder		Stroke (mm)		Payload (kg)*		Max. spee	ed (mm/s)	Reference
Series	Туре	type	X-axis maximum	Y-axis maximum	Z-axis maximum	i ayioad (kg)	X-axis	Y-axis	Z-axis	page
ICSPA4	B3N1H	I/A	2250	700	-	21.2	2400	1200	—	P. 341
4-axis Combinations	B3N1M	I/A	2250	700	_	40	1300	1200	_	P. 343

* The payload shown is the maximum value for the rated acceleration.

Cartesian Robot 6-axis Combinations

XMYB+ZB Type (X-axis Multi-Slider/Y-axis Side Base Mount/Z-axis Base Mount)

Series	Туре	Type Encoder Stroke (mm) Payload (kg)*	٨	∕lax. spee	d (mm/s)*	Reference				
Series	туре	type	X-axis maximum	Y-axis maximum	Z-axis maximum	rayioau (ky)	X-axis	Y-axis	Z-axis	page
ICSPA6	B3N1HB3□	I/A	2250	700	500	9/11.2	2400	1200	1200/600	P. 345
ISPA+ISPA 6-axis Combinations	B3N1MB3	I/A	2250	700	500	9/19	1300	1200	1200/600	P. 347

* The payload shown is the maximum value for the rated acceleration. * For those with multiple lead types, the payload and maximum speed are listed in the order of high lead/medium lead/low lead.

XMYB+ZS Type (X-axis Multi-Slider/Y-axis Side Base Mount/Z-axis Slider Mount)

Series	Turno	Encoder	Stroke (mm)			Payload (kg)*		Max. spee	Reference	
	Туре	type	X-axis maximum	Y-axis maximum	Z-axis maximum	rayidad (kg)	X-axis	Y-axis	Z-axis	page
ICSPA6	B3N1HS3M	I/A	2250	700	400	11.5	2400	1200	600	P. 349
ISPA+ISPA 6-axis Combinations	B3N1MS3M	I/A	2250	700	400	13	1300	1200	600	P. 351

* The payload shown is the maximum value for the rated acceleration.

Cartesian Robot

Cartesian Robot Selection Notes

Wiring Method Types and Features

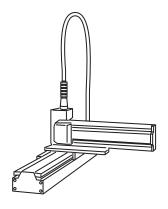
The motor/encoder cable management method can be "Self-standing cable" or "Cable track". (Please refer to product pages for selectable wiring methods.)

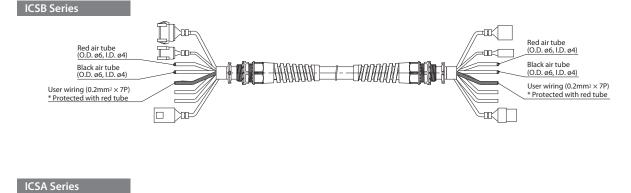
Self-standing Cable

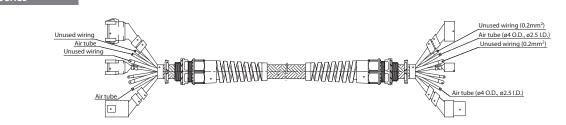
Cable Management Model: SC



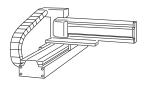
- The flex radius is large, making disconnection less likely.
- Vertical space is required.
- The composite cable contains service wiring and tubing for users.







Cable Track



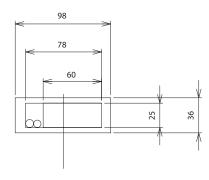
ICSB Series

Please refer to the dimensions on the product pages.

ICSA Series

ISA extra-large type 2-axis combinations

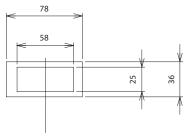
Applicable models: BP //BQ //BQ



Cable track for Y-axis wiring

Cable Management Model: $CT\Box\Box$

- **Features** Since height can be minimized, vertical space is not required. The wiring of equipment to be mounted on the Y-axis and . Z-axis can be stored in the cable track.
 - Four different track sizes can be selected according to the amount of cable to be stored. (ICSA Series exclusive)

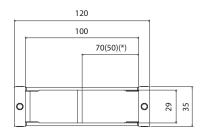


Cable track for Z-axis wiring (optional)

• Nut rotation actuator 2-axis/3-axis/4-axis/6-axis combinations

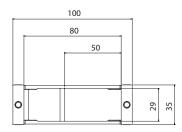
Applicable models:

B1N000/B2N000/B3N000/



Cable track for Y-axis wiring

(*) 70 for 2-axis combinations and 50 for 3-axis combinations and more.



Cable track for Z-axis wiring (optional)

Cable Exit Direction/Sensor Mounting Direction/Z-axis Wiring Option

Cable Exit Direction/Sensor Mounting Direction

The cable exit direction of the cartesian robot configured axis and mounting direction of the sensor (creep sensor/home limit switch) differ depending on the configuration type. Please refer to the table below for more information.

(1) Cable exit direction * Applies only to 2-axis/3-axis combinations.

The cable exit direction is set only when the configured axis is IS(P)B, SSPA or IS(P)A-W.

Only the cable exit direction of the first axis can be changed as an option.

(However, it cannot be changed for YZS/YZB type and ICS(P)A Series.)

To set a different direction from the normal setting, indicate the cable exit direction symbol in the X-axis Option.

If the configured axis is IS(P)A-W, indicate the exit direction symbol in the configuration model name even for the normal setting.

(2) Sensor (creep sensor/home limit switch) mounting direction

The sensor mounting direction cannot be changed.

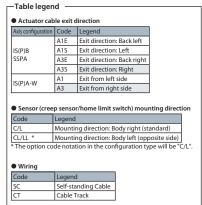
Even if the mounting direction is opposite, the option code notation in the configuration type will be "C/L".

Also, if the configured axis is IS(P)A-W or NS, the sensor mounting position will be "C/L" regardless of the configuration direction.

Depending on the configured axis, the sensor may not be mountable. Please check the Options table on the product pages.

2-axis Combinations

Configuration	Configuration	First	axis	Secor	nd axis	Second axis
type	direction	Cable exit direction *1	Sensor mounting direction *2	Cable exit direction	Sensor mounting direction	wiring
	1	A3S[A3]	CL/LL[C/L]	A1S	C/L	
XYB	2	A1S[A1]	C/L[C/L]	A3S	CL/LL	SC
XYBG	3	A3S[A3]	CL/LL[C/L]	A3S	CL/LL	CT
	4	A1S[A1]	C/L[C/L]	A1S	C/L	
	1	A3S	CL/LL	A3S	C/L	
XYS	2	A1S	C/L	A1S	CL/LL	SC
X12	3	A3S	CL/LL	A1S	CL/LL	SC
	4	A1S	C/L	A3S	C/L	
	1	A3S	CL/LL	A3S	CL/LL	
	2	A1S	C/L	A1S	C/L	
xz	3	A3S	CL/LL	A1S	C/L	СТ
~~	4	A1S	C/L	A3S	CL/LL	CI
	5	A3S	CL/LL	A1S	C/L	
	6	A1S	C/L	A3S	CL/LL	
YZS	1	A1E	C/L	A3E	CL/LL	SC
123	2	A3E	CL/LL	A1E	C/L	30
	1	A1E	C/L	A3S	CL/LL	CT
V7P		AIE		A1E	C/L	SC
τZB	YZB 2	A3E	CL/LL	A1S	C/L	CT
	2	ASE		A3E	CL/LL	SC
XYG	1	A3S	CL/LL	A3E	C/L	СТ
AIG	2	A1S	C/L	A1E	CL/LL	



*1 Direction in the normal setting. Cable exit direction can be changed as an option (YZS/YZB cannot be changed).

[] is for IS(P)A-W. *2 [] is for IS(P)A-W or NS axis configuration.

3-axis Combinations

Configuration	Configuration	Firs	t axis		nd axis	Thir	d axis	Third axis
type	direction	Cable exit direction *1	Sensor mounting direction *2	Cable exit direction	Sensor mounting direction	Cable exit direction	Sensor mounting direction	wiring
	1	A35[A3]	CL/LL[C/L]	A1S	C/L	A3S	CL/LL	CT
	· ·	X35[X3]	CE/EE[C/E]	AIS	0/2	A3E	60/11	SC
XYB	2	A15[A1]	C/L[C/L]	A3S	CL/LL	A1S	C/L	CT
+						A1E		SC
ZB	3	A3S[A3]	CL/LL[C/L]	A3S	CL/LL	A1S	C/L	CT
						A1E		SC
	4	A1S[A1]	C/L[C/L]	A1S	C/L	A3S	CL/LL	CT
		105(10)			<i>C</i> #	A3E	<i>C</i> //	SC
ХҮВ	1	A3S[A3]	CL/LL[C/L]	A15	C/L	A1E	C/L	
+	2	A15[A1]	C/L[C/L]	A3S	CL/LL	A3E	CL/LL	SC
ZS	3	A3S[A3]	CL/LL[C/L]	A3S	CL/LL	A3E	CL/LL	
	4	A1S[A1]	C/L[C/L]	A1S	C/L	A1E	C/L	
XZ+YS	1	A3S	CL/LL	A3E	CL/LL	A35	C/L	SC
	2	A1S	C/L	A1E	C/L	A15	CL/LL	
XYG+ZB	1	A3S	CL/LL	A3E	C/L	A15	C/L	CT
	2	A15 A35	C/L	A1E A3E	CL/LL C/L	A3S A3E	CL/LL CL/LL	
XYG+ZS	2	A35 A15	CL/LL C/L	A1E	C/L CL/LL	AIE	CL/LL C/L	SC
	2	AIS	U/L	AIE	CL/LL	AIE	U/L	CT
	1	A3S	CL/LL	A1S	C/L	A35	CL/LL	SC
						A3E A1S		CT
XYBG	2	A1S	C/L	A3S	CL/LL	AIE	C/L	SC
+						A1S		CT
ZB	3	A3S	CL/LL	A3S	CL/LL	AIE	C/L	SC
						A3S		CT
	4	A1S	C/L	A1S	C/L	A3E	CL/LL	SC
	1	A3S	CL/LL	A1S	C/L	A1E	C/L	30
XYBG	2	AIS	CL/LL C/L	A3S	CL/LL	A3E	CL/LL	
+	3	A3S	CL/LL	A3S	CL/LL CL/LL	A3E	CL/LL CL/LL	SC
ZS	4	A15	C/L	A1S	C/L	A1E	C/L	

*1 Direction in the normal setting. Cable exit direction can be changed as an option.

[] is for IS(P)A-W. *2 [] is for IS(P)A-W or NS axis configuration.

4-axis Combinations

Configuration	Configuration			Wiring		
type	direction	First axis	Second axis	Third axis	Fourth axis	winng
ХМҮВ	1	C/L	-	C/L	CL/LL	СТ

6-axis Combinations

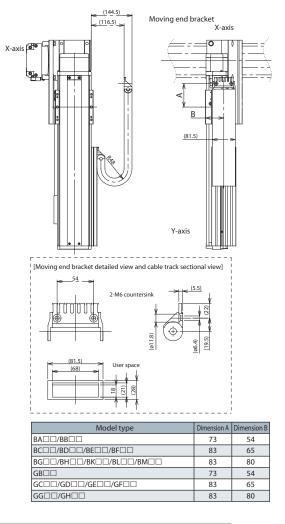
Configuration	Configuration	Sensor mounting direction							
type	direction	First axis	Second axis	Third axis	Fourth axis	Fifth axis	Sixth axis	Wiring	
XMYB + ZB	1	C/L	-	C/L	C/L	CL/LL	CL/LL	СТ	
XMYB + ZS	1	C/L	-	C/L	CL/LL	CL/LL	C/L	СТ	

Z-axis Wiring Option

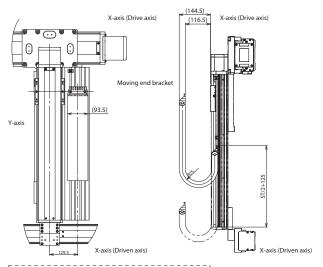
* Only ICS(P)B2 can be selected

Cable track for wiring is set as an option on the Y-axis slider of XYB, XYBG and XYG for customer device mounting.

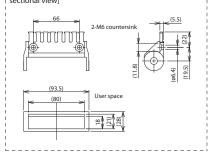
<Configuration type: XYB, XYBG>



<Configuration type: XYG-G1J/G2J>



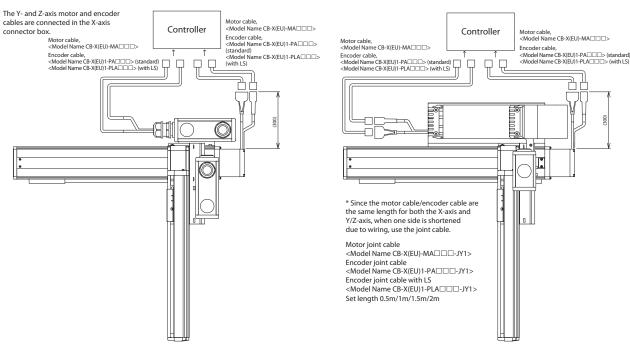
[Moving end bracket detailed view and cable track sectional view]



Cartesian Robot - Controller Connecting Cable *ICS(P)B

Connect the cartesian robot - controller connecting cable using the single axis robot cable for each configured axis. Please contact IAI for more details on the cables.

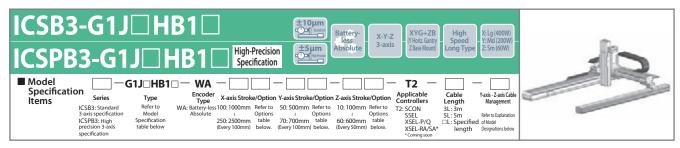
<Self-standing cable specification>



<Cable track specification>

ה

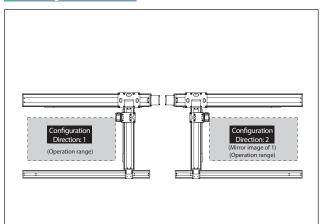
Cartesian Robot



XY configuration direction *1	Z-axis speed type *2	Model
	Н	ICSB3[ICSPB3]-G1J1HB1H-①-②③-④⑤-⑥⑦-T2-⑧-⑨
1	М	ICSB3[ICSPB3]-G1J1HB1M-D-23-45-67-T2-8-9
	L	ICSB3[ICSPB3]-G1J1HB1L-1]-23-45-67-T2-8-9
	н	ICSB3[ICSPB3]-G1J2HB1H-1-23-43-67-T2-8-9
2	М	ICSB3[ICSPB3]-G1J2HB1M-①-23-45-67-T2-8-9
	L	ICSB3[ICSPB3]-G1J2HB1L-1]-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of []] through []] in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXUWX-1)-400-20-2)-T2-1)-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM05-N-0-0-2	—
Y-axis	ISB[ISPB]-MXM-1-200-20-4-T2-1-5	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-1-60-10-6-T2-11-7	→ Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names. Note that the strokes are indicated in mm (millimeters).

* Lead is specified with 🔞 in the above model names. 16: For Z-axis High Speed type 8: For Z-axis Medium Speed type 4: For Z-axis Low Speed type

* Cable exit direction is specified with 10 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	100: 1000mm ² 250: 2500mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	50: 500mm ₹ 70: 700mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 60: 600mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-CT: Cable track - Cable track

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order

aproved a structure of the structure of							
Туре	Model	Reference page					
X-axis cable exit direction	*	See P.11, P.353					
AQ seal (standard equipment)	AQ	See P.353					
Brake (equipped as standard on Z-axis) *1	В	See P.353					
Creep sensor *2	C/CL	See P.353					
Home limit switch *2	L/LL	See P.353					
Non-motor end specification	NM	See P.353					
Guide with ball-retaining mechanism *3	RT	See P.354					

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details. *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the

mounting position. Please refer to P.11 for more information. *3 Cannot be selected for High-Precision Specification. * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

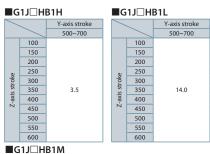
Drive system	Ball screw, rolled C10 [equivalent to rolled C5]				
Positioning repeatability	±0.01mm [±0.005mm]				
Lost motion	0.05mm [0.02mm] or less				
Guide	Integrated with base				
Base	Material: Aluminum with white alumite treatment				
X-axis motor output/lead	400W/20mm				
Y-axis motor output/lead	200W/20mm				
Z-axis motor output/lead	60W/16mm (H), 8mm (M), 4mm (L)				

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters). (Note 2) The cable length is the length between the X-axis connector box and the controller <u>A</u> Notes The standard lengths are 3m and 5m, but other lengths can also be specified in meters. The maximum length is 15m. (Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The

payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.



Y-axis stroke 500~700

7.0

300 300 400

Maximum Speed by Stroke (mm/s) (Note 4)

G1J□HB1H

100-450 500-600 700 1,000-1,200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2300 X-axis 1200 1150 1000 950 830 740 650 590 540 490 440 410		250
	270 2	
X 1 4000	3/0 3	340
Y-axis — 1200 —		
Z-axis 960 —		

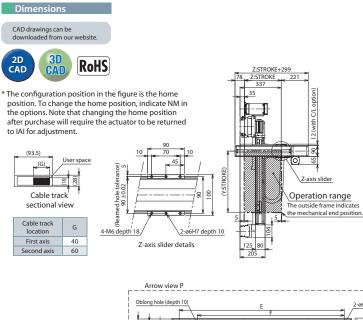
■G1J□HB1M

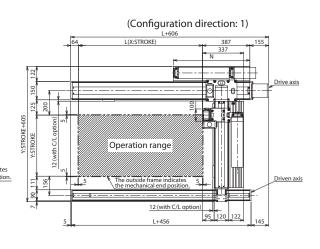
	100~450	500~600	700	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	-		1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340	
Y-axis	- 1200									—							
Z-axis	480									_							

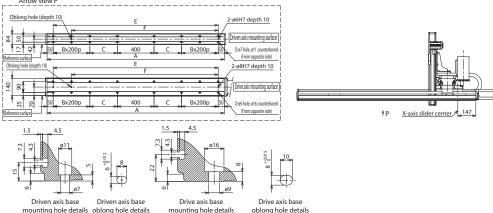
■G1J□HB1L

	100~450	500~600	700	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis		-		1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	— 1200									—							
Z-axis	240									_							

ICSB3 [ICSPB3]-G1J HB1 -CT-CT (Cable track specification)







X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514
A	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950
В	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3	3
C	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575	625
D	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20	20
E	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
F	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375

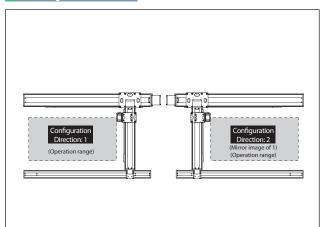
ICSB3/ICSPB3-G1J□HB1□

				±10µm ⊡sadar	Battery- Jess Absolute		High Speed Long Type	(: Lg (400W) (: Md (200W) 2: Md (100W)	Ĩ.
Model Specificati Items	ion Series		Specificatio Specificatio	n		Applicable Controllers	Length	axis - Z-axis Cable Management	-19
		Refer to WA: Battery- Model Absolut Specification table below	ess 100: 1000mm Refer to e 2 Options 250: 2500mm table (Every 100mm) below.	₹ Options 70:700mm table	≥ Options 60: 600mm table	T2: SCON SSEL XSEL-P/Q XSEL-RA/SA* *Coming soon	□L: Specified ₀	lefer to Explanation if Model Designations below	

XY configuration direction *1	Z-axis speed type *2	Model
	Н	ICSB3[ICSPB3]-G1J1HB2H-①-②③-④⑤-⑥⑦-T2-⑧-⑨
1	М	ICSB3[ICSPB3]-G1J1HB2M-D-23-45-67-T2-8-9
	L	ICSB3[ICSPB3]-G1J1HB2L-1]-2] 3-4] 5-6] 7-T2-8-9
	Н	ICSB3[ICSPB3]-G1J2HB2H-①-23-45-67-T2-6-9
2	М	ICSB3[ICSPB3]-G1J2HB2M-①-②③-④⑤-⑥⑦-T2-⑧-⑨
	L	ICSB3[ICSPB3]-G1J2HB2L-1-23-45-67-T2-6-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of []] through []] in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXUWX-1]-400-20-2]-T2-1]-3	\rightarrow Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM05-N-0-0-2	—
Y-axis	ISB[ISPB]-MXM-1-200-20-4-T2-1-5	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-1-100-10-6-T2-11-7	→ Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names.
Note that the strokes are indicated in mm (millimeters).
* Lead is specified with 100 in the above model names.
20: For Z-axis High Speed type
10: For Z-axis Medium Speed type
5: For Z-axis Low Speed type
5: For Z-axis Low Speed type
5: For Z-axis Low Speed type
5: Corb axis Low Speed type

* Cable exit direction is specified with 1 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	100: 1000mm 2 250: 2500mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	50: 500mm ² 70: 700mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 60: 600mm
0	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-CT: Cable track - Cable track

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in <u>alphabetical order</u>.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
*2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as 'C' and the home limit switch as 'L' regardless of the mounting position. Please refer to P.11 for more information.
*3 Cannot be selected for High-Precision Specification.

* To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	100W/20mm (H), 10mm (M), 5mm (L)

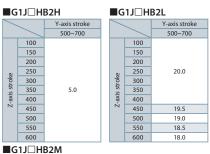
Applicable Controllers

Ν

Contact IAI. The controller for this system needs to be purchased/prepared separately.

	(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).
	(Note 2) The cable length is the length between the X-axis connector box and the controller.
\wedge	The standard lengths are 3m and 5m, but other lengths can also be specified in meters.
lotes	The maximum length is 15m.
	(Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the

acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.



Y-axis stroke 500~700

10.0

300 300 400

Maximum Speed by Stroke (mm/s) (Note 4)

G1J□HB2H

GU	INDZH																
\square	100~450	500~600	700	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	s —			1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	— 1200									—							
Z-axis	ris 1200									_							

■G1J□HB2M

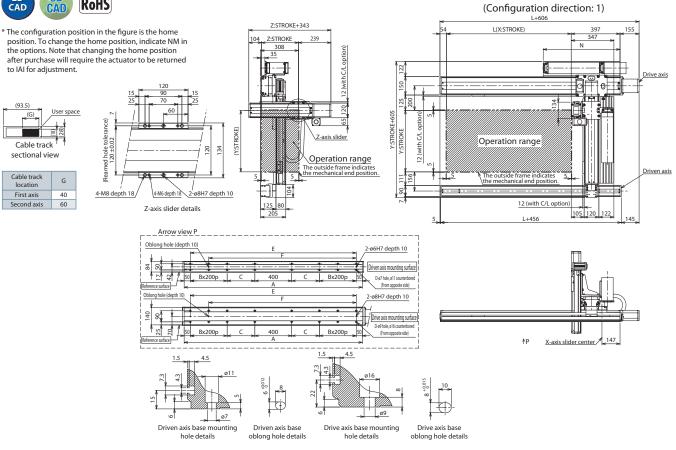
/	100~450	500~600	700	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	-		1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340	
Y-axis	—	- 1200								_							
Z-axis	600								_								

■G1J□HB2L

\sim	100~450	500~600	700	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	_			1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	— 1200)							_							
Z-axis	300									_							

ICSB3 [ICSPB3]-G1J HB2 -CT-CT (Cable track specification)





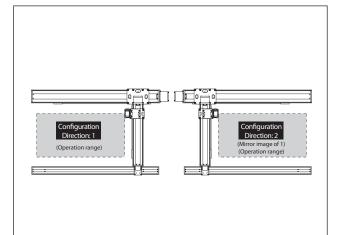
-																
X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514
A	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950
В	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3	3
C	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575	625
D	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20	20
E	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
F	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375

ICSB3-G1J ICSPB3-G1				
Model Specification Series Items ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis specification	Refer to WA: Battery-less 100: 1000mm Refer to Model Absolute 2 Options	V-axis Stroke/Option Z-axis Stroke/Option 50: 500mm Refer to i Options 70: 700mm table 60: 600mm table	T2: SCON 3L: 3m	

	XY configuration direction *1	Z-axis speed type *2	Model
	1	н	ICSB3[ICSPB3]-G1J1HB3H-①-②③-④⑤-⑥⑦-T2-⑧-⑨
	I	М	ICSB3[ICSPB3]-G1J1HB3M-1-23-45-67-T2-8-9
	2	Н	ICSB3[ICSPB3]-G1J2HB3H-①-②③-④⑤-⑥⑦-T2-⑧-⑨
		М	ICSB3[ICSPB3]-G1J2HB3M-1-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of []] through []] in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



tion	* Items in brackets [are for the High-Precision Specification

Axis Configu	* Items in brackets [] are for	or the High-Precision Specification.
Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXUWX-1]-400-20-2]-T2-1]-3	\rightarrow Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM05-N-0-0-2	-
Y-axis	ISB[ISPB]-MXM-1-200-20-4-T2-1-5	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-1-200-10-6-T2-11-7	\rightarrow Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names. Note that the strokes are indicated in mm (millimeters). * Lead is specified with ⑧ in the above model names. 20. For Z-axis High Speed type 10: For Z-axis Medium Speed type

* Cable exit direction is specified with (1) in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	100: 1000mm ² 250: 2500mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	50: 500mm ² 70: 700mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 60: 600mm
0	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-CT: Cable track - Cable track

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in <u>alphabetical order</u>.

in the second multiple options, specify them in uphabeted order.								
Туре	Model	Reference page						
X-axis cable exit direction	*	See P.11, P.353						
AQ seal (standard equipment)	AQ	See P.353						
Brake (equipped as standard on Z-axis) *1	В	See P.353						
Creep sensor *2	C/CL	See P.353						
Home limit switch *2	L/LL	See P.353						
Non-motor end specification	NM	See P.353						
Guide with ball-retaining mechanism *3	RT	See P.354						

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as 'C' and the home limit switch as 'L' regardless of the mounting position. Please refer to P.11 for more information.
 *3 Cannot be selected for High-Precision Specification.
 * To set a different X-axis calbe exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

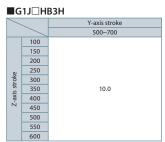
common specifica	tions in blackets [] are for the high recision specification.
Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	200W/20mm (H), 10mm (M)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

	(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).
	(Note 2) The cable length is the length between the X-axis connector box and the controller.
A Notes	The standard lengths are 3m and 5m, but other lengths can also be specified in meters.
Notes	The maximum length is 15m.
	(Note 3) The rated acceleration is 0.4G. The payload is based on operation at the rated acceleration.
	When the acceleration is increased, the payload will be reduced.
	(Note 4) Please note that a longer stroke will result in a lower max speed.







18.5

18.0

Maximum Speed by Stroke (mm/s) (Note 4)

G1J□HB3H

GU	ПРЗН																
\square	100~450	500~600	700	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis		-		1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	-	1200	C							-							
Z-axis	12	00		—													

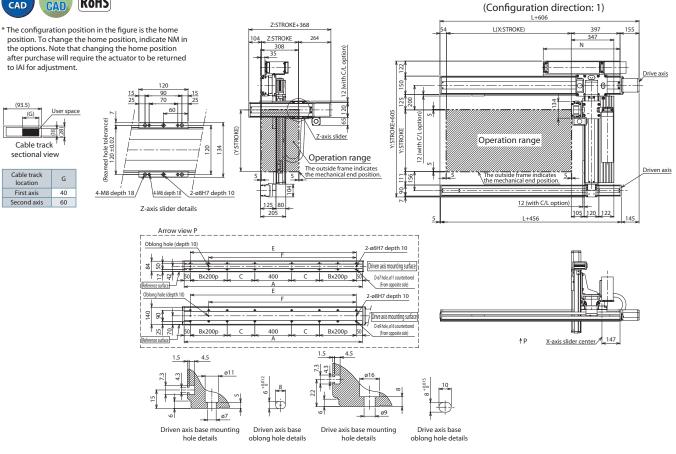
G1J□HB3M

/	100~450	500~600	700	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis		-		1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	—	1200	C							_							
Z-axis	60	00								_							

ICSB3 [ICSPB3]-G1J HB3 -CT-CT (Cable track specification)



550 600



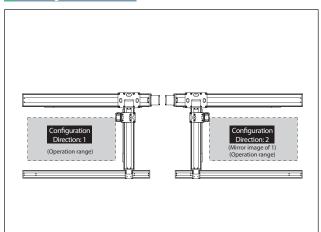
Marila atrialia	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514
A	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950
В	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3	3
C	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575	625
D	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20	20
E	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
F	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375

	-G2J⊟I 3-G2J⊑		t ±5µm Absolute 3.	-Y-Z axis (YHoriz Gantry ZBase Mount)	High Speed Long Type Z: Sm (60W)	0
Model Specification Items	Series Type ICSB3: Standard 3-axis specification precision 3-axis specification	WA: Battery-less 100: 1000mm Refer to 8 Absolute 2 Options on 250: 2500mm table 12	¿ Options ₂ Options I20: 1200mm table 60: 600mm table	to T2: SCON phs SSEL e XSEL-P/Q	Cable Y-axis - Z-axis Cable Length Management 3L: 3m 5L: 5m Refer to Explanation DL: Specified of Model length Designations below	

XY configuration direction *1	Z-axis speed type *2	Model
	Н	ICSB3[ICSPB3]-G2J1HB1H-①-23-45-67-T2-8-9
1	м	ICSB3[ICSPB3]-G2J1HB1M-D-23-45-67-T2-8-9
	L	ICSB3[ICSPB3]-G2J1HB1L-1]-2]3-4]5-6]7-T2-8-9
2	н	ICSB3[ICSPB3]-G2J2HB1H-①-23-45-67-T2-6-9
	м	ICSB3[ICSPB3]-G2J2HB1M-①-②③-④⑤-⑥⑦-T2-⑧-⑨
	L	ICSB3[ICSPB3]-G2J2HB1L-1-1-23-45-67-T2-6-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of []] through []] in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

X-axis (Driven axis) ISB-SXM05-N-0-0-2 — Y-axis ISB[ISPB]-MXMX-① 200-20-④ T2-① → Please contact IAI for more detail	Name of axis	Model	Reference page
Y-axis ISB[ISPB]-MXMX-①-200-20-④-T2-①-⑤ → Please contact IAI for more detail	X-axis (Drive axis)	ISB[ISPB]-LXUWX-1)-400-20-2)-T2-1)-3	\rightarrow Please contact IAI for more details
	X-axis (Driven axis)	ISB-SXM05-N-0-0-2	—
Z-axis ISB[ISPB]-SXM-①-60-@-⑥-T2-①-⑦ → Please contact IAI for more detail	Y-axis	ISB[ISPB]-MXMX-1-200-20-4-T2-11-5	→ Please contact IAI for more details
	Z-axis	ISB[ISPB]-SXM-①-60-@-6-T2-①-⑦	→ Please contact IAI for more details

Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ⑦ in the above model names.

In the above model names. Note that the strokes are indicated in mm (millimeters). * Lead is specified with [1] in the above model names. 16: For Z-axis High Speed type 4: For Z-axis Low Speed type 4: Cot Z-axis Low Speed type * Cable exit direction is specified with [1]] in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	100: 1000mm 2 250: 2500mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	80: 800mm 2 120: 1200mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 60: 600mm
0	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-CT: Cable track - Cable track

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number.

When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

"I Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 "2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information.

Mounting position. Prease reference of a non-mountained. ¹³ Cannot be selected for High-Precision Specification. ¹⁴ To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	60W/16mm (H), 8mm (M), 4mm (L)

Applicable Controllers

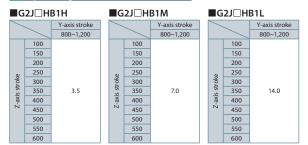
Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters). (Note 2) The cable length is the length between the X-axis connector box and the controller. The standard lengths are 3m and 5m, but other lengths can also be specified <u>A</u> Notes

in meters. The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.





Maximum Speed by Stroke (mm/s) (Note 4)

G 2.	G2J□HB1H															
	100~600	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	-	1200		1150	1000	950	830	740	650	590	490	540	490	440	370	340
Y-axis	-	1200	1100							-						
Z-axis	960							-	_							

■G2J□HB1M

	100~600	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	-	1200		1150	1000	950	830	740	650	590	490	540	490	440	370	340
Y-axis	—	1200	1100							-						
Z-axis	480							-	_							

■G2J□HB1L

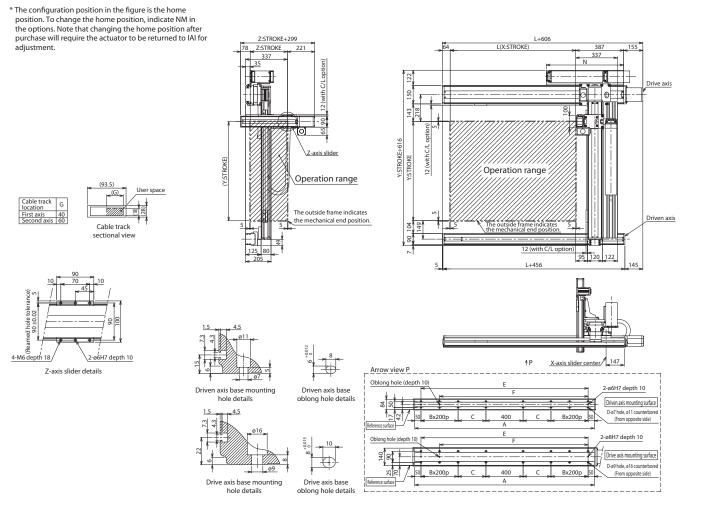
	100~600	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	-	1200		1150	1000	950	830	740	650	590	490	540	490	440	370	340
Y-axis	-	1200	1100							_						
Z-axis	240							-	-							

ICSB3 [ICSPB3]-G2J HB1 -CT-CT (Cable track specification)

Dimensions



(Configuration direction: 1)



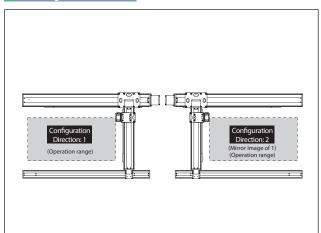
X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514
A	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950
В	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3	3
C	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575	625
D	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20	20
E	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
F	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375

			High-Pre		±10µm Standard ±5µm	Battery- less Absolute		High Speed Long Type	X: Lg (400W) Y: Md (200W) Z: Md (100W)	lie-
Model Specification			 X-axis Stroke/O	ation		Z-axis Stroke/Option 10: 100mm Refer to 2 Options	T2: SCON	Cable Length 3L: 3m	Y-axis - Z-axis Cable Management	19
	ICSPB3: High precision 3-axis specification	Specification table below	250: 2500mm ta	ble 12	20: 1200mm table Every 100mm) below.	60: 600mm table (Every 50mm) below.	SSEL XSEL-P/Q XSEL-RA/SA* *Coming soon	5L: 5m □L: Specified length	Refer to Explanation d of Model Designations below	

XY configuration direction *1	Z-axis speed type *2	Model
	Н	ICSB3[ICSPB3]-G2J1HB2H-①-②③-④⑤-⑥⑦-T2-⑧-⑨
1	М	ICSB3[ICSPB3]-G2J1HB2M-D-23-45-67-T2-8-9
	L	ICSB3[ICSPB3]-G2J1HB2L-1]-2] 3-4] 5-6] 7-T2-8-9
	Н	ICSB3[ICSPB3]-G2J2HB2H-①-23-45-67-T2-6-9
2	М	ICSB3[ICSPB3]-G2J2HB2M-①-②③-④⑤-⑥⑦-T2-⑧-⑨
	L	ICSB3[ICSPB3]-G2J2HB2L-1-23-45-67-T2-6-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of []] through []] in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXUWX-1)-400-20-2)-T2-1)-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM05-N-0-0-2	-
Y-axis	ISB[ISPB]-MXMX-①-200-20-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-1-100-10-6-T2-11-7	→ Please contact IAI for more details

Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ⑦ in the above model names.

In the above model names. Note that the strokes are indicated in mm (millimeters). * Lead is specified with [1] in the above model names. 20: For Z-axis High Speed type 10: For Z-axis Medium Speed type 5: For Z-axis Low Speed type * Cable exit direction is specified with [1]] in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	100: 1000mm 2 250: 2500mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	80: 800mm ૨ 120: 1200mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 60: 600mm
0	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-CT: Cable track - Cable track

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number.

When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

** Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
*2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information.
*3 Cannot be selected for High-Precision Specification.
* To as the direction of the transfer to P.11 for more information.
*To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol.
Please refer to P.11 for the cable exit direction of each axis.

Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	100W/20mm (H), 10mm (M), 5mm (L)

Applicable Controllers

<u>/</u> Not

Contact IAI. The controller for this system needs to be purchased/prepared separately.

	(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).
	(Note 2) The cable length is the length between the X-axis connector box and the controller.
\mathbf{V}	The standard lengths are 3m and 5m, but other lengths can also be specified in meters.
tes	The maximum length is 15m.
	(Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced.

(Note 4) Please note that a longer stroke will result in a lower max speed.



	G2J⊟H	B2H	G	2J⊟HI	B2M
	<	Y-axis stroke			Y-axis stroke
		800~1,200			800~1,200
	100			100	
	150			150	
	200			200	
	250		۵	250	
stroke	300		Z-axis stroke	300	
s st	350	5.0	s st	350	10.0
-axis	400		-axi	400	
-Z-	450		И	450	
	500			500	
	550			550	
	600			600	

G2	IH	B2	

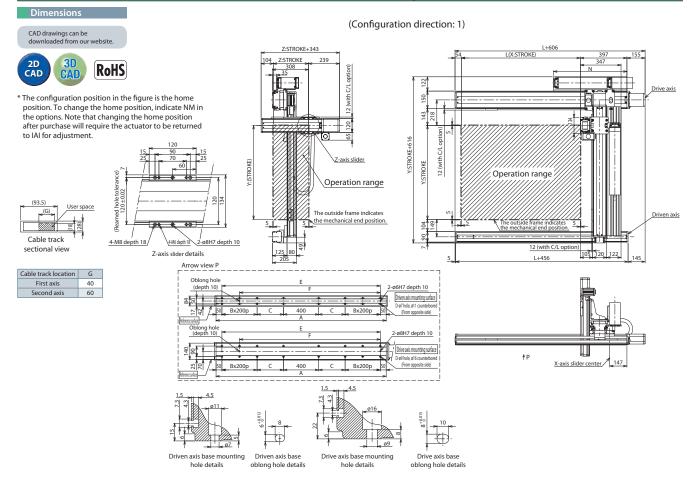
-0										
	_	Y-axis stroke								
		800~1100	1200							
	100		20.0							
Z-axis stroke	150		20.0							
	200		20.0							
	250	20.0	19.5							
	300		18.9							
s st	350		18.2							
-axi	400		17.6							
Z	450	19.5	17.0							
	500	19.0	16.4							
	550	18.5	15.7							
	600	18.0	15.1							

Maximum Speed by Stroke (mm/s) (Note 4)

■G2J□HB2H

	100~600	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	—	1200	0	1150	1000	950	830	740	650	590	490	540	490	440	370	340
Y-axis	—	1200	1100							—						
Z-axis	1200								_							
∎G2J□H	G2J□HB2M															
	100~600	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	—	1200	0	1150	1000	950	830	740	650	590	490	540	490	440	370	340
Y-axis	—	1200	1100							—						
Z-axis	600								_							
■G2J□H	B2L															
	100~600	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	—	1200	D	1150	1000	950	830	740	650	590	490	540	490	440	370	340
Y-axis	—	1200	1100													
Z-axis	300								_							

ICSB3 [ICSPB3]-G2J HB2-CT-CT (Cable track specification)



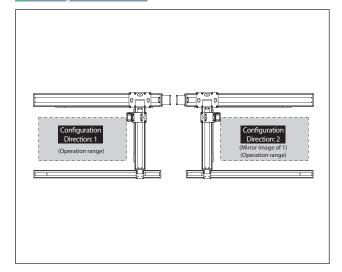
X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514
A	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950
В	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3	3
C	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575	625
D	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20	20
E	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
F	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375

ICSB3-	G2J⊟H	B3	t10µm Sandard Battery- Liess	X-Y-Z IYHoriz Gant		
ICSPB3	G2J□I	HB3 High-Precision Specification	n ±5µm Absolute	3-axis Z Base Moun	Long Type Z: Md (200W)	OF
3-a	Series Type B3: Standard Refer to xis specification Model Specification	WA: Battery-less 100: 1000mm Refer to Absolute Options	Y-axis Stroke/Option Z-axis Stro	m Refer to Options SSEL	- Cable Y-axis -Z-axis Cable Length Management 3L: 3m 5L: 5m Refer to Explanation LL: Specified of Model	
pre	cision 3-axis table below tecification	(Every 100mm) below.				

XY configuration direction *1	Z-axis speed type *2	Model
1	н	ICSB3[ICSPB3]-G2J1HB3H-①-②③-④⑤-⑥⑦-T2-⑧-⑨
I	М	ICSB3[ICSPB3]-G2J1HB3M-1-23-45-67-T2-8-9
2	н	ICSB3[ICSPB3]-G2J2HB3H-①-② ③-④ ⑤-⑥ ⑦-T2-⑧-⑨
2	М	ICSB3[ICSPB3]-G2J2HB3M-D-23-46-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of [] through [] in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXUWX-10-400-20-22-12-10-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM05-N-0-0-2	-
Y-axis	ISB[ISPB]-MXMX-①-200-20-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-1-200-10-6-T2-11-7	→ Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ⑦ in the above model names. Note that the strokes are indicated in mm (millimeters). * Lead is specified with ⑩ in the above model names. 20: For Z-axis High Speed type 10: For Z-axis Medium Speed type

* Cable exit direction is specified with 1 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	100: 1000mm 2 250: 2500mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	80: 800mm 2 120: 1200mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 60: 600mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-CT: Cable track - Cable track

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number.

When selecting multiple options, specify them in <u>alphabetical order</u>.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

*Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information.
 *3 Cannot be selected for High-Precision Specification.
 *1 To set a different X-axis calle exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	200W/20mm (H), 10mm (M)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

	(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).
	(Note 2) The cable length is the length between the X-axis connector box and the controller.
<u>/!</u> Notes	The standard lengths are 3m and 5m, but other lengths can also be specified in meters. The maximum length is 15m.
	(Note 3) The rated acceleration is 0.4G. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced.
	(Note 4) Please note that a longer stroke will result in a lower max speed.

267 ICSB3/ICSPB3-G2J□HB3□

■G2J□HB3H

		Y-axis stroke			_	Y-axis str	oke	
	\sim	800~1,200			<u> </u>	800~1000	1100	1200
	100				100	20.0	20.0	20.0
	150				150		20.0	20.0
	200				200		20.0	19.6
۵	250	10.0		Z-axis stroke	250		20.0	18.9
stroke	300				300		20.0	18.3
s st	350				350		19.7	17.7
Z-axis	400				400		19.1	17.1
	450				450	19.5	18.4	16.4
	500				500	19.0	17.8	15.8
	550				550	18.5	17.1	15.1
	600				600	18.0	16.5	14.5

G2J□HB3M

Maximum Speed by Stroke (mm/s) (Note 4)

G2J□HB3H

X-axis - 1200 1150 1000 950 830 740 650 590 490 440 370 Y-axis - 1200 1100 - - - -		2400	2300	2200	2100	2000	1900	1800	1700	1600	1500	1400	1300	1200	800~1100	100~600	
Y-axis — 1200 1100 —	340	370	440	490	540	490	590	650	740	830	950	1000	1150	C	120	_	X-axis
							_							1100	1200	—	Y-axis
Z-axis 1200 —								-								1200	Z-axis

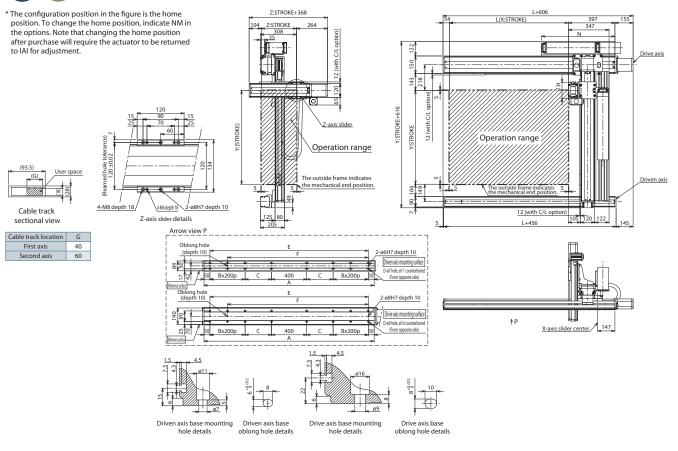
■G2J□HB3M

[100~600	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
	X-axis	-	1200)	1150	1000	950	830	740	650	590	490	540	490	440	370	340
	Y-axis	—	1200	1100							_						
	Z-axis	600								_							

ICSB3 [ICSPB3]-G2J HB3 -CT-CT (Cable track specification)

Dimensions





(Configuration direction: 1)

X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514
A	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950
В	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3	3
C	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575	625
D	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20	20
E	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
F	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375

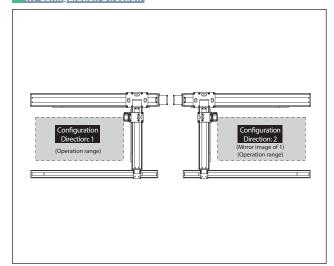
ICSB3/ICSPB3-G2J□HB3□

ICSB3 ICSPB						±10µm Oliver	Battery- less Absolute 3-az		High Speed Long Type	X: Lg (400W) Y: Md (200W) Z: Sm (60W)	1
Model Specificati Items	on Series ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis specification	Type Refer to Model Specification table below	Absolute	X-axis Stroke/C 100: 1000mm Re 2 Op 250: 2500mm ta	fer to 50 tions able 70	2:500mm Refer to 2 Options 2:700mm table	Z-axis Stroke/Optio 10: 100mm Refer to 2 Options 40: 400mm table (Every 50mm) below.	T2: SCON	Cable Length 3L: 3m 5L: 5m IL: Specified length	Y-axis - Z-axis Cable Management Refer to Explanation d of Model Designations below	

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-G1J1HS1M-①-23-45-67-T2-8-9
I	L	ICSB3[ICSPB3]-G1J1HS1L-①-23-45-67-T2-8-9
n	М	ICSB3[ICSPB3]-G1J2HS1M-①-23-45-67-T2-6-9
2	L	ICSB3[ICSPB3]-G1J2HS1L-1-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXUWX-①-400-20-②-T2-①-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM05-N-0-0-2	—
Y-axis	ISB[ISPB]-MXM-①-200-20-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-1-60-10-6-T2-11-77	→ Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ⑦ in the above model names. Note that the strokes are indicated in mm (millimeters). * Lead is specified with ⑩ in the above model names. 8: For Z-axis Medium Speed type 4: For Z-axis Low Speed type

* Cable exit direction is specified with 🕕 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	100: 1000mm 2 250: 2500mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	50: 500mm ₹ 70: 700mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 40: 400mm
0	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-CTSC: Cable track - Cable track + Self-standing cable

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353
Guide with ball-retaining mechanism *4	RT	See P.354

The set of the se

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	60W/8mm (M), 4mm (L)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters). (Note 2) The cable length is the length between the X-axis connector box and the controller The standard lengths are 3m and 5m, but other lengths can also be specified in meters. <u>A</u> Notes The maximum length is 15m. (Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced.

(Note 4) Please note that a longer stroke will result in a lower max speed.

400

■G1J□HS		S1M	■G1J□HS1L				
	_	Y-axis stroke			_		
		500~700					
	100	4.3			100		
۵	150	3.9		a	150		
Z-axis stroke	200	3.5		axis stroke	200		
s st	250	3.1		s st	250		
-axi	300	2.8		-axi	300		
Ń	350	2.4		Ż-	350		

Maximum Speed by Stroke (mm/s) (Note 4)

■G1J□H	S1M															
	100~400	500~700	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	-	-	1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	—	1200							-							
Z-axis	480								_							
G1J□H	IG1J□HS1L															
	512															
	100~400	500~700	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis			1,000~1,200 1200	1300 1150	1400 1000	1500 950	1600 830	1700 740	1800 650	1900 590	2000 540	2100 490	2200 440	2300 410	2400 370	2500 340
	100~400															

400

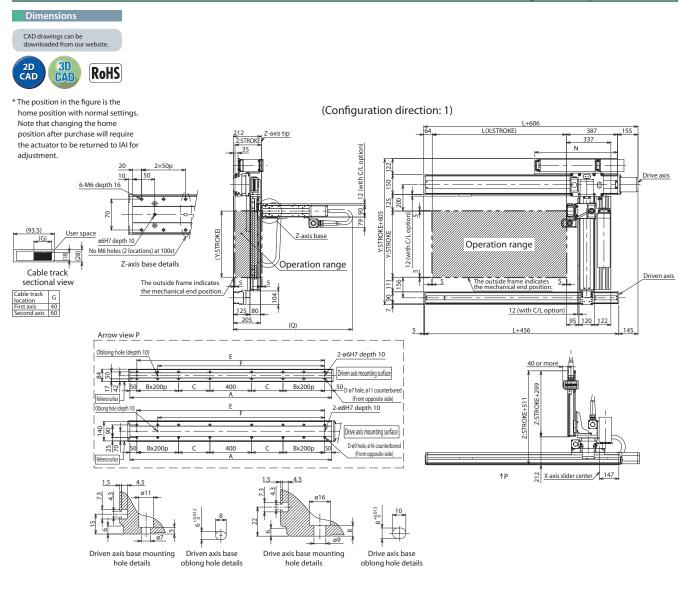
Y-axis strok 500~700 11.3 10.9 10.5

10.1

9.8 9.4

9.1

ICSB3 [ICSPB3]-G1J□HS1□-CT-CTSC (Cable track - Cable track + Self-standing cable specification)



Q dimension

Z-axis stroke 1	100	150	200	250	300	350	400	450	500
Q 9	900	950	1000	1050	1100	1150	1200	1250	1300

X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514
A	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950
В	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3	3
C	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575	625
D	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20	20
E	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
F	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375

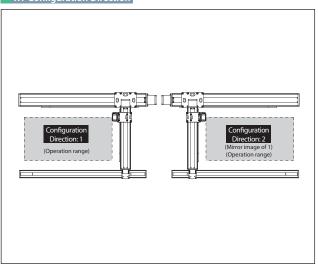


ICSB	3-G1J □	HS2L		±10µm Sandarid		Y-Z XYG+ZS	High	X: Lg (400W)	۵
ICSPE	33-G1J [HS2	High-Precision Specification	±5µm	Absolute 3-a	Ixis Z Slider)	Long Type	Z: Md (100W)	PL-
Model									
Specificati	ion	BIHS2L - WA PPe Encoder Type		Y-axis Stroke/Optio	n Z-axis Stroke/Opti	- T2 - Applicable Controllers	Cable Length	 Y-axis - Z-axis Cable Management	

XY configuration direction *1	Z-axis speed type *2	Model
1	L	ICSB3[ICSPB3]-G1J1HS2L-①-23-46-67-T2
2	L	ICSB3[ICSPB3]-G1J2HS2L-1-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of [] through [] in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.





Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXUWX-1]-400-20-2]-T2-10-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM05-N-0-0-2	—
Y-axis	ISB[ISPB]-MXM-①-200-20-④-T2-⑩-⑤	\rightarrow Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-1-100-5-6-T2-0-7	→ Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names. Note that the strokes are indicated in mm (millimeters).

* Cable exit direction is specified with in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	100: 1000mm 2 250: 2500mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	50: 500mm ² 70: 700mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 50: 500mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-CTSC: Cable track - Cable track + Self-standing cable

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number.

When selecting multiple options, specify them in alphabetical order

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353
Guide with ball-retaining mechanism *4	RT	See P.354

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information.
 *3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM). To set the Z-axis descent position as home, remove the non-motor end (NM) designation. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.
 *4 Cannot be selected for High-Precision Specification.

Cannot be Selected up inplicited on periods of the selection.
 For set alfifteent X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol.
 Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	100W/5mm

Applicable Controllers

A Notes

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters). (Note 2) The cable length is the length between the X-axis connector box and the controller. The standard lengths are 3m and 5m, but other lengths can also be specified

in meters. The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

■G1J□HS2L

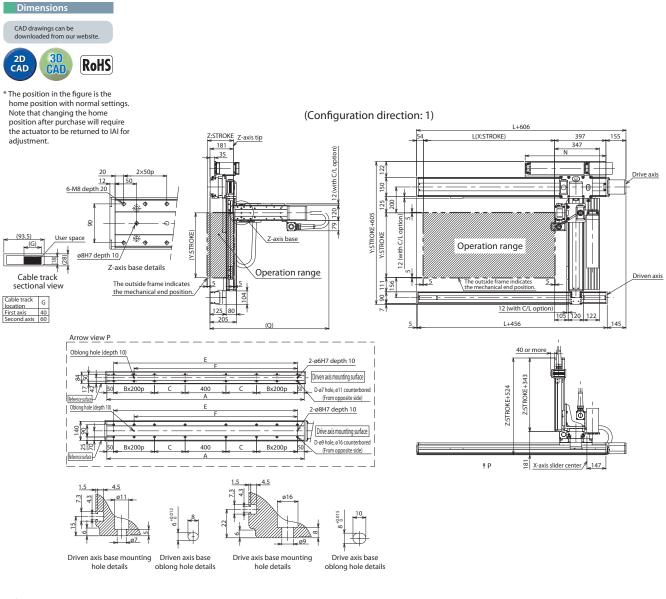
		Y-axis stroke
		500~700
	100	14.8
	150	14.2
e	200	13.6
Z-axis stroke	250	12.9
s st	300	12.3
-axi	350	11.6
Z	400	11.0
	450	10.4
	500	9.8

Maximum Speed by Stroke (mm/s) (Note 4)

■G1J□HS2L

	100~500	500~700	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	-	_	1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	-	1200							-							
Z-axis	300								_							

ICSB3 [ICSPB3]-G1J HS2L-CT-CTSC (Cable track - Cable track + Self-standing cable specification)



	me		

Z-axis stroke	100	150	200	250	300	350	400	450	500
Q	900	950	1000	1050	1100	1150	1200	1250	1300

X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514
A	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950
В	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3	3
C	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575	625
D	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20	20
E	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
F	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375

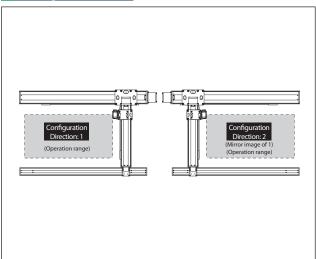
ICSB3	3-G1J		S3M		ttery- ess X-Y-Z	XYG+ZS IYHoriz Gantry	High Speed	X:Lg (400W) Y:Md (200W)	
ICSPE				on ±5µm Abs	solute 3-axis		Long Type	Z: Md (200W)	
Model Specificat Items	ion Series ICSB3: Standard 3-axis specification	G1J HS3 Type Refer to Model	iype	on Y-axis Stroke/Option Z-ax 50: 500mm Refer to 10: 10: 0 Options	xis stroke/Option C	2: SCON	Length 3L: 3m	-axis - Z-axis Cable Management Refer to Explanation	
	ICSPB3: High	Specification	250: 2500mm table		500mm table		L: Specified		



XY configuration direction *1	Z-axis speed type *2	Model
1	м	ICSB3[ICSPB3]-G1J1HS3M-1]-23-45-67-T2-8-9
2	М	ICSB3[ICSPB3]-G1J2HS3M-1-23-45-67-T2-6-9
		·

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of []] through []] in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXUWX-1]-400-20-2]-T2-10-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM05-N-0-0-2	—
Y-axis	ISB[ISPB]-MXM-①-200-20-④-T2-⑩-⑤	\rightarrow Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-1-200-10-6-T2-1-7	→ Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for 🗍 through 🗊 in the above model names.

In the above model names. Note that the strokes are indicated in mm (millimeters). * (able exit direction is specified with 🔞 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation							
1	Encoder type	WA: Battery-less Absolute							
2	X-axis stroke (Note 1)	100: 1000mm 2 250: 2500mm							
3	X-axis option	Refer to Options table below.							
4	Y-axis stroke (Note 1)	50: 500mm 2 70: 700mm							
5	Y-axis option	Refer to Options table below.							
6	Z-axis stroke (Note 1)	10: 100mm 2 50: 500mm							
0	Z-axis option	Refer to Options table below.							
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m							
9	Y-axis - Z-axis Cable Management	CT-CTSC: Cable track - Cable track + Self-standing cable							

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order

Туре	Model	Reference page							
X-axis cable exit direction	*	See P.11, P.353							
AQ seal (standard equipment)	AQ	See P.353							
Brake (equipped as standard on Z-axis) *1	В	See P.353							
Creep sensor *2	C/CL	See P.353							
Home limit switch *2	L/LL	See P.353							
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353							
Guide with ball-retaining mechanism *4	RT	See P.354							

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information.
 *3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM). To set the Z-axis descent position as home, remove the non-motor end (NM) designation. Note that changing the home position Application to be returned to IAI for adjustment.
 *4 Cannot be selected for High-Precision Specification.
 *To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please are the sub-to the IAI for the other option.

Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	200W/10mm

Applicable Controllers

N

Contact IAI. The controller for this system needs to be purchased/prepared separately

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).
(Note 2) The cable length is the length between the X-axis connector box and the controller.
The standard lengths are 3m and 5m, but other lengths can also be specified in meters. The maximum length is 15m.
(Note 3) The rated acceleration is 0.4G. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced.

(Note 4) Please note that a longer stroke will result in a lower max speed.

G1J□HS3M

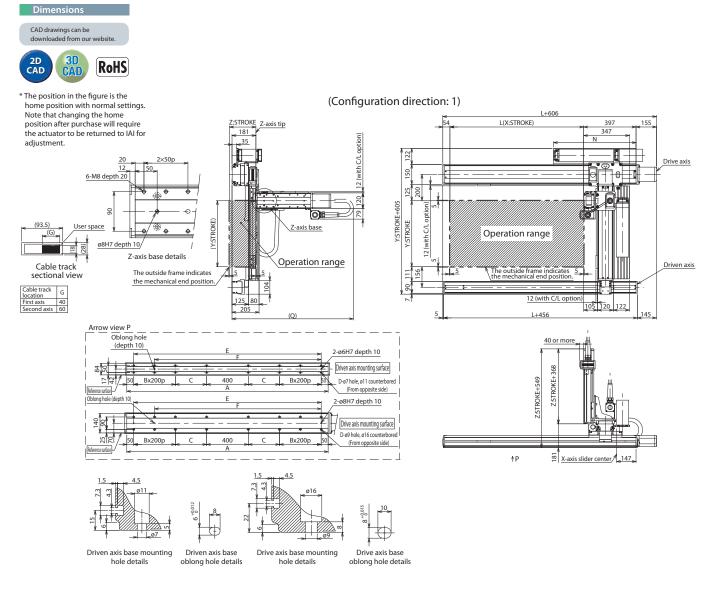
		Y-axis stroke
		500~700
	100	14.3
	150	13.6
a	200	13.0
Z-axis stroke	250	12.3
s st	300	11.7
-axi	350	11.1
Z	400	10.5
	450	9.8
	500	9.2

Maximum Speed by Stroke (mm/s) (Note 4)

■G1J□HS3M

	100~500	500~700	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	-	_	1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	-	1200														
7-avis	600								_							

ICSB3 [ICSPB3]-G1J HS3M-CT-CTSC (Cable track - Cable track + Self-standing cable specification)



Q dimension

 Z-axis stroke	100	150	200	250	300	350	400	450	500
Q	900	950	1000	1050	1100	1150	1200	1250	1300

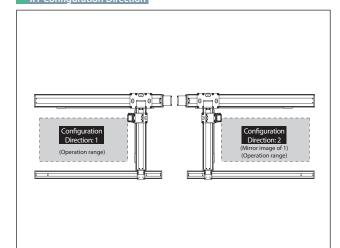
X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514
A	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	2950
В	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3	3
С	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575	625
D	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20	20
E	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
F	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375

ICSB3 ICSPB				High-Preci Specificat		X-Y-Z 3-axis	XYG+ZS (Y Horiz, Gantry Z Slider)	High Speed Long Type	X: Lg (400W) Y: Md (200W) Z: Sm (60W)	
Model Specificati Items	Series ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis specification	Type Refer to Model Specification table below	Encoder Type Sattery-less 1 Absolute 2	X-axis Stroke/Op 00: 1000mm Refer 2 Optio 250: 2500mm tab	er to 10: 100mm ions ? ble 40: 400mm	Refer to Options table	Applicable Controllers T2: SCON SSEL XSEL-P/Q XSEL-RA/SA* *Coming soon	Cable Length 3L: 3m 5L: 5m L: Specifier length		

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-G2J1HS1M-1]-23-45-67-T2-8-9
I	L	ICSB3[ICSPB3]-G2J1HS1L-①-23-45-67-T2-8-9
2	М	ICSB3[ICSPB3]-G2J2HS1M-①-23-45-67-T2-6-9
2	L	ICSB3[ICSPB3]-G2J2HS1L-1-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of []] through []] in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXUWX-1-400-20-2-12-1-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM05-N-0-0-2	-
Y-axis	ISB[ISPB]-MXMX-①-200-20-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-①-60-@-6-T2-①-⑦	→ Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through 应 in the above model names.

Note that the strokes are indicated in mm (millimeters). Lead is specified with 1 in the above model names. 8: For Z-axis Medium Speed type 4: For Z-axis Low Speed type

* Cable exit direction is specified with (1) in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	100: 1000mm 2 250: 2500mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	80: 800mm 2 120: 1200mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 40: 400mm
0	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-CTSC: Cable track - Cable track + Self-standing cable

1

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number.

When selecting multiple options, specify them in <u>alphabetical order</u>.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353
Guide with ball-retaining mechanism *4	RT	See P.354

H Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration
 direction, but the creep sensor is specified in the model name as 'C' and the home limit switch as 'L' regardless of the
 mounting position. Please refer to P.11 for more information.
 *3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM).
 To set the Z-axis descent position after purchase will require the actuator to be returned to IAI for adjustment.
 *4 Cannot be selected for High-Precision Specification.
 *To set adifferent X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol.
 Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	60W/8mm (M), 4mm (L)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters). (Note 2) The cable length is the length between the X-axis connector box and the controller <u>A</u> Notes The standard lengths are 3m and 5m, but other lengths can also be specified in meters. The maximum length is 15m. (Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the

acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

275 ICSB3/ICSPB3-G2J□HS1□

G2J HS1	1

Μ	∎G	2J⊟H	S1L
Y-axis stroke		_	Y-axis stroke
800~1,200			800~1,200
4.3		100	11.3
3.9	a	150	10.9
3.5	Z-axis stroke	200	10.5
3.1	s st	250	10.1
2.8	-axi	300	9.8
2.4	И	350	9.4
2.1		400	9.1

Maximum Speed by Stroke (mm/s) (Note 4)

1350 1450 1550

1250 1350

12

Ν

425 475

1650 1750

1450 1550

12

 625
 675
 725
 775
 825
 875
 925
 1025
 1075
 1125
 1125
 1225
 1275
 1325
 1375

575 425

1650 1750

475 525

1950 2050

1850 1950 2050 2150 2250 2350 2450

575 425

2150 2250

2650 2750

2450 2550

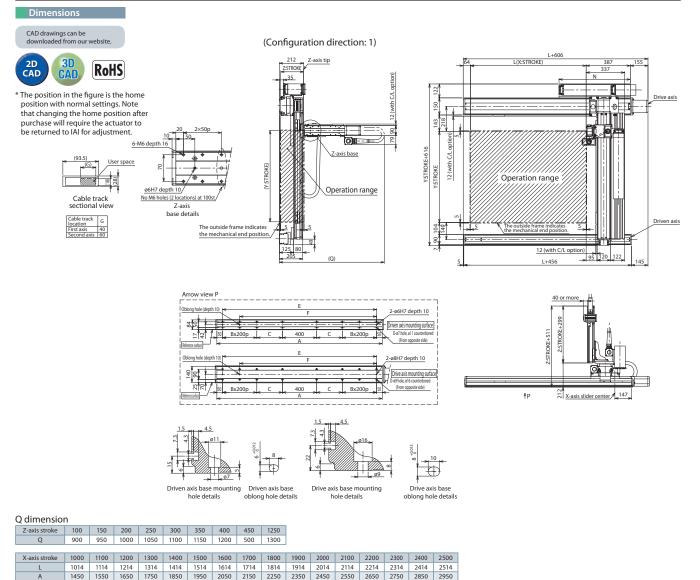
■G2J□HS1M

	100~400	800~900	1000~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	-	-	120	D	1150	1000	950	830	740	650	590	490	540	490	440	370	340
Y-axis	—	12	200	1100							—						
Z-axis	480								_								

■G2J□HS1L

	100~400	800~900	1000~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	-	_	1200	0	1150	1000	950	830	740	650	590	490	540	490	440	370	340
Y-axis	—	12	.00	1100							—						
Z-axis	240								_								

ICSB3 [ICSPB3]-G2J HS1 -CT-CTSC (Cable track - Self-standing cable specification)



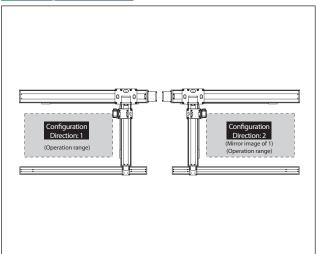
ICSB3	B-G2J		S2L		to D	0μm Istandard	Battery- Jess		High Speed	X: Lg (400W) Y: Md (200W)	
ICSPE	83-G2	J	HS2	High-Prec Specifica	.151011	High Presson	Absolute 3-ax	Is ZSlider)	Long Type	Z: Md (100W)	
Model Specification Items	CSB3: Standard 3-axis specification ICSPB3: High precision 3-axis specification	52J HS2 Type Refer to Model Specification table below	L — WA Encoder Type WA: Battery-less Absolute	X-axis Stroke/0 100: 1000mm Re 250: 2500mm	2fer to 80: 800mm ptions ≀ able 120: 1200mr	Refer to Options n table	 Z-axis Stroke/Option 10: 100mm Refer to ₹0: 500mm table [Every 50mm] below.	Applicable Controllers T2: SCON SSEL XSEL-P/Q XSEL-RA/SA* *Coming soon	Cable Length 3L: 3m 5L: 5m CL: Specifie length	Y-axis - Z-axis Cable Management Refer to Explanation d of Model Designations below	



T2-8-9
T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of []] through []] in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.





Axis Configuration	* Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXUWX-1]-400-20-2]-T2-10-3	\rightarrow Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM05-N-0-0-2	—
Y-axis	ISB[ISPB]-MXMX-1-200-20-4-T2-10-5	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-1-100-5-6-T2-1-7	→ Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through 🕅 in the above model names. Note that the strokes are indicated in mm (millimeters).

Cable exit direction is specified with 100 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	100: 1000mm 2 250: 2500mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	80: 800mm 2 120: 1200mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 50: 500mm
0	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-CTSC: Cable track - Cable track + Self-standing cable

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order

men selecting multiple options, specify them in <u>approbation of del</u>								
Туре	Model	Reference page						
X-axis cable exit direction	*	See P.11, P.353						
AQ seal (standard equipment)	AQ	See P.353						
Brake (equipped as standard on Z-axis) *1	В	See P.353						
Creep sensor *2	C/CL	See P.353						
Home limit switch *2	L/LL	See P.353						
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353						
Guide with ball-retaining mechanism *4	RT	See P.354						

H Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information.
 *3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM).
 To set the Z-axis descent position after purchase will require the actuator to be returned to IAI for adjustment.
 *4 Cannot be selected for High-Precision Specification.
 *To set adifferent X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer
 to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	100W/5mm

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters). (Note 2) The cable length is the length between the X-axis connector box and the controller The standard lengths are 3m and 5m, but other lengths can also be specified <u>Notes</u> in meters. The maximum length is 15m. (Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the

acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

G2J□HS2L

		Y-axis stroke
		800~1,200
	100	14.8
	150	14.2
e	200	13.6
Z-axis stroke	250	12.9
is st	300	12.3
-ax	350	11.6
2	400	11.0
	450	10.4
	500	9.8

Maximum Speed by Stroke (mm/s) (Note 4)

1450 1550

1250 1350

12

Ν

425 475

1650 1750

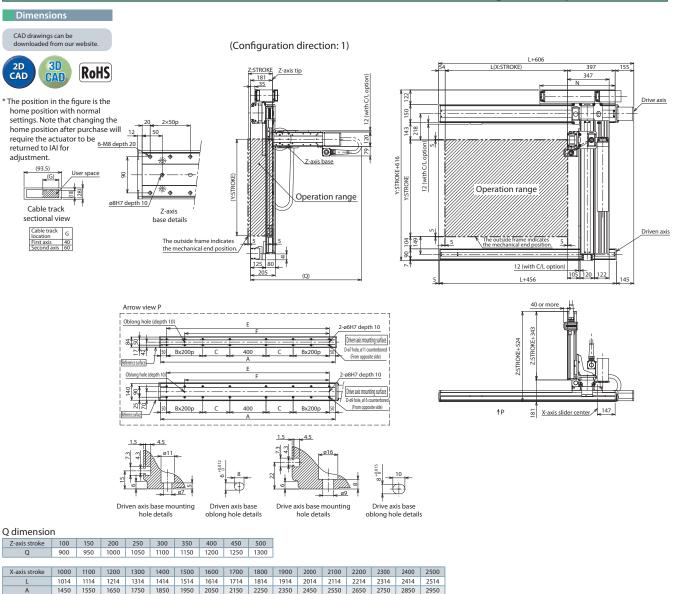
1450 1550

12

G2J□HS2L

	100~500	800~900	1000~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	-	_	120	0	1150	1000	950	830	740	650	590	490	540	490	440	370	340
Y-axis	-	12	200	1100							_						
7-avis	300																

ICSB3 [ICSPB3]-G2J HS2L-CT-CTSC (Cable track - Self-standing cable specification)



475 525

1950 2050

1850 1950 2050 2150 2250 2350 2450

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 1225
 1275
 1325
 1375

575 425

2150 2250

2650 2750

2450 2550

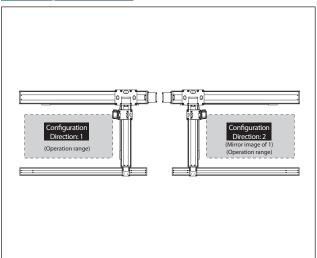
ICSB3	B-G2J	ΠH	S3M	±10µm	Battery- Jess		High Speed Y:1	Lg (400W)	
				-Precision cification	Absolute 3-ax	IS ZSlider)		Md (200W)	
Specificati ltems	On Series ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis specification	52J HS3 Type Refer to Model Specification table below	Encoder Type WA: Battery-less Absolute 250: 2500mm	Options 2 Option table 120:1200mm table	to 10: 100mm Refer to s ∂ Options 50: 500mm table	Applicable Controllers T2: SCON SSEL XSEL-P/Q XSEL-RA/SA*	Length M 3L: 3m 5L: 5m Refe □L: Specified of M	er to Explanation	ha



XY configuration direction *1	Z-axis speed type *2	Model			
1	М	ICSB3[ICSPB3]-G2J1HS3M-①-②③-④⑤-⑥⑦-T2-⑧-⑨			
2	М	ICSB3[ICSPB3]-G2J2HS3M-①-23-45-67-T2-8-9			
*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right					

for details of) through in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.





Axis Configuration	* Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXUWX-1)-400-20-2)-T2-10-3	\rightarrow Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM05-N-0-0-2	—
Y-axis	ISB[ISPB]-MXMX-①-200-20-④-T2-⑩-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-①-200-10-⑥-T2-⑩-⑦	→ Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ⑦ in the above model names. Note that the strokes are indicated in mm (millimeters).

* Cable exit direction is specified with [10] in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	100: 1000mm 2 250: 2500mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	80: 800mm 2 120: 1200mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 50: 500mm
0	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-CTSC: Cable track - Cable track + Self-standing cable

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number.

When selecting multiple options specify them in alphabetical order

when selecting multiple options, specify them in aphabetical order.								
Туре	Model	Reference page						
X-axis cable exit direction	*	See P.11, P.353						
AQ seal (standard equipment)	AQ	See P.353						
Brake (equipped as standard on Z-axis) *1	В	See P.353						
Creep sensor *2	C/CL	See P.353						
Home limit switch *2	L/LL	See P.353						
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353						
Guide with ball-retaining mechanism *4	RT	See P.354						

H Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration
 direction, but the creep sensor is specified in the model name as 'C' and the home limit switch as 'L' regardless of the
 mounting position. Please refer to P.11 for more information.
 *3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM).
 To set the Z-axis descent position after purchase will require the actuator to be returned to IAI for adjustment.
 *4 Cannot be selected for High-Precision Specification.
 *To set adifferent X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol.
 Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	200W/10mm

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

	(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).
•	(Note 2) The cable length is the length between the X-axis connector box and the controller.
/ Notes	The standard lengths are 3m and 5m, but other lengths can also be specified in meters. The maximum length is 15m.
	(Note 3) The rated acceleration is 0.4G. The payload is based on operation at the rated acceleration.
	When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

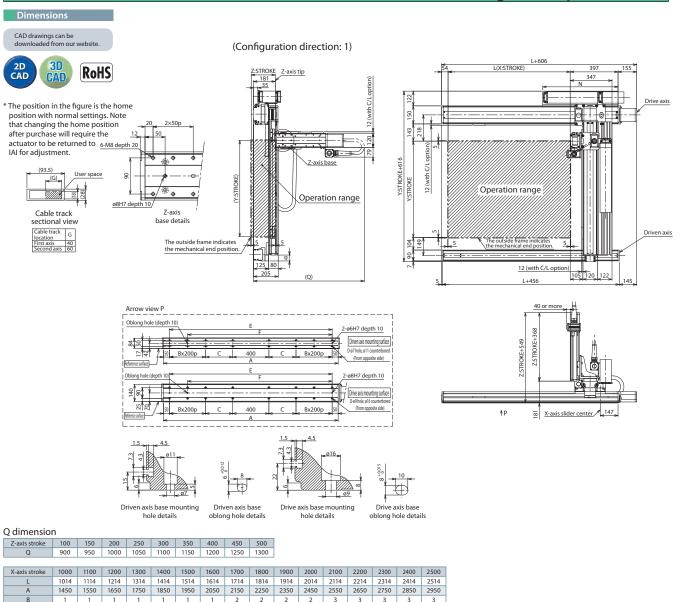
G	G2J□HS3M							
	_	Y-axis stroke						
		800~1,200						
	100	14.3						
	150	13.6						
e	200	13.0						
Z-axis stroke	250	12.3						
is st	300	11.7						
-ax	350	11.1						
2	400	10.5						
	450	9.8						
	500	9.2						

Maximum Speed by Stroke (mm/s) (Note 4)

■G2J□HS3M

	100~500	800~900	1000~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	<u> </u>		1200	0	1150	1000	950	830	740	650	590	490	540	490	440	370	340
Y-axis	-	- 1200		1100							_						
Z-axis	600								_								

ICSB3 [ICSPB3]-G2J HS3M-CT-CTSC (Cable track - Self-standing cable specification)



575 425

2150 2250

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2450 2550

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1450 1550

1450 1550

1250 1350

12

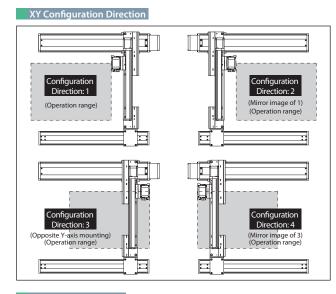
Ν

ICSB3				±10µm battery- less Absolute	X-Y-Z 3-axis (Y Side Gant Z Base Mour	y Speed Y: Sml (60W)	
Model Specificati Items	ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis specification	GB HB1 Type Refer to Model Specification table below	Encoder Type X-axis Stroke/Option Y-a WA: Battery-less 10: 100mm Refer to 30 Absolute 2 Options 110: 1100mm table 60	ery 50mm) below. (Every 50mm)	Refer to Options table XSEL-P/Q		

Model Specification	* Items in brackets [] are for the High-Precision Specification.
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XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GB1HB1M-①-23-45-67-T2-8-9
	L	ICSB3[ICSPB3]-GB1HB1L-1-23-45-67-T2-6-9
2	М	ICSB3[ICSPB3]-GB2HB1M-①-23-45-67-T2-8-9
2	L	ICSB3[ICSPB3]-GB2HB1L-1-23-45-67-T2-6-9
3	М	ICSB3[ICSPB3]-GB3HB1M-①-23-45-62-T2-8-9
5	L	ICSB3[ICSPB3]-GB3HB1L-1-23-45-67-T2-6-9
4	М	ICSB3[ICSPB3]-GB4HB1M-①-②③-④⑤-⑥⑦-T2-⑧-⑨
4	L	ICSB3[ICSPB3]-GB4HB1L-1-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXM-①-100-20-②-T2-①-③	\rightarrow Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM01-N-0-0-2	—
Y-axis	ISB[ISPB]-SXM-①-60-16-④-T2-①-⑤	\rightarrow Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-1-60-10-6-T2-11-7	→ Please contact IAI for more details

Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ⑦ in the above model names. Note that the strokes are indicated in mm (millimeters).

* Lead is specified with 🔟 in the above model names. 8: For Z-axis Medium Speed type

4: For Z-axis Low Speed type

* Cable exit direction is specified with 1 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	10: 100mm 2 110: 1100mm (100: 1000mm) *1
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm 2 60: 600mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 30: 300mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable CT-CT: Cable track - Cable track

*1 The maximum X-axis stroke is 1000mm for the self-standing cable specification.

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number.

When selectin a multiple options specify them in alphabetical orde

aphabeteal order.						
Туре	Model	Reference page				
X-axis cable exit direction	*	See P.11, P.353				
AQ seal (standard equipment)	AQ	See P.353				
Brake (equipped as standard on Z-axis) *1	В	See P.353				
Creep sensor *2	C/CL	See P.353				
Home limit switch *2	L/LL	See P.353				
Non-motor end specification	NM	See P.353				
Guide with ball-retaining mechanism *3	RT	See P.354				

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
*2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the

mounting position. Please refer to P.11 for more information.

* To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol.
 Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]			
Positioning repeatability	±0.01mm [±0.005mm]			
Lost motion	0.05mm [0.02mm] or less			
Guide	Integrated with base			
Base	Material: Aluminum with white alumite treatment			
X-axis motor output/lead	100W/20mm			
Y-axis motor output/lead	60W/16mm			
Z-axis motor output/lead	60W/8mm (M), 4mm (L)			

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters). (Note 2) The cable length is the length between the X-axis connector box and the controller. The standard lengths are 3m and 5m, but other lengths can also be specified \triangle in meters. The maximum length is 15m. Notes (Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

■GB□HB1M											
		Y-axis stroke									
		300~400	450	500	550	600					
e	100		7.0	7.0	6.6	5.1					
stroke	150		7.0	7.0	6.2	4.7					
s st	200	7.0	7.0	7.0	5.8	4.3					
Z-axis	250		7.0	6.8	5.4	3.9					
	300		6.7	6.5	5.1	3.6					

GB⊟HB1L

			Y-axis stroke										
		300	350	400	450	500	550	600					
۵	100	7.6	7.6	7.3	6.9	6.6	6.1	5.8					
axis stroke	150	7.2	7.2	6.9	6.5	6.2	5.8	5.5					
s st	200	6.9	6.9	6.6	6.1	5.8	5.4	5.1					
Z-axi	250	6.5	6.5	6.2	5.8	5.5	5.1	4.8					
	300	6.3	6.2	5.9	5.5	5.2	4.8	4.5					

Maximum Speed by Stroke (mm/s) (Note 4)

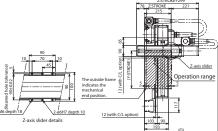
		100~300	300~600	650~700	750~800	850~900	950~1000	1050~1100			
>	K-axis	1200			860	695	570	460			
Y	r-axis	—	960			-					
Z	Z-axis	480			-	_					

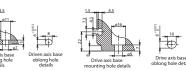
■GB□HB1L									
	100~300	300~600	650~700	750~800	850~900	950~1000	1050~1100		
X-axis		1200		860	695	570	460		
Y-axis	-	960			-				
Z-axis	240	_							

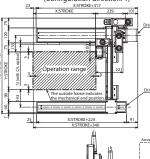
ICSB3 [ICSPB3]-GB HB1 -SC-SC (Self-standing cable specification)



* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.



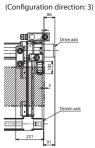




IH.

1P X-axis sli

(Configuration direction: 1)



en axis

Arrow view P		
Oblong hole		2-ø6H7 reamed.
(depth 10)	La E	depth 10
	√ F	Driven axis mounting surface
	·······	D-p7 hole.
88 ++		911 counterbored
	0 C Bx200p	50 (From opposite side)
Reference	A A A A A A A A A A A A A A A A A A A	A
		H
Oblong hole 20	50,50 H G×200p 120	40
(depth 10)	90±002 1	00 2-98H7 depth 10
	Rearned hole tolerance	13/
2812		/ Drive axis mounting surface
		D-ø9 hole,
ା ଛୀଛାଁନୀ /	10 (From reference surface)	@16 counterbored (From opposite side)
Reference	F	+ 2-98H7 depth 10
surface	0 C B×200p	+50 2-08H7 depth 10
! •	BAZOOD	• ~` +
He		

X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
А	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
В	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5
C	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	204	254	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104
F	134	184	234	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4
Н	24	74	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18
Y-axis stroke	300	350	400 45	500	550	600													

 Q
 700
 750
 750
 800
 800
 850
 850

н

Ν

-CT-CT (Cable track specification) ICSB3 [ICSPB3]-GB HB1

(Configuration direction: 3) (Configuration direction: 1) CAD drawings can be downloaded from our website. 3D CAD 2D CAD RoHS * The configuration position in on range the figure is the home position. ation range To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment ŧ ħ J-M8 depth 20 2-ø8H7 depth 1 F IJ, tΡ X-axis stroke A

	28
3-GB□HB1□	LU

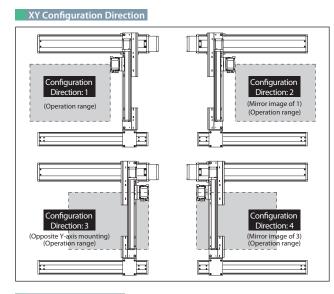


ICSB3-GB		±10µm Battery- less Absolute 3-axis		
Model Specification Items Series Series Series Serification Series Series Sation Secification Secification	GB MB1 WA —	axis Stroke/Option Z-axis Stroke/Option i: 300mm Refer to i: 00ptions i Options i: 600mm table 30: 300mm table i: 600mm table 30: 300mm table	Applicable Cable Yavis-Zavis Cab Controllers Length Maagement T2:SCON 3L:3m XSEL-P0, L1:Specified of Model XSEL-RAVSA** length Designations below	n

Model Specification	* Items in brackets [] are for the High-Precision Specification.
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XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GB1MB1M-1]-23-45-67-T2-8-9
1	L	ICSB3[ICSPB3]-GB1MB1L-D-23-45-67-T2-8-9
2	М	ICSB3[ICSPB3]-GB2MB1M-1]-23-45-67-T2-8-9
2	L	ICSB3[ICSPB3]-GB2MB1L-1)-23-45-67-T2-8-9
3	М	ICSB3[ICSPB3]-GB3MB1M-1]-2] 3-4] 5-6] 7-T2-8-9
5	L	ICSB3[ICSPB3]-GB3MB1L-1)-23-45-67-T2-8-9
4	М	ICSB3[ICSPB3]-GB4MB1M-1]-2] 3-4] 5-6] 7-T2-8-9
4	L	ICSB3[ICSPB3]-GB4MB1L-1)-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of []] through []] in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page		
X-axis (Drive axis)	ISB[ISPB]-MXM-①-100-10-②-T2-①-③	\rightarrow Please contact IAI for more details		
X-axis (Driven axis)	ISB-SXM01-N-0-0-2	-		
Y-axis	ISB[ISPB]-SXM-①-60-8-④-T2-①-⑤	→ Please contact IAI for more details		
Z-axis	ISB[ISPB]-SXM-1-60-10-60-T2-11-7	→ Please contact IAI for more details		

Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names. Note that the strokes are indicated in mm (millimeters).

* Lead is specified with (10) in the above model names. 8: For Z-axis Medium Speed type

4: For Z-axis Low Speed type

* Cable exit direction is specified with 1 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation			
1	Encoder type	WA: Battery-less Absolute			
2	X-axis stroke (Note 1)	10: 100mm ૨ 110: 1100mm (100: 1000mm) *1			
3	X-axis option	Refer to Options table below.			
4	Y-axis stroke (Note 1)	30: 300mm 2 60: 600mm			
5	Y-axis option	Refer to Options table below.			
6	Z-axis stroke (Note 1)	10: 100mm 2 30: 300mm			
7	Z-axis option	Refer to Options table below.			
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m			
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable CT-CT: Cable track - Cable track			

*1 The maximum X-axis stroke is 1000mm for the self-standing cable specification.

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in <u>alphabetical order</u>.

Туре	Model	Reference page	
X-axis cable exit direction	*	See P.11, P.353	
AQ seal (standard equipment)	AQ	See P.353	
Brake (equipped as standard on Z-axis) *1	В	See P.353	
Creep sensor *2	C/CL	See P.353	
Home limit switch *2	L/LL	See P.353	
Non-motor end specification	NM	See P.353	
Guide with ball-retaining mechanism *3	RT	See P.354	

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position.
 Please refer to P.11 for more information.
 *3 Cannot be selected for High-Precision Specification.

* To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]		
Positioning repeatability	±0.01mm [±0.005mm]		
Lost motion 0.05mm [0.02mm] or less			
Guide	Integrated with base		
Base	Material: Aluminum with white alumite treatment		
X-axis motor output/lead	100W/10mm		
Y-axis motor output/lead	60W/8mm		
Z-axis motor output/lead	60W/8mm (M), 4mm (L)		

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters). (Note 2) The cable length is the length between the X-axis connector box and the controller. The standard lengths are 3m and 5m, but other lengths can also be specified in meters. <u>A</u> Notes The maximum length is 15m. (Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The

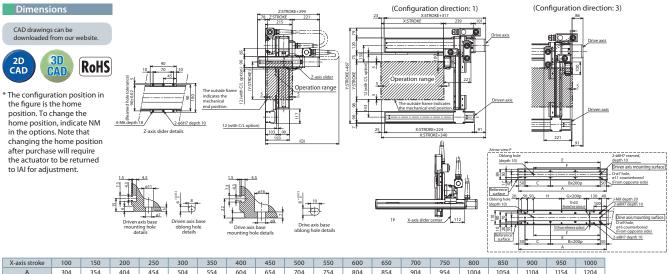
payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

	G	BDME	31M	■GB□MB1L				
			Y-axis stroke				Y-axis stroke	
			300~600				300~600	
	e	100		Z-axis stroke	100			
	axis stroke	150	7.0		. <u>s</u> 200	150		
	s st	200				14.0		
		250				250		
	Ż	300			N	300		

Maximum Speed by Stroke (mm/s) (Note 4)

G	GB⊡MB1M								GB⊡M	31L						
		100~300	300~600	650~700	750~800	850~900	950~1000	1050~1100		100~300	300~600	650~700	750~800	850~900	950~1000	1050~1100
X-	-axis	600 430 345 280 230					X-axis		600 4			230	280	230		
Y-	-axis	- 480 -						Y-axis	-	480	_					
Z-	-axis	480 —							Z-axis	240			-	_		

ICSB3 [ICSPB3]-GB MB1 -SC-SC (Self-standing cable specification)



X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	/00	/50	800	850	900	950	1000
A	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
В	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5
C	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	204	254	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104
F	134	184	234	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4
Н	24	74	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18
V avis strake	200	250	400 45	50 500	550	600													

 Y-axis stroke
 300
 350
 400
 450
 500
 550
 600

 Q
 700
 750
 750
 800
 800
 850
 850

ICSB3 [ICSPB3]-GB MB1 -CT-CT (Cable track specification)

(Configuration direction: 3) Dimensions (Configuration direction: 1) X-STROKE CAD drawings can be downloaded from our website. 2D CAD 3D CAD RoHS * The configuration position in the figure is the home position. on range To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment Ħ Ľ, tP

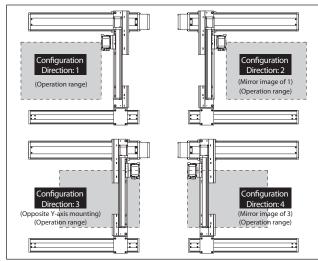
X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
A	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204	1254	1304
В	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
C	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
E	204	254	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
F	134	184	234	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034	1084	1134
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4
Н	24	74	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18
N	175	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	575	600	625	650	675

ICSB	B-GC	HB1	t10µm Battery- Jess 2 void		Î
ICSPE	33-GC [HB1 High-Precision Specification	453 Absolute 3-axis	Z Base Mount) Type Z: Sml (60W)	
Model Specificati Items	ion Series	iype ·	-axis Stroke/Option 2-axis Stroke/Option	Applicable Cable Y-axis-Z-axis Cable Management	
	3-axis specification ICSPB3: High Sp	Model Absolute ≀ Options pecification 110: 1100mm table 7	¿ Options ≀ Options (0:700mm table 40:400mm table Every 50mm) below. (Every 50mm) below.	T2: SCON 3L: 3m SSEL 5L: 5m Refer to Explanation XSEL-P/Q □L: Specified of Model XSEL-RA/SA** length Designations below ** Coming soon	

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GC1HB1M-1]-2] 3-4] 5-6] 7-T2-8-9
1	L	ICSB3[ICSPB3]-GC1HB1L-1-23-45-67-T2-6-9
2	М	ICSB3[ICSPB3]-GC2HB1M-1]-2] 3-4] 5-6] 7-T2-8-9
2	L	ICSB3[ICSPB3]-GC2HB1L-1-23-45-67-T2-6-9
3	М	ICSB3[ICSPB3]-GC3HB1M-1]-2] 3-4] 5-6] 7-T2-8-9
5	L	ICSB3[ICSPB3]-GC3HB1L-1-23-43-67-T2-6-9
4	М	ICSB3[ICSPB3]-GC4HB1M-1]-2] 3-4] 5-6] 7-T2-8-9
4	L	ICSB3[ICSPB3]-GC4HB1L-1-23-45-67-T2-6-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of [] through [] in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXM-①-200-20-②-T2-①-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM01-N-0-0-2	—
Y-axis	ISB[ISPB]-MXM-①-100-20-④-T2-①-⑤	\rightarrow Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-1-60-10-6-T2-11-7	→ Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for 🗊 through 🕖 in the above model names.

Note that the strokes are indicated in mm (millimeters).

* Lead is specified with 🔟 in the above model names.

8: For Z-axis Medium Speed type

4: For Z-axis Low Speed type

* Cable exit direction is specified with 🔟 in the above model names.

Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	10: 100mm 2 110: 1100mm (100: 1000mm) *1
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm ² 70: 700mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 40: 400mm
0	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable CT-CT: Cable track - Cable track

*1 The maximum X-axis stroke is 1000mm for the self-standing cable specification.

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number.

When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact LAI for details.
2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the momentum or the model name as "C" and the home limit switch as "L" negardless of the momentum or the model name as "C" and the home limit switch as "L" negardless of the momentum or the model name as "C" and the home limit switch as "L" negardless of the momentum or the model name as "C" and the home limit switch as "L" negardless of the momentum or the model name as "C" and the home limit switch as "L" negardless of the momentum or the model name as "C" and the nome limit switch as "L" negardless of the momentum or the model name as "C" and the nome limit switch as "L" negardless of the momentum or the model name as "C" and the nome limit switch as "L" negardless of the momentum or the model name as "C" and the nome limit switch as "L" negardless of the momentum or the model name as "C" and the nome limit switch as "L" negardless of the momentum or the model name as "C" and the nome limit switch as "L" negardless of the momentum or the model name as "C" and the nome limit switch as "L" negardless of the momentum or the model name as "C" and the nome limit switch as "L" negardless of the momentum or the model name as "C" and the nome limit switch as "L" negardless of the momentum or the model name as "C" and the nome limit switch as "L" and the nome limit switch as "L" and the nome limit switch as "L" negardless of the momentum or the model name as "C" and the nome limit switch as "L" and the nome limit switch as "L" and the negardle switch as "L" and the nome limit switch as "L" and the nome limi

mounting position. Please refer to P.11 for more information.

Preserver to P. 1 for more information. *3 Cannot be selected for High-Precision Specification. * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]					
Positioning repeatability	±0.01mm [±0.005mm]					
Lost motion	0.05mm [0.02mm] or less					
Guide	Integrated with base					
Base	Material: Aluminum with white alumite treatment					
X-axis motor output/lead	200W/20mm					
Y-axis motor output/lead	100W/20mm					
Z-axis motor output/lead	60W/8mm (M), 4mm (L)					

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters). (Note 2) The cable length is the length between the X-axis connector box and the controller. The standard lengths are 3m and 5m, but other lengths can also be specified <u>A</u> Notes in meters. The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

HB1	М			

	бС⊟НВ	1M		іс⊟нв	31L	
		Y-axis stroke			Y-axis stroke	
		300~700			300~650	700
	100			100		14.0
۵	150		۵	150		14.0
stroke	200		stroke	200		14.0
s st	250	7.0	s st	250	14.0	14.0
-axis	300		-axis	300		14.0
Ż	350		Z.	350		13.9
	400			400		13.6

Maximum Speed by Stroke (mm/s) (Note 4)

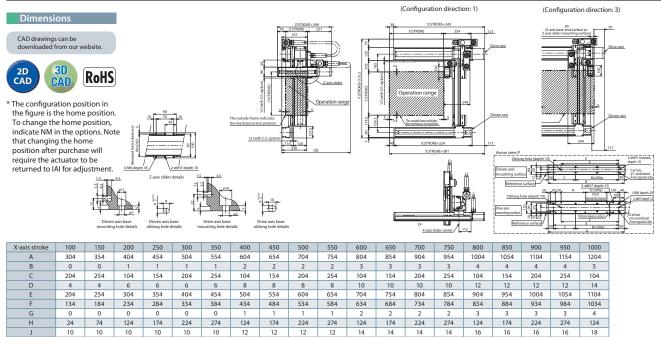
Y-axis stroke

Ν

	100~300	300~400	450~700	750~800	850~900	950~1000	1050~1100				
X-axis	1200			860	695	570	460				
Y-axis	—	12	00	—							
Z-axis	480				_						

■GC□HB1L											
1		100~300	300~400	450~700	750~800	850~900	950~1000	1050~1100			
ĺ	X-axis		1200		860	695	570	460			
ĺ	Y-axis	-	12	00		-	-				
	Z-axis	24	10			-					

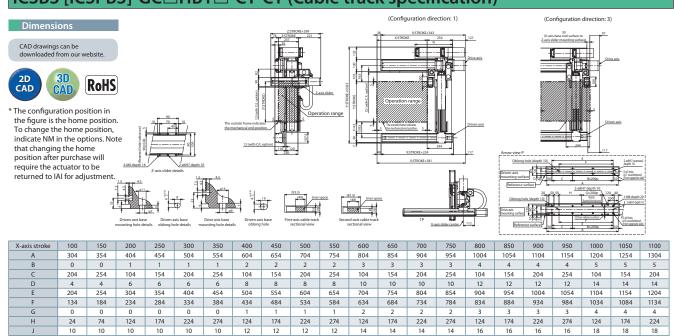
ICSB3 [ICSPB3]-GC HB1 -SC-SC (Self-standing cable specification)



]-CT-CT (Cable track specification) ICSB3 [ICSPB3]]**HB1**[-GC

 300
 350
 400
 450
 500
 550
 600
 650
 700

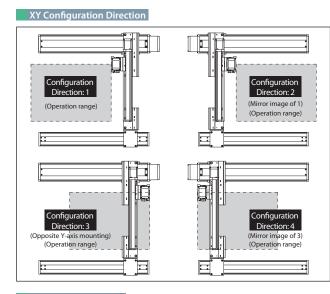
 750
 750
 800
 800
 850
 850
 850
 900
 900



ICSB3-GC		topinates biotectopinates topinates biotectopinates b		
Model Specification Items ICSB3:Standard 3-axis specification ICSPB3: High precision 3-axis specification	Type Encoder Type X-axis Stroke/Option Y: Refer to Model WA: Battery-less 10:100mm Refer to Options Specification		Applicable Cable Yaxis -Zaxis Cable Controllers Length Management T2: SCON 31: 3m SSEL Sim Refer to Explanation XSEL-P/Q :: Specified of Model XSEL-RASA** length Designations below **Coming soon	

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GC1HB2M-1]-23-46-67-T2-8-9
1	L	ICSB3[ICSPB3]-GC1HB2L-1-23-45-67-T2-6-9
2	М	ICSB3[ICSPB3]-GC2HB2M-①-②③-④⑤-⑥⑦-T2-⑧-⑨
2	L	ICSB3[ICSPB3]-GC2HB2L-1]-23-45-67-T2-8-9
3	М	ICSB3[ICSPB3]-GC3HB2M-1]-2]3-4]5-6]7-T2-8-9
3	L	ICSB3[ICSPB3]-GC3HB2L-1-23-45-67-T2-6-9
4	М	ICSB3[ICSPB3]-GC4HB2M-①-②③-④⑤-⑥⑦-T2-⑧-⑨
4	L	ICSB3[ICSPB3]-GC4HB2L-1]-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of []] through []] in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXM-①-200-20-②-T2-①-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM01-N-0-0-2	-
Y-axis	ISB[ISPB]-MXM-①-100-20-④-T2-①-⑤	\rightarrow Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-1-100-10-6-T2-11-7	→ Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ⑦ in the above model names.

in the above model names. Note that the strokes are indicated in mm (millimeters). Lead is specified with
in the above model names. 10: For Z-axis Medium Speed type 5: For Z-axis Low Speed type

* Cable exit direction is specified with 1 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations	

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	10: 100mm 2 110: 1100mm (100: 1000mm) *1
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm ² 70: 700mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm
0	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable CT-CT: Cable track - Cable track

*1 The maximum X-axis stroke is 1000mm for the self-standing cable specification.

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in <u>alphabetical order</u>.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

 *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the momentum of the configuration o mounting position. Please refer to P.11 for more information.

Preserver to P. 1 for more information. *3 Cannot be selected for High-Precision Specification. * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	200W/20mm
Y-axis motor output/lead	100W/20mm
Z-axis motor output/lead	100W/10mm (M), 5mm (L)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters). (Note 2) The cable length is the length between the X-axis connector box and the controller. The standard lengths are 3m and 5m, but other lengths can also be specified <u>Notes</u> in meters. The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

GC□HB2M

	< l				1	-axis strok	e			
		300	350	400	450	500	550	600	650	700
	100	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
۵	150	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
stroke	200	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
s st	250	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.9
-axis	300	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.3
Z-	350	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	8.6
	400	9.6	9.6	9.5	9.5	9.5	9.5	9.5	9.4	8.0

GC□HB2L

	_	Y-axis stroke									
		300	350	400	450	500	550	600	650	700	
	100	13.0	13.0	13.0	12.9	12.9	12.9	12.9	12.8	11.8	
a	150	12.5	12.4	12.4	12.4	12.4	12.4	12.3	12.3	11.2	
stroke	200	11.9	119	11.9	11.9	11.8	11.8	11.8	11.8	10.6	
is st	250	11.3	11.3	11.3	11.2	11.2	11.2	11.2	11.1	9.9	
-axis	300	10.8	10.7	10.7	10.7	10.7	10.6	10.6	10.6	9.3	
Z-	350	10.1	10.1	10.1	10.1	10.0	10.0	10.0	10.0	8.6	
	400	9.6	9.6	9.5	9.5	9.5	9.5	9.5	9.4	8.0	

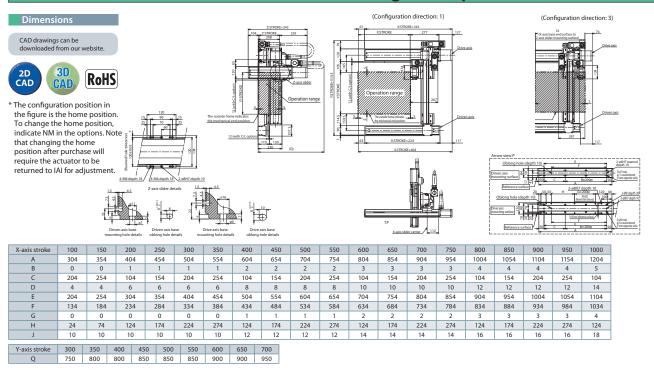
Maximum Speed by Stroke (mm/s) (Note 4)

■GC□HB2M

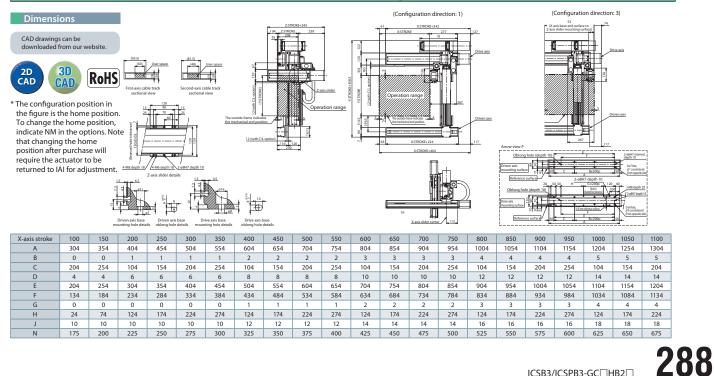
	100~300	300~400	450~700	750~800	850~900	950~1000	1050~1100
X-axis		1200		860	695	570	460
Y-axis	—	12	00		-	-	
Z-axis	60	00			-		

l	■GC□HB2L							
1		100~300	300~400	450~700	750~800	850~900	950~1000	1050~1100
	X-axis		1200			695	570	460
	Y-axis	—	12	00		-	_	
	Z-axis	30	00			_		

ICSB3 [ICSPB3]-GC HB2 -SC-SC (Self-standing cable specification)



-CT-CT (Cable track specification) ICSB3 [ICSPB3]-GC]**HB2**[

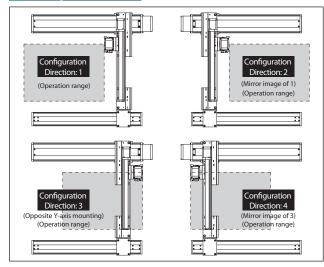


ICSB3	B-GC	HB	3H	±10µm Battery- less	X-Y-Z 3-axis	Speed Y: Md (100W	
			B3H High-Precision Specification	4bsolute	Z Base Mount)	Type Z:Md(200W	
Specification Items	CSB3: Standard 3-axis specification ICSPB3: High precision 3-axis specification	Туре	WA: Battery-less 10:100mm Refer to 30 Absolute 2 Options 110:1100mm table 70	70: 700mm table 40: 400mm Every 50mm) below. (Every 50mm) b	table XSEL-P/Q	Cable Y-axis - Z-axis Ca Length Management 3L: 3m SL: 5m Refer to Explanat CL: Specified of Model * length Designations bel	on

XY configuration direction *1	Z-axis speed type	Model
1	Н	ICSB3[ICSPB3]-GC1HB3H-①-23-45-67-T2-8-9
2	Н	ICSB3[ICSPB3]-GC2HB3H-①-23-45-67-T2-8-9
3	Н	ICSB3[ICSPB3]-GC3HB3H-①-23-45-67-T2-8-9
4	Н	ICSB3[ICSPB3]-GC4HB3H-1)-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of 🗓 through 😨 in the model names above.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXM-1-200-20-2-12-10-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM01-N-0-0-2	-
Y-axis	ISB[ISPB]-MXM-①-100-20-④-T2-⑩-⑤	\rightarrow Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-①-200-20-⑥-T2-⑩-⑦	→ Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names. Note that the strokes are indicated in mm (millimeters). * Cable exit direction is specified with l⑩ in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation			
1	Encoder type	WA: Battery-less Absolute			
2	X-axis stroke (Note 1)	10: 100mm 2 110: 1100mm (100: 1000mm) *1			
3	X-axis option	Refer to Options table below.			
4	Y-axis stroke (Note 1)	30: 300mm ² 70: 700mm			
5	Y-axis option	Refer to Options table below.			
6	Z-axis stroke (Note 1)	10: 100mm 2 40: 400mm			
7	Z-axis option	Refer to Options table below.			
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m			
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable CT-CT: Cable track - Cable track			

*1 The maximum X-axis stroke is 1000mm for the self-standing cable specification.

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in <u>alphabetical order</u>.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

 *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact L4l for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position.

Please refer to P.11 for more information.

Prease refer to P. 11 on More mutation.
 * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol.
 Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	200W/20mm
Y-axis motor output/lead	100W/20mm
Z-axis motor output/lead	200W/20mm

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

	(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).
	(Note 2) The cable length is the length between the X-axis connector box and the controller.
\triangle	The standard lengths are 3m and 5m, but other lengths can also be specified in meters.
Notes	The maximum length is 15m.
	(Note 3) The rated acceleration is 0.4G. The payload is based on operation at the rated acceleration.
	When the acceleration is increased, the payload will be reduced.

(Note 4) Please note that a longer stroke will result in a lower max speed.

■GC□HB3H

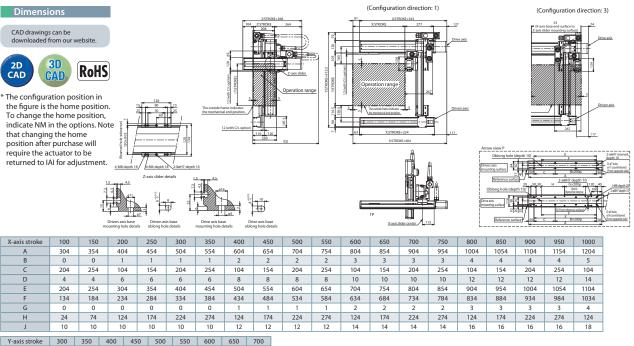
					١	/-axis strok	e			
		300	350	400	450	500	550	600	650	700
	100	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
۵	150	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
stroke	200	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
s st	250	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.3
-axis	300	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	8.7
Ņ	350	9.7	9.7	9.6	9.6	9.6	9.6	9.5	9.5	8.1
	400	9.1	9.1	9.1	9.1	9.0	9.0	9.0	9.0	7.5

Maximum Speed by Stroke (mm/s) (Note 4)

■GC□HB3H

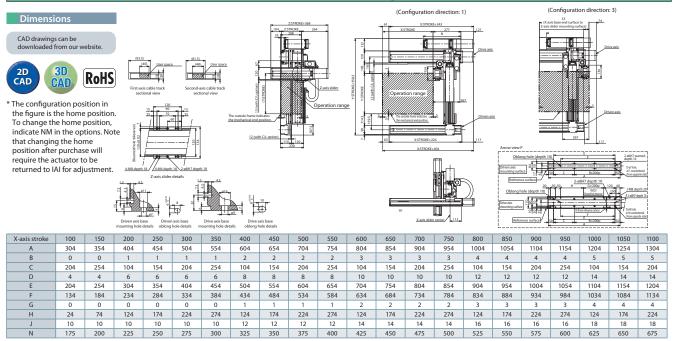
	100~300	300~400	450~700	750~800	850~900	950~1000	1050~1100
X-axis	1200			860	695	570	460
Y-axis	—	12	00		-	-	
Z-axis	12	00			_		

ICSB3 [ICSPB3]-GC HB3H-SC-SC (Self-standing cable specification)



Q 750 800 800 850 850 850 900 900 950

ICSB3 [ICSPB3]-GC HB3H-CT-CT (Cable track specification)

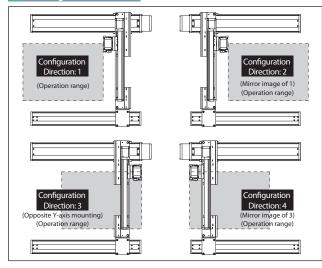


ICSB	B-GC□	MB2L	Battery- Lless		
Model		High-Precision Specification		T2	
ltems	Series ICSB3: Standard 3-axis specification ICSPB3: High	Refer to WA: Battery-less 10: 100mm Refer to Model Absolute ≀ Options Specification 110: 1100mm table	Y-axis Stroke/Option Z-axis Stroke/Option 30:300mm Refer to options 10:100mm Refer to Options 70:700mm table 40:400mm table (Every 50mm) below. (Every 50mm) below.	Applicable Cable Yasis-Zasis Cable Controllers Length Management T2: SCON 3L: 3m SEL SSEL SSE SSE XSEL-P/Q L: Specified of Model XSEL-RA/SA** **Coming soot Length Designations below	

XY configuration direction *1	Z-axis speed type	Model
1	L	ICSB3[ICSPB3]-GC1MB2L-①-23-45-67-T2-8-9
2	L	ICSB3[ICSPB3]-GC2MB2L-D-23-45-67-T2-8-9
3	L	ICSB3[ICSPB3]-GC3MB2L-①-23-45-67-T2-8-9
4	L	ICSB3[ICSPB3]-GC4MB2L-1)-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of 🗊 through 🗊 in the model names above.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXM-①-100-10-2-T2-10-3	\rightarrow Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM01-N-0-0-2	—
Y-axis	ISB[ISPB]-MXM-1-100-10-4-T2-10-5	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-1-100-5-6-T2-10-7	\rightarrow Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names. Note that the strokes are indicated in mm (millimeters). * Cable exit direction is specified with l⑩ in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	10: 100mm 2 110: 1100mm (100: 1000mm) *1
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm ² 70: 700mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 40: 400mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable CT-CT: Cable track - Cable track

*1 The maximum X-axis stroke is 1000mm for the self-standing cable specification.

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in <u>alphabetical order</u>.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
*2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information.

Preserver to P. 1 for more information. *3 Cannot be selected for High-Precision Specification. * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]			
Positioning repeatability	±0.01mm [±0.005mm]			
Lost motion	0.05mm [0.02mm] or less			
Guide	Integrated with base			
Base	Material: Aluminum with white alumite treatment			
X-axis motor output/lead	100W/10mm			
Y-axis motor output/lead	100W/10mm			
Z-axis motor output/lead	100W/5mm			

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

	(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).
A Notes	(Note 2) The cable length is the length between the X-axis connector box and the controller. The standard lengths are 3m and 5m, but other lengths can also be specified in meters. The maximum length is 15m.
	(Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the

acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

■GC□MB2L

		Y-axis stroke											
		300	350	400	450	500	550	600	650	700			
	100	17.6	17.2	16.8	16.5	16.1	15.5	14.9	13.9	11.8			
۵	150	17.0	16.6	16.2	15.9	15.5	14.9	14.4	13.3	11.2			
stroke	200	16.4	16.0	15.6	15.3	14.9	14.4	13.8	12.7	10.6			
s st	250	15.7	15.3	14.9	14.6	14.2	13.8	13.2	12.0	9.9			
-axis	300	15.1	14.7	14.3	14.0	13.6	13.2	12.7	11.4	9.3			
Z-	350	14.4	14.0	13.6	13.3	12.9	12.5	12.0	10.7	8.6			
	400	13.8	13.4	13.0	12.7	12.3	11.9	11.5	10.1	8.0			

Maximum Speed by Stroke (mm/s) (Note 4)

■GC□MB2L

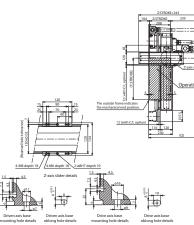
	100~300	300~400	450~700	750~800	850~900	950~1000	1050~1100
X-axis		600		430	345	280	230
Y-axis	—	60	00		-	-	
Z-axis	30	00			-		

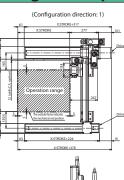
ICSB3 [ICSPB3]-GC MB2L-SC-SC (Self-standing cable specification)

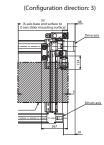


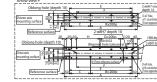
Dimensions

* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.





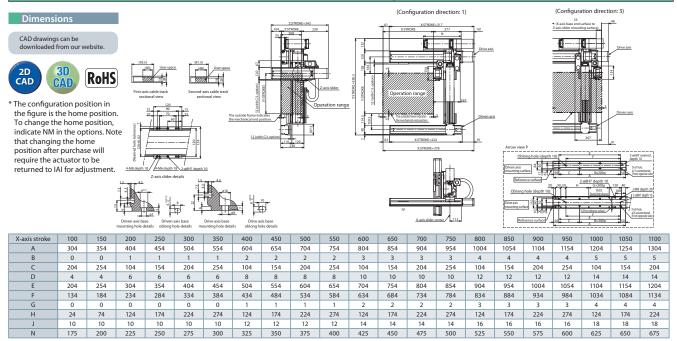




X-axis stroke	100	150	20	0	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	304	354	40	4	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
В	0	0	1		1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5
C	204	254	10	4	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104
D	4	4	6		6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	204	254	30	4	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104
F	134	184	23	4	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034
G	0	0	0		0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4
н	24	74	12	4	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124
J	10	10	10)	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18
Y-axis stroke	300	350	400	450	500	550	600	650	700											
0	750	0.00	0.0.0	050	050	050	000	0.00	050											

Q 750 800 800 850 850 900 900 950

ICSB3 [ICSPB3]-GC MB2L-CT-CT (Cable track specification)

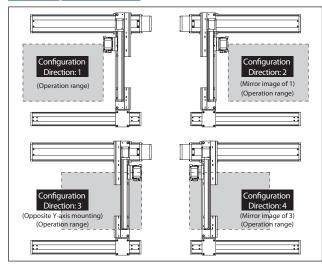


ICSB	B-GC 🗆 N	MB3M	t10µm Battery- Liess	XYBG+ZB IY Side Gantry Speed Y: Md (100W)	Ω.
ICSPE	33-GC □	BB3M High-Precision Specification		Z Base Mount) Type Z: Md (200W)	
Model Specificati	on Series Typ	- Type -	axis Stroke/Option 2-axis Stroke/Option	Applicable Cable Y-axis -Z-axis Cable Controllers Length Management	
	ICSB3: Standard Refer 3-axis specification Mod ICSPB3: High Specific precision 3-axis table b specification	del Absolute ¿ Options cation 110: 1100mm table 70	Options Options Options Options Options table 40: 400mm table very 50mm) below. (Every 50mm) below.	T2: SCON 3L: 3m SSEL 5L: 5m Refer to Explanation XSEL-P/Q L: Specified of Model XSEL-RA/SA** length Designations below **Coming soon	

XY configuration direction *1	Z-axis speed type	Model
1	м	ICSB3[ICSPB3]-GC1MB3M-1]-23-45-67-T2-8-9
2	М	ICSB3[ICSPB3]-GC2MB3M-1]-23-45-67-T2-8-9
3	М	ICSB3[ICSPB3]-GC3MB3M-1]-2] 3]-4] 5]-6] 7]-T2-6]-9
4	м	ICSB3[ICSPB3]-GC4MB3M-1]-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of 🕦 through 💿 in the model names above.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXM-1-100-10-2-T2-10-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM01-N-0-0-2	—
Y-axis	ISB[ISPB]-MXM-①-100-10-④-T2-⑩-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-①-200-10-⑥-T2-⑩-⑦	→ Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names. Note that the strokes are indicated in mm (millimeters). * Cable exit direction is specified with l⑩ in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	10: 100mm 2 110: 1100mm (100: 1000mm) *1
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm ² 70: 700mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 40: 400mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable CT-CT: Cable track - Cable track

*1 The maximum X-axis stroke is 1000mm for the self-standing cable specification.

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in <u>alphabetical order</u>.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
*2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information.

Preserver to P. 1 for more information. *3 Cannot be selected for High-Precision Specification. * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	100W/10mm
Y-axis motor output/lead	100W/10mm
Z-axis motor output/lead	200W/10mm

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).
(Note 2) The cable length is the length between the X-axis connector box and the controller.
The standard lengths are 3m and 5m, but other lengths can also be specified in meters. The maximum length is 15m.
(Note 3) The rated acceleration is 0.4G. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced.

(Note 4) Please note that a longer stroke will result in a lower max speed.

293 ICSB3/ICSPB3-GC MB3M

■GC□MB3M

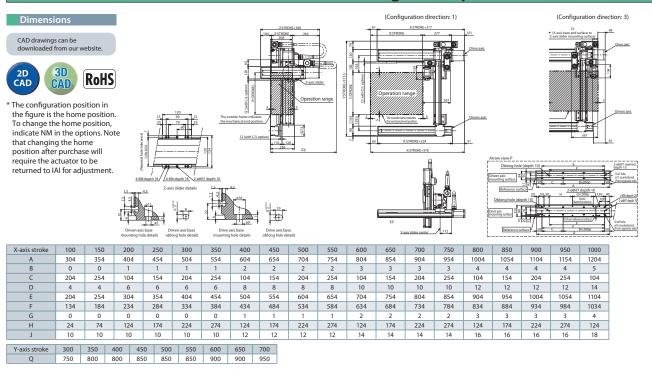
	_	Y-axis stroke								
		300	350	400	450	500	550	600	650	700
	100	17.1	16.7	16.3	16.0	15.6	15.0	14.5	13.4	11.3
N	150	16.4	16.0	15.6	15.3	14.9	14.4	13.8	12.7	10.6
-axis	200	15.8	15.4	15.0	14.7	14.3	13.9	13.3	12.1	10.0
is st	250	15.1	14.7	14.3	14.0	13.6	13.2	12.7	11.4	9.3
stroke	300	14.5	14.1	13.7	13.4	13.0	12.6	12.1	10.8	8.7
e	350	13.9	13.5	13.1	12.8	12.4	12.0	11.6	10.2	8.1
	400	13.3	12.9	12.5	12.2	11.8	11.4	11.0	9.6	7.5

Maximum Speed by Stroke (mm/s) (Note 4)

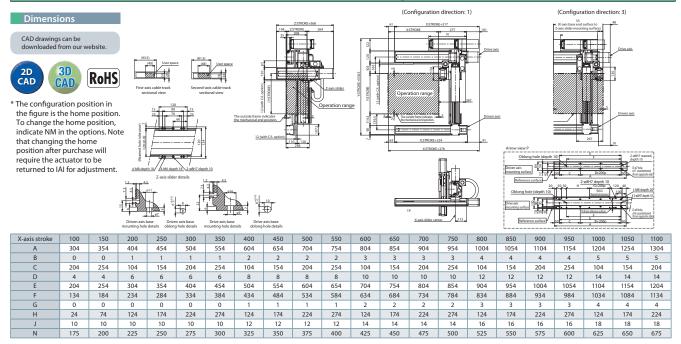
■GC□MB3M

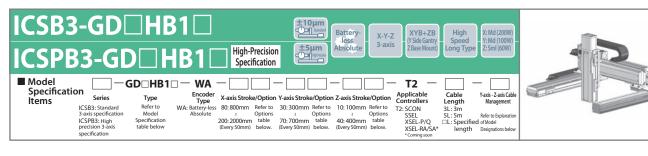
	100~300	300~400	450~700	750~800	850~900	950~1000	1050~1100
X-axis	600			430	345	280	230
Y-axis	—	600			-	-	
Z-axis	60	10			_		

ICSB3 [ICSPB3]-GC MB3M-SC-SC (Self-standing cable specification)



ICSB3 [ICSPB3]-GC MB3M-CT-CT (Cable track specification)

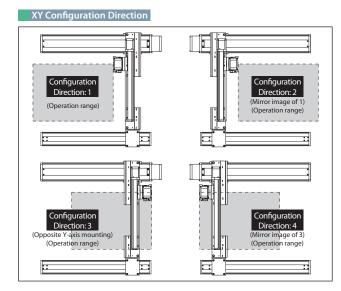




Model Specification	* Items in brackets [] are for the High-Precision Specification.
---------------------	--

XY configuration direction *1	Z-axis speed type *2	Model
1	м	ICSB3[ICSPB3]-GD1HB1M-1]-2]3-4]5-6]7-T2-6-9
1	L	ICSB3[ICSPB3]-GD1HB1L-1)-23-45-67-T2-8-9
2	м	ICSB3[ICSPB3]-GD2HB1M-1]-23-45-67-T2-8-9
2	L	ICSB3[ICSPB3]-GD2HB1L-D-23-45-67-T2-8-9
3	м	ICSB3[ICSPB3]-GD3HB1M-1]-2]3-4]5-6]7-T2-6-9
5	L	ICSB3[ICSPB3]-GD3HB1L-1)-23-45-67-T2-8-9
4	М	ICSB3[ICSPB3]-GD4HB1M-1]-23-45-67-T2-8-9
4	L	ICSB3[ICSPB3]-GD4HB1L-D-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of [] through [] in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.



Axis Configu	* Items in brackets [] are for	or the High-Precision Specification.
Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXMX-1-200-20-2-12-1-3	\rightarrow Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM02-N-0-0-2	—
Y-axis	ISB[ISPB]-MXM-1-100-20-4-T2-1-5	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-1-60-10-6-T2-11-7	→ Please contact IAI for more details

Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ⑦ in the above model names.
 Note that the strokes are indicated in mm (millimeters).
 Lead is specified with ⑧ in the above model names.
 S: For Z-axis Medium Speed type
 4: For Z-axis Low Speed type

* Cable exit direction is specified with 1 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation			
1	Encoder type	WA: Battery-less Absolute			
2	X-axis stroke (Note 1)	80: 800mm 2 200: 2000mm			
3	X-axis option	Refer to Options table below.			
4	Y-axis stroke (Note 1)	30: 300mm ² 70: 700mm			
5	Y-axis option	Refer to Options table below.			
6	Z-axis stroke (Note 1)	10: 100mm 2 40: 400mm			
7	Z-axis option	Refer to Options table below.			
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m			
9	Y-axis - Z-axis Cable Management	CT-CT: Cable track - Cable track			

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number.

When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

** Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
*2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as *C" and the home limit switch as *L" regardless of the mounting position.
Please refer to P.11 for more information.

¹ Cannot be selected for High-Precision Specification.
¹ To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol.
Please refer to P.11 for the cable exit direction of each axis.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]		
Positioning repeatability	±0.01mm [±0.005mm]		
Lost motion	0.05mm [0.02mm] or less		
Guide	Integrated with base		
Base	Material: Aluminum with white alumite treatment		
X-axis motor output/lead	200W/20mm		
Y-axis motor output/lead	100W/20mm		
Z-axis motor output/lead	60W/8mm (M), 4mm (L)		

Applicable Controllers

Z N

Contact IAI. The controller for this system needs to be purchased/prepared separately.

	(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).
	(Note 2) The cable length is the length between the X-axis connector box and the controller.
<u>A</u> lotes	The standard lengths are 3m and 5m, but other lengths can also be specified in meters. The maximum length is 15m.
	(Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced.
	(Note 4) Please note that a longer stroke will result in a lower max speed.

G		31M		IGD⊟H	B1L	
		Y-axis stroke			Y-axis stroke	
		300~700			300~650	700
	100			100		14.0
e	150			_ω 150		14.0
stroke	200		-	200 200		14.0
s st	250	7.0		250	14.0	14.0
-axis	300					14.0
4	350		· · · · ·	N 350		13.9
	400			400		13.6

Maximum Speed by Stroke (mm/s) (Note 4)

■GD□HB1M

	100~300 300~400 450~700			800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
X-axis	—			1200	1100	1000	950	800	700	600	550	500	450
Y-axis	- 1200						_						
7 avic	490												

■GD□HB1L

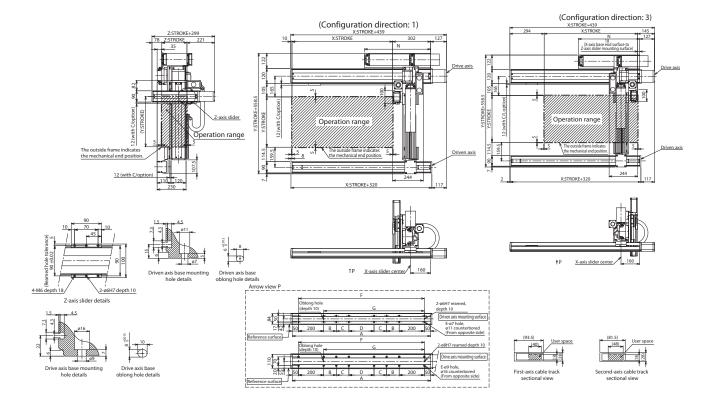
	100~300	300~400	450~700	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
X-axis	—			1200	1100	1000	950	800	700	600	550	500	450
Y-axis	—	- 1200						_					
Z-axis	240							_					

ICSB3 [ICSPB3]-GD HB1 -CT-CT (Cable track specification)





* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.



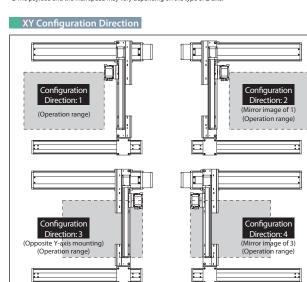
X-axis stroke	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
A	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
В	200	200	200	250	300	350	400	450	500	550	200	200	200
C	0	0	0	0	0	0	0	0	0	0	400	450	500
D	200	300	400	400	400	400	400	400	400	400	400	400	400
E	12	12	12	12	12	12	12	12	12	12	16	16	16
F	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
G	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
N	525	575	625	675	725	775	825	875	925	975	1025	1075	1125

	GD□H 3-GD□		±10µm battery- less Absolute	X-Y-Z 3-axis XYBG+ZB (Y Side Gantry Z Base Mount)	High Speed Long Type Z:Md (100W) Z:Md (100W)	
Model Specification Items	Series Type ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis specification specification	WA: Battery-less 80: 800mm Refer to 30 Absolute ≀ Options 200: 2000mm table 70	axis Stroke/Option Z-axis Stroke 0:300mm Refer to 10: 100mm i<0ptions i 0:700mm table 40: 400mm very 50mm) below.	Refer to T2: SCON Options SSEL table XSEL-P/Q	Cable Y-axis -Z-axis Cable Length Management 3L: 3m 5L: 5m Refer to Explanation DL: Specified of Model length Designations below	

Model Specification	* Items in brackets [] are for the High-Precision Specification.
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XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GD1HB2M-1]-23-45-67-T2-8-9
1	L	ICSB3[ICSPB3]-GD1HB2L-1)-23-45-67-T2-8-9
2	М	ICSB3[ICSPB3]-GD2HB2M-1]-23-45-67-T2-8-9
2	L	ICSB3[ICSPB3]-GD2HB2L-D-23-45-67-T2-8-9
3	М	ICSB3[ICSPB3]-GD3HB2M-1]-2]3-4]5-6]7-T2-6-9
5	L	ICSB3[ICSPB3]-GD3HB2L-D-23-45-67-T2-8-9
4	М	ICSB3[ICSPB3]-GD4HB2M-1]-23-45-67-T2-8-9
4	L	ICSB3[ICSPB3]-GD4HB2L-1)-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of [] through [] in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.



Axis Configuration * Items in brackets [] are for the High-Precision Specifi							
Name of axis	Model	Reference page					
X-axis (Drive axis)	ISB[ISPB]-MXMX-1-200-20-2-12-1-3	\rightarrow Please contact IAI for more details					
X-axis (Driven axis)	ISB-SXM02-N-0-0-2	—					
Y-axis	ISB[ISPB]-MXM-①-100-20-④-T2-①-⑤	\rightarrow Please contact IAI for more details					
Z-axis	ISB[ISPB]-MXM-1-100-10-6-T2-11-7	\rightarrow Please contact IAI for more details					

Refer to the symbols within the table Explanation of Model Designations at the upper right for 1 through $\fbox{2}$ in the above model names.

In the above model names. Note that the strokes are indicated in mm (millimeters). Lead is specified with I in the above model names. 10: For Zaxis Medium Speed type

Cable exit direction is specified with 🕕 in the above model names. Please refer to P.11 for the exit directions.

No. Description Notation 1 Encoder type WA: Battery-less Absolute 80: 800mm X-axis stroke 2 (Note 1) 200: 2000mm 3 Refer to Options table below. X-axis option 30: 300mm Y-axis stroke 4 (Note 1) 70: 700mm 5 Y-axis option Refer to Options table below. 10: 100mm Z-axis stroke 6 (Note 1) 40: 400mm 0 Z-axis option Refer to Options table below. 3L:3m Cable length 8 5L:5m (Note 2) □L:□m 9 Y-axis - Z-axis Cable Management CT-CT: Cable track - Cable track

Options

Explanation of Model Designations

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
*2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the

mounting position. Please refer to P.11 for more information.

3 Cannot be selected for High-Precision Specification.
 * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol.
 Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	200W/20mm
Y-axis motor output/lead	100W/20mm
Z-axis motor output/lead	100W/10mm (M), 5mm (L)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters). (Note 2) The cable length is the length between the X-axis connector box and the controller. The standard lengths are 3m and 5m, but other lengths can also be specified <u>A</u> Notes in meters.

The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

GD□HB2M

	_				١	/-axis strok	e			
		300	350	400	450	500	550	600	650	700
	100	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
۵	150	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
stroke	200	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
s st	250	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.9
-axis	300	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.3
Ż-	350	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	8.6
	400	9.6	9.6	9.5	9.5	9.5	9.5	9.5	9.4	8.0

■GD□HB2L

		Y-axis stroke										
		300	350	400	450	500	550	600	650	700		
۵	100	13.0	13.0	13.0	12.9	12.9	12.9	12.9	12.8	11.8		
	150	12.5	12.4	12.4	12.4	12.4	12.4	12.3	12.3	11.2		
stroke	200	11.9	119	11.9	11.9	11.8	11.8	11.8	11.8	10.6		
is st	250	11.3	11.3	11.3	11.2	11.2	11.2	11.2	11.1	9.9		
-axis	300	10.8	10.7	10.7	10.7	10.7	10.6	10.6	10.6	9.3		
Ż-	350	10.1	10.1	10.1	10.1	10.0	10.0	10.0	10.0	8.6		
	400	9.6	9.6	9.5	9.5	9.5	9.5	9.5	9.4	8.0		

Maximum Speed by Stroke (mm/s) (Note 4)

■GD□HB2M

	100~300	300~400	450~700	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
X-axis		-		1200	1100	1000	950	800	700	600	550	500	450
Y-axis	—	12	00	_									
Z-axis	60	00						—					

■GD□HB2L

	100~300	300~400	450~700	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
X-axis	—		1200	1100	1000	950	800	700	600	550	500	450	
Y-axis	—	- 1200						_					
Z-axis	300							_					

ICSB3 [ICSPB3]-GD HB2 -CT-CT (Cable track specification)

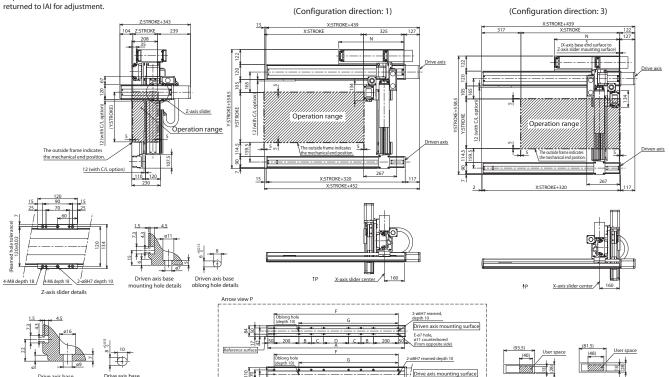
Dimensions



* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

Drive axis base mounting hole details

Drive axis base blong hole detail



D

Drive axis mounting surface

First-axis cable track sectional view

Second-axis cable t sectional view

C B 200 50 E-ø9 hole, ø16 count (From opposite side)

X-axis stroke	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
A	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
В	200	200	200	250	300	350	400	450	500	550	200	200	200
C	0	0	0	0	0	0	0	0	0	0	400	450	500
D	200	300	400	400	400	400	400	400	400	400	400	400	400
E	12	12	12	12	12	12	12	12	12	12	16	16	16
F	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
G	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
N	525	575	625	675	725	775	825	875	925	975	1025	1075	1125

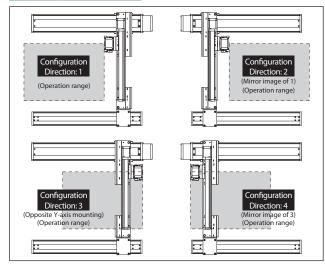
Reference s

	B-GD□H B3-GD□	B3H HB3H ^{High-Precision} Specification	±10µm Lister Less Absolute	X-Y-Z 3-axis XYBG+ZB (YSide Gantry ZBase Mount	High Speed Long Type Z:Md (200W)	
Model Specificati Items	CSB3: Standard 3-axis specification ICSPB3: High precision 3-axis specification	WA: Battery-less 80:800mm Refer to Absolute ≀ Options n 200:2000mm table	Y-axis Stroke/Option Z-axis Strok 30:300mm Refer to 10:100mm t Options t 70:700mm table 40:400mm (Every 50mm) below. (Every 50mm)	Options SEL table XSEL-P/O	Cable Y-axis -Z-axis Cable Length Management 31: 3m 51: 5m Refer to Explanation CL: Specified of Model length Designations below	

XY configuration direction *1	Z-axis speed type	Model
1	н	ICSB3[ICSPB3]-GD1HB3H-①-②③-④⑤-⑥⑦-T2-⑧-⑨
2	Н	ICSB3[ICSPB3]-GD2HB3H-1-23-46-67-T2-8-9
3	Н	ICSB3[ICSPB3]-GD3HB3H-①-23-46-67-T2-8-9
4	Н	ICSB3[ICSPB3]-GD4HB3H-1-23-45-67-T2-8-9

*** 1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ^[1] through ^[2] in the model names above.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXMX-1-200-20-2-12-10-3	\rightarrow Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM02-N-0-0-2	—
Y-axis	ISB[ISPB]-MXM-1-100-20-4-T2-10-5	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-①-200-20-⑥-T2-⑩-⑦	\rightarrow Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ⑦ in the above model names. In the above model names. Note that the strokes are indicated in mm (millimeters). * (able exit direction is specified with 🔞 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	80: 800mm 2 200: 2000mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm 2 70: 700mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 40: 400mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:⊡m
9	Y-axis - Z-axis Cable Management	CT-CT: Cable track - Cable track

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number.

When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page		
X-axis cable exit direction	*	See P.11, P.353		
AQ seal (standard equipment)	AQ	See P.353		
Brake (equipped as standard on Z-axis) *1	В	See P.353		
Creep sensor *2	C/CL	See P.353		
Home limit switch *2	L/LL	See P.353		
Non-motor end specification	NM	See P.353		
Guide with ball-retaining mechanism *3	RT	See P.354		

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position.
 Please refer to P.11 for more information.
 *3 Cannot be selected for High-Precision Specification.
 * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol.
 Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]			
Positioning repeatability	±0.01mm [±0.005mm]			
Lost motion	0.05mm [0.02mm] or less			
Guide	Integrated with base			
Base	Material: Aluminum with white alumite treatment			
X-axis motor output/lead	200W/20mm			
Y-axis motor output/lead	100W/20mm			
Z-axis motor output/lead	200W/20mm			

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

	(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).
	(Note 2) The cable length is the length between the X-axis connector box and the controller.
\triangle	The standard lengths are 3m and 5m, but other lengths can also be specified in meters.
Notes	The maximum length is 15m.
	(Note 3) The rated acceleration is 0.4G. The payload is based on operation at the rated acceleration.
	When the acceleration is increased, the payload will be reduced.

(Note 4) Please note that a longer stroke will result in a lower max speed.

GD□HB3H

	_		Y-axis stroke									
		300	350	400	450	500	550	600	650	700		
stroke	100	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0		
	150	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0		
	200	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0		
s st	250	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	9.3		
-axis	300	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	8.7		
Ż	350	9.7	9.7	9.6	9.6	9.6	9.6	9.5	9.5	8.1		
	400	9.1	9.1	9.1	9.1	9.0	9.0	9.0	9.0	7.5		

Maximum Speed by Stroke (mm/s) (Note 4)

■GD□HB3H

		100~300 300~400 450~700			800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
	X-axis	_		1200	1100	1000	950	800	700	600	550	500	450	
Γ	Y-axis	- 1200						_						
	Z-axis	1200							_					

ICSB3 [ICSPB3]-GD HB3H-CT-CT (Cable track specification)

Dimensions



* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

> hole 20+0

4-M8 depth 18

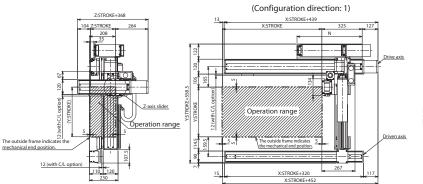
+0

4-M6 depth 18 2-ø8H7 depth 10

Z-axis slider details

4.5

Drive axis base ounting hole details



cente

B 200

2-ø6H7 reamed, depth 10 Driven axis mounting surface

Drive axis mounting surface

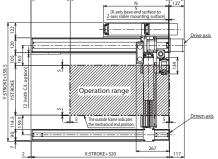
-ø9 hole, ø16 counterbored

rom opposite side)

E-ø7 hole, ø11 counterbored (From opposite side

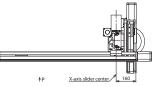
2-ø8H7 reamed depth 10

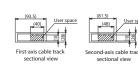
tΡ



(Configuration direction: 3)

X:STROKE+439





ICSB3/ICSPB3-GD HB3H

X-axis stroke	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
A	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
В	200	200	200	250	300	350	400	450	500	550	200	200	200
C	0	0	0	0	0	0	0	0	0	0	400	450	500
D	200	300	400	400	400	400	400	400	400	400	400	400	400
E	12	12	12	12	12	12	12	12	12	12	16	16	16
F	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
G	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
N	525	575	625	675	725	775	825	875	925	975	1025	1075	1125

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Driven axis base oblong hole details

Arrow view I

25

110

Driven axis base

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T Drive axis base oblong hole details

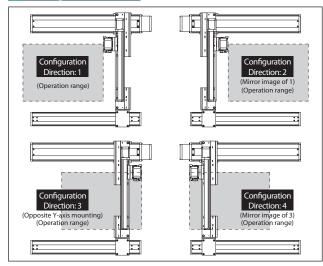
mounting hole details

ICSB	B-GE	B	31L	000	-Y-Z (V Side Gantry Si	High X: Lg (400W) Peed Y: Md (200W)	
ICSPE	83-GE		B1L High-Precision Specification	450 Absolute		Type Z: Sml (60W)	
Model Specificat		GE HB1	L — WA — 🗌 🗌 —]— T2 — 🗌		
Items	Series	Туре	Encoder Type X-axis Stroke/Option Y-	-axis Stroke/Option Z-axis Stroke/Opt	tion Applicable Ca Controllers Len	ble Y-axis - Z-axis Cable gth Management	
	ICSB3: Standard 3-axis specification	Refer to Model	WA: Battery-less 10: 100mm Refer to 3 Absolute 2 Options	30: 300mm Refer to 10: 100mm Refer	to T2: SCON 3L:	3m	
	ICSPB3: High	Specification	130: 1300mm table 9	90:900mm table 50:500mm tabl	e XSEL-P/Q □L:	Specified of Model	
	precision 3-axis specification	table below	<100: 1000mm>* below. (Every 50mm) * For self-standing	Every 50mm) below. (Every 50mm) belo	W. XSEL-RA/SA** ** Coming soon	length Designations below	

XY configuration direction *1	Z-axis speed type	Model
1	L	ICSB3[ICSPB3]-GE1HB1L-①-②③-④⑤-⑥⑦-T2-⑧-⑨
2	L	ICSB3[ICSPB3]-GE2HB1L-1)-23-45-67-T2-8-9
3	L	ICSB3[ICSPB3]-GE3HB1L-1]-2] 3]-4] 5]-6] 7]-T2-8]-9
4	L	ICSB3[ICSPB3]-GE4HB1L-1]-23-43-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of 🗓 through 🗐 in the model names above.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXM-①-400-20-②-T2-⑩-③	\rightarrow Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM03-N-0-0-2	—
Y-axis	ISB[ISPB]-MXM-①-200-20-④-T2-⑩-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-①-60-4-@-⑥-T2-@-⑦	→ Please contact IAI for more details

*** Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names. Note that the strokes are indicated in mm (millimeters). * Cable exit direction is specified with ⑧ in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation				
1	Encoder type	WA: Battery-less Absolute				
2	X-axis stroke (Note 1)	10: 100mm 2 130: 1300mm (100: 1000mm) *1				
3	X-axis option	Refer to Options table below.				
4	Y-axis stroke (Note 1)	30: 300mm 2 90: 900mm				
5	Y-axis option	Refer to Options table below.				
6	Z-axis stroke (Note 1)	10: 100mm 2 50: 500mm				
7	Z-axis option	Refer to Options table below.				
8	Cable length (Note 2)	3L:3m 5L:5m □∟□m				
9	Y-axis - Z-axis Cable Management uum X-axis stroke is 1000mm for the	SC-SC: Self-standing cable - Self-standing cable CT-CT: Cable track - Cable track				

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in <u>alphabetical order</u>.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position.
 Please refer to P.11 for more information.
 *3 Cannot be selected for High-Precision Specification.
 *3 Cannot be used for High-Precision Specification.

* To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]				
Positioning repeatability	±0.01mm [±0.005mm]				
Lost motion	0.05mm [0.02mm] or less				
Guide	Integrated with base				
Base	Material: Aluminum with white alumite treatment				
X-axis motor output/lead	400W/20mm				
Y-axis motor output/lead	200W/20mm				
Z-axis motor output/lead	60W/4mm				

Applicable Controllers

Ν

Contact IAI. The controller for this system needs to be purchased/prepared separately.

	(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).
	(Note 2) The cable length is the length between the X-axis connector box and the controller.
Notes	The standard lengths are 3m and 5m, but other lengths can also be specified in meters. The maximum length is 15m.
	(Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the

acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

Z-axis

■GE□HB1L							
		Y-axis stroke					
		300~900					
	100						
	150						
e	200						
Z-axis stroke	250						
is st	300	14.0					
-ax	350						
2	400						
	450						
	500						

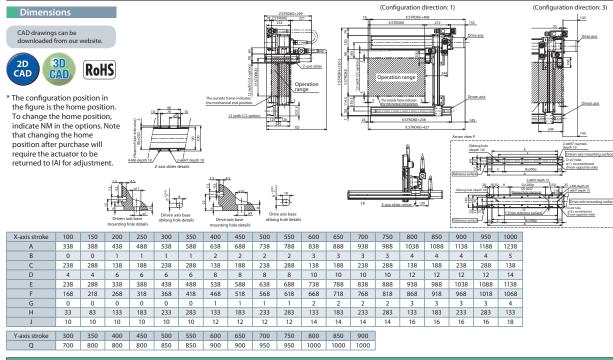
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Ν

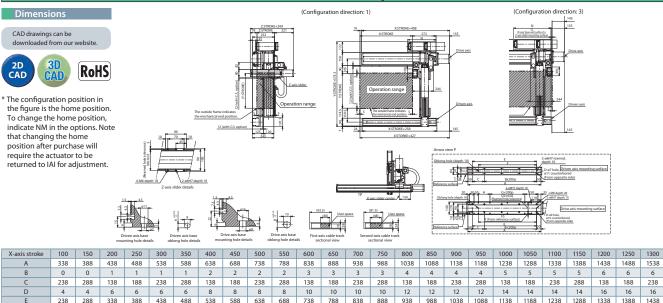
 175 200 225 250 275 300 325 350 375

	Maximum Speed by Stroke (mm/s) (Note 4)											
	■GE□HB1L											
		100~300	300~500	550~700	750~800	850~900	950~1000	1050~1100	1150~1,200	1250~1300		
X-axis 1200 92							765	645	550	440		
	Vanie		10	00	960	605						

ICSB3 [ICSPB3]-GE HB1L-SC-SC (Self-standing cable specification)



ICSB3 [ICSPB3]-GE HB1L-CT-CT (Cable track specification)



425 450 475

. D

epth 20 denth 10

500 525

550 575

Λ

600 625

Drive axi

1438 1488

1268 1318

133 183

700 725 750 775

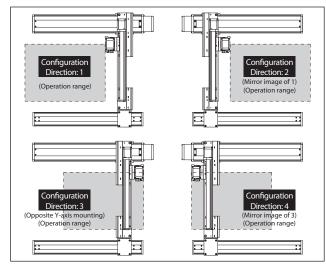
ICSB3 ICSPE				±10µm less less Absolute	X-Y-Z 3-axis ZBase Mou	ZB High Speed Type	X: Lg (400W) Y: Md (200W) Z: Md (100W)	
Model Specificati Items	ON Series ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis specification	GE HB2 Type Refer to Model Specification table below	Encoder Type X-axis Stroke/Option Y-axis WA: Battery-less 10:100mm Refer to 30: Absolute 2 Options 130:1300mm table 90:	ery 50mm) below. (Every 50mm) below.	Refer to Dptions table T2: SCON SSEL XSEL-P/Q	Length 3L: 3m 5L: 5m □L: Specified A** length	Y-axis - Z-axis Cable Management Refer to Explanation of Model Designations below	

Model Specification	* Items in brackets [] are for the High-Precision Specification.
---------------------	--

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GE1HB2M-①-② ③-④ ⑤-⑥ ⑦-T2-⑧-⑨
'	L	ICSB3[ICSPB3]-GE1HB2L-1-23-45-67-T2-8-9
2	м	ICSB3[ICSPB3]-GE2HB2M-①-23-465-67-T2-8-9
2	L	ICSB3[ICSPB3]-GE2HB2L-1-23-45-67-T2-8-9
3	м	ICSB3[ICSPB3]-GE3HB2M-①-23-45-67-T2-8-9
5	L	ICSB3[ICSPB3]-GE3HB2L-1-23-45-67-T2-8-9
4	М	ICSB3[ICSPB3]-GE4HB2M-①-2 ③-4 ⑤-6 ⑦-T2-8-9
4	L	ICSB3[ICSPB3]-GE4HB2L-1-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.
 *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.											
Name of axis	Model	Reference page									
X-axis (Drive axis)	ISB[ISPB]-LXM-①-400-20-②-T2-①-③	\rightarrow Please contact IAI for more details									
X-axis (Driven axis)	ISB-SXM03-N-0-0-2	—									
Y-axis	ISB[ISPB]-MXM-①-200-20-④-T2-①-⑤	\rightarrow Please contact IAI for more details									
Z-axis	ISB[ISPB]-MXM-1-100-10-6-T2-11-7	\rightarrow Please contact IAI for more details									

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names. Note that the strokes are indicated in mm (millimeters). * Lead is specified with ⑧ in the above model names. 10: For Z-axis Medium Speed type 5: For Z-axis Low Speed type * Cable exit direction is specified with ⑨ in the above model names. Please refer to P.11 for the exit directions.

) .	Description	Notation
1)	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	10: 100mm 2 130: 1300mm (100: 1000mm) *1
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm 2 90: 900mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 50: 500mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable CT-CT: Cable track - Cable track

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in <u>alphabetical order</u>.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details. *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information. *3 Cannot be selected for High-Precision Specification. * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Ball screw, rolled C10 [equivalent to rolled C5]
±0.01mm [±0.005mm]
0.05mm [0.02mm] or less
Integrated with base
Material: Aluminum with white alumite treatment
400W/20mm
200W/20mm
100W/10mm (M), 5mm (L)

Applicable Controllers

N

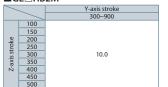
Contact IAI. The controller for this system needs to be purchased/prepared separately

	(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).
	(Note 2) The cable length is the length between the X-axis connector box and the controller.
\wedge	The standard lengths are 3m and 5m, but other lengths can also be specified in meters.
Votes	The maximum length is 15m.
	(Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The pavload is based on operation at the rated acceleration. When the

acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.



GE□HB2M



Maximum Speed by Stroke (mm/s) (Note 4)

GE HB2M														
	100~300	300~500	550~700	750~800	850~900	950~1000	1050~1100	1150~1,200	1250~1300					
X-axis		12	00		920	765	645	550	440					
Y-axis	—	12	00	860	695	_								
Z-axis	60	00				-								

/	100~300	300~500	550~700	750~800	850~900	950~1000	1050~1100	1150~1,200	1250~1300	
X-axis		12	00		920	765 645 550 440				
Y-axis	-	12	00	860	695		-	-		
Z-axis	30	00				-				

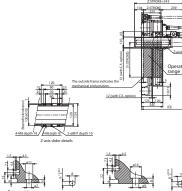
■GE□HB2L

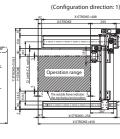
	_	Y-axis stroke											
		300~700	750 800		850	900							
	100		20.0	20.0	18.9	16.8							
	150		20.0	20.0	18.3	16.2							
ê	200		20.0	20.0	17.7	15.6							
stroke	2 250		20.0	19.4	17.0	14.9							
s st	300	20.0	20.0	18.8	16.4	14.3							
-axis	350		20.0	18.1	15.7	13.6							
Ń	400		20.0	17.5	15.1	13.0							
	450		19.4	16.9	14.5	12.4							
	500		18.8	16.3	13.9	11.8							

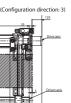
ICSB3 [ICSPB3]-GE HB2 -SC-SC (Self-standing cable specification)

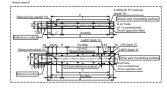


* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.





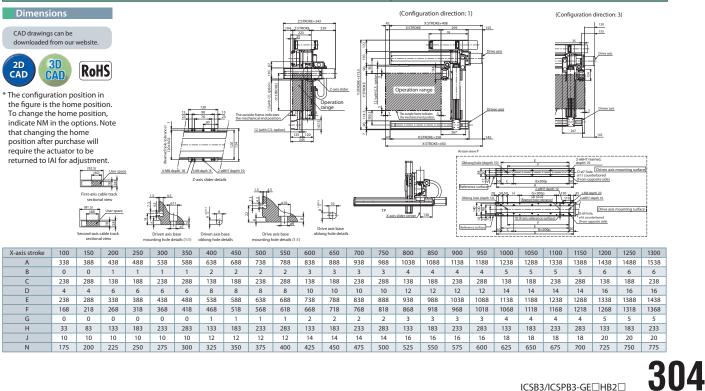




X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238
В	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5
C	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138
F	168	218	268	318	368	418	468	518	568	618	668	718	768	818	868	918	968	1018	1068
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4
Н	33	83	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233	283	133
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18
Y-axis stroke	300	350	400	450	500	550	600	650	700	750	800	850	900						
Q	800	800	800	850	850	900	900	950	950	1000	1000	1000	1050						

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ICSB3 [ICSPB3]-GE HB2 -CT-CT (Cable track specification)



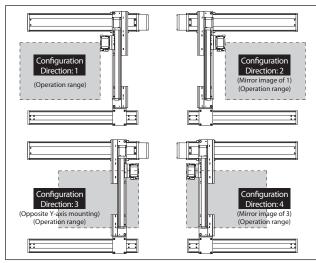
ICSB3	-GE	B	Ligger X-Y-Z (VSide Centry Speed V: Md (200M)	r.
ICSPB	3-GE	ΠH	+5um Absolute 3-axis 7Base Mount Type 7: Md (200W)	
Model Specificatio	on Series	GE HB3	Encoder X-avis Stroke/Ontion X-avis Stroke/Ontion Z-avis Stroke/Ontion Applicable Cable Y-axis-Z-axis Cab	
ltems	ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis specification	Refer to Model Specification table below	Type Arabits attorner/option1 ranks attorner/option1 ranks attorner/option1 cashs attorner/optio	



XY configuration direction *1	Z-axis speed type *2	Model
	Н	ICSB3[ICSPB3]-GE1HB3H-①-23-45-67-T2-8-9
1	М	ICSB3[ICSPB3]-GE1HB3M-1-23-45-67-T2-8-9
	L	ICSB3[ICSPB3]-GE1HB3L-1-23-45-67-T2-8-9
	Н	ICSB3[ICSPB3]-GE2HB3H-D-23-45-67-T2-8-9
2	М	ICSB3[ICSPB3]-GE2HB3M-①-② ③-④ ⑤-⑥ ⑦-T2-⑧-⑨
	L	ICSB3[ICSPB3]-GE2HB3L-1-23-45-67-T2-8-9
	Н	ICSB3[ICSPB3]-GE3HB3H-①-23-45-67-T2-8-9
3	М	ICSB3[ICSPB3]-GE3HB3M-1-23-45-67-T2-6-9
	L	ICSB3[ICSPB3]-GE3HB3L-①-②③-④⑤-⑥⑦-T2-⑧-⑨
	Н	ICSB3[ICSPB3]-GE4HB3H-D-23-45-67-T2-8-9
4	М	ICSB3[ICSPB3]-GE4HB3M-①-②③-④⑤-⑥⑦-T2-⑧-⑨
	L	ICSB3[ICSPB3]-GE4HB3L-1-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of [] through [] in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXM-①-400-20-②-T2-①-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM03-N-0-0-2	—
Y-axis	ISB[ISPB]-MXM-①-200-20-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM①-200-@-⑥-T2-①-⑦	→ Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names. Note that the strokes are indicated in mm (millimeters). * Lead is specified with ⑧ in the above model names. 20: For Z-axis High Speed type 10: For Z-axis How Speed type 5: For Z-axis Low Specified with 1 1 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model	Designations
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No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	10: 100mm 2 130: 1300mm (100: 1000mm) *1
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm 2 90: 900mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 50: 500mm
0	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9 *1 The manim	Y-axis - Z-axis Cable Management um X-axis stroke is 1000mm for the	SC-SC: Self-standing cable - Self-standing cable CT-CT: Cable track - Cable track

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
*2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the

mounting position. Please refer to P.11 for more information.

3 Cannot be selected for High-Precision Specification.
 * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol.
 Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	200W/20mm (H), 10mm (M), 5mm (L)
Annicable Control	

Applicable Controllers

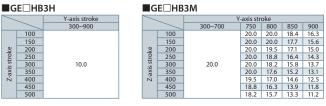
Contact IAI. The controller for this system needs to be purchased/prepared separately.

	(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).
	(Note 2) The cable length is the length between the X-axis connector box and the controller.
\triangle	The standard lengths are 3m and 5m, but other lengths can also be specified in meters.
Notes	The maximum length is 15m.
	(Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the

acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.



GE□HB3H



■GE□HB3L

\frown	_	Y-axis stroke													
		300	350	400	450	500	550	600	650	700	750	800	850	900	
	100	31.8	31.4	31.1	30.7	30.3	29.9	29.5	29.1	26.1	23.3	20.8	18.4	16.3	
	150	31.1	30.7	30.4	30.0	29.6	29.2	28.8	28.4	25.4	22.6	20.1	17.7	15.6	
é	200	30.5	30.1	29.8	29.4	29.0	28.6	28.2	27.8	24.8	22.0	19.5	17.1	15.0	
stroke	250	29.8	29.4	29.1	28.7	28.3	27.9	27.5	27.1	24.1	21.3	18.8	16.4	14.3	
	300	29.2	28.8	28.5	28.1	27.7	27.3	26.9	26.5	23.5	20.7	18.2	15.8	13.7	
axis	350	28.6	28.2	27.9	27.5	27.1	26.7	26.3	25.9	22.9	20.1	17.6	15.2	13.1	
Ň	400	28.0	27.6	27.3	26.9	26.5	26.1	25.7	25.3	22.3	19.5	17.0	14.6	12.5	
	450	27.3	26.9	26.6	26.2	25.8	25.4	25.0	24.6	21.6	18.8	16.3	13.9	11.8	
	500	26.7	26.3	26.0	25.6	25.2	24.8	24.4	24.0	21.0	18.2	15.7	13.3	11.2	

Maximum Speed by Stroke (mm/s) (Note 4)

GE□HB3H

	100~300	300~500	550~700	750~800	850~900	950~1000	1050~1100	1150~1,200	1250~1300		
X-axis		12	00		920	765	645	550	440		
Y-axis	—	12	00	860	695		-	-			
Z-axis	1200					-					

GE□HB3M

[100~300	300~500	550~700	750~800	850~900	950~1000	1050~1100	1150~1,200	1250~1300
	X-axis		12	00		920	765	645	550	440
	Y-axis	- 1200 860				695		-	_	
[Z-axis	60	00				—			

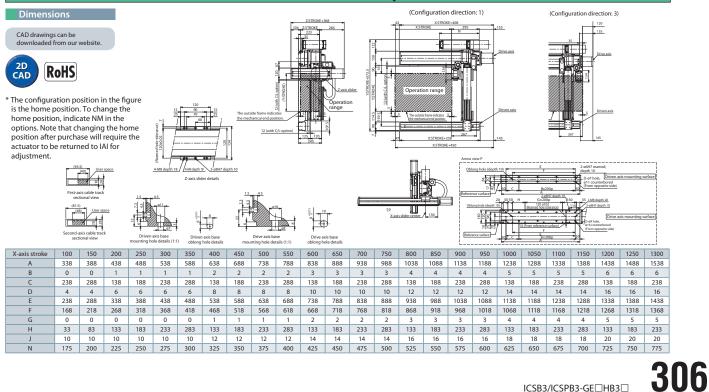
■GE□HB3L

/	100~300	300~500	550~700	750~800	850~900	950~1000	1050~1100	1150~1,200	1250~1300
X-axi	s	12	00		920	765	645	550	440
Y-axi	s —	12	00	860	695		-	_	
Z-axi	s 30	300				—			

ICSB3 [ICSPB3]-GE HB3 -SC-SC (Self-standing cable specification) Dimensions (Configuration direction: 1) direction: 3) CAD drawings can be F 8 2 2D RoHS CAD ration The configuration position in the figure is the home position. To change the home position, 1-3e indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment e, Drive Drive as Đ Ħ Reference surface 400 450 500 550 600 650 X-axis stroke 100 150 200 250 300 350 700 750 800 850 900 950 1000 1088 1138 A б б 1018 1068

e 300 350 400 450 500 550 600 650 700 750 800 850 900 Y-axis st 800 800 950 1000 1000 1000 Q

ICSB3 [ICSPB3]-GE HB3]-CT-CT (Cable track specification)



183

283 133

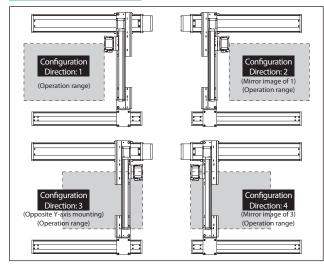
183 233

ICSB3 ICSPB			High-Preci Specificat	sion ion	±10µm Denset ±5µm	Battery- less Absolute	X-Y-Z 3-axis	XYBG+ZB (Y Side Gantry Z Base Mount)	Speed	X: Lg (400W) Y: Md (200W) Z: Sml (60W)	2
Model Specificati Items	on Series ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis specification	GF HB11 Type Refer to Model Specification table below	X-axis Strok		A Y-axis Stroke/Option 30:300mm Refer to 2 Options 90:900mm table (Every 50mm) below.	10: 100mm	Refer to Options table	Applicable Controllers T2: SCON SSEL XSEL-P/Q XSEL-RA/SA* *Coming soon	Cable Length 3L: 3m 5L: 5m L: Specifier length		

XY configuration direction *1	Z-axis speed type	Model
1	L	ICSB3[ICSPB3]-GF1HB1L-1]-2]3-4]5-6]7-T2-8-9
2	L	ICSB3[ICSPB3]-GF2HB1L-1)-23-45-67-T2-8-9
3	L	ICSB3[ICSPB3]-GF3HB1L-①-② ③-④ ⑤-⑥ ⑦-T2-⑧-⑨
4	L	ICSB3[ICSPB3]-GF4HB1L-1]-23-43-67-T2-8-9

*** 1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXMX-①-400-20-②-T2-⑩-③	\rightarrow Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM04-N-0-0-2	—
Y-axis	ISB[ISPB]-MXM-①-200-20-④-T2-⑩-⑤	\rightarrow Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-①-60-4-⑥-T2-⑩-⑦	→ Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ⑦ in the above model names. Note that the strokes are indicated in mm (millimeters). * Cable exit direction is specified with ⑩ in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation					
1	Encoder type	WA: Battery-less Absolute					
2	X-axis stroke (Note 1)	100: 1000mm 2 250: 2500mm					
3	X-axis option	Refer to Options table below.					
4	Y-axis stroke (Note 1)	30: 300mm 2 90: 900mm					
5	Y-axis option	Refer to Options table below.					
6	Z-axis stroke (Note 1)	10: 100mm 2 50: 500mm					
0	Z-axis option	Refer to Options table below.					
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m					
9	Y-axis - Z-axis Cable Management	CT-CT: Cable track - Cable track					

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number.

when selecting multiple options, specify them in aphabetical order.							
Туре	Model	Reference page					
X-axis cable exit direction	*	See P.11, P.353					
AQ seal (standard equipment)	AQ	See P.353					
Brake (equipped as standard on Z-axis) *1	В	See P.353					
Creep sensor *2	C/CL	See P.353					
Home limit switch *2	L/LL	See P.353					
Non-motor end specification	NM	See P.353					
Guide with ball-retaining mechanism *3	RT	See P.354					

 *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information.

* To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	60W/4mm

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

	(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).
	(Note 2) The cable length is the length between the X-axis connector box and the controller.
\triangle	The standard lengths are 3m and 5m, but other lengths can also be specified
	in meters.
Notes	The maximum length is 15m.
	(Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The

payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

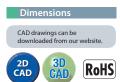
■GF□HB1L							
		Y-axis stroke					
		300~900					
	100						
	150 au 200						
e							
r k	250						
is st	300	14.0					
Z-axis stroke	350						
7	400						
	450						
	500						

Maximum Speed by Stroke (mm/s) (Note 4)

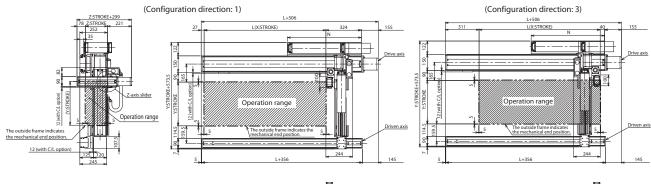
■GF□HB1L

	100~300	300~500	550~700	750~800	850~900	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis			-			1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	-	12	200	860	695														
Z-axis	2	40								_									

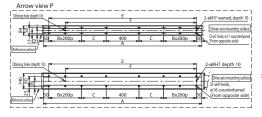
ICSB3 [ICSPB3]-GF HB1L-CT-CT (Cable track specification)

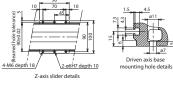


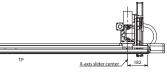
* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

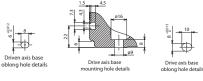














(93.5



X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514
A	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
В	1	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3
C	225	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575
D	12	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20
E	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750
F	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375

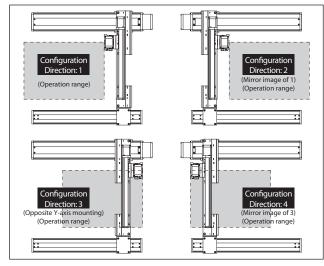
ICSB3				Precision	±10µm Stadard ±5µm	000	-Y-Z axis XYBG+ZB (Y Side Gantry Z Base Mount	Speed	X: Lg (400W) Y: Md (200W) Z: Md (100W)	
Model Specificati Items	ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis specification	GF HB2 Type Refer to Model Specification table below	WA Constraints Co	n Refer to 30 Options n table 90	? Options 0:900mm table		to T2: SCON ns SSEL e XSEL-P/Q	Cable Length 3L: 3m 5L: 5m L: Specified 6 length	Y-axis - Z-axis Cable Management Refer to Explanation d of Model Designations below	

Model Specification	* Items in brackets [] are for the High-Precision Specification.
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XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GF1HB2M-①-23-45-67-T2-8-9
1	L	ICSB3[ICSPB3]-GF1HB2L-1]-23-43-67-T2-8-9
2	М	ICSB3[ICSPB3]-GF2HB2M-①-23-465-67-T2-6-9
2	L	ICSB3[ICSPB3]-GF2HB2L-1]-23-43-67-T2-8-9
3	М	ICSB3[ICSPB3]-GF3HB2M-①-23-465-67-T2-6-9
2	L	ICSB3[ICSPB3]-GF3HB2L-1]-23-43-67-T2-8-9
4	М	ICSB3[ICSPB3]-GF4HB2M-①-23-465-67-T2-6-9
4	L	ICSB3[ICSPB3]-GF4HB2L-D-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of []] through []] in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.





Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXMX-①-400-20-②-T2-①-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM04-N-0-0-2	—
Y-axis	ISB[ISPB]-MXM-①-200-20-④-T2-①-⑤	\rightarrow Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-1-100-10-6-T2-11-7	→ Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names. Note that the strokes are indicated in mm (millimeters). * Lead is specified with ⑧ in the above model names. 10: For Z-axis Medium Speed type

5: For Z-axis Low Speed type

Cable exit direction is specified with (1) in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	100: 1000mm 2 250: 2500mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm 2 90: 900mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 50: 500mm
0	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:⊡m
9	Y-axis - Z-axis Cable Management	CT-CT: Cable track - Cable track

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number.

When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page								
X-axis cable exit direction	*	See P.11, P.353								
AQ seal (standard equipment)	AQ	See P.353								
Brake (equipped as standard on Z-axis) *1	В	See P.353								
Creep sensor *2	C/CL	See P.353								
Home limit switch *2	L/LL	See P.353								
Non-motor end specification	NM	See P.353								
Guide with ball-retaining mechanism *3	RT	See P.354								

 The Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information.

3 Cannot be selected for High-Precision Specification.
 * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol.
 Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	100W/10mm (M), 5mm (L)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters). (Note 2) The cable length is the length between the X-axis connector box and the controller. The standard lengths are 3m and 5m, but other lengths can also be specified A Notes in meters. The maximum length is 15m. (Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

GF□HB2M

	Y-axis stroke				_	Y-axis stroke								
		300~900				300~700	750	800	850	900				
	100				100		20.0	20.0	18.9	16.8				
	150				150	20.0	20.0	20.0	18.3	16.2				
e	200			e	200		20.0	20.0	17.7	15.6				
stroke	250			stroke	250		20.0	19.4	17.0	14.9				
s st	300	10.0		s st	300		20.0	18.8	16.4	14.3				
-axis	350			-axis	350		20.0	18.1	15.7	13.6				
Й	400			Ż	400		20.0	17.5	15.1	13.0				
	450				450		19.4	16.9	14.5	12.4				
	500				500		18.8	16.3	13.9	11.8				

695

860

GF□HB2L

Maximum Speed by Stroke (mm/s) (Note 4)

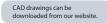
■GF□HB2M

	100~300	300~500	550~700	750~800	850~900	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	-				1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340	
Y-axis	—	12	00	860	695							_							
Z-axis	600																		
■GF□HB	■GF□HB2L																		
	100~300	300~500	550~700	750~800	850~900	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	X-axis —				1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340	

Y-axis 1200 300

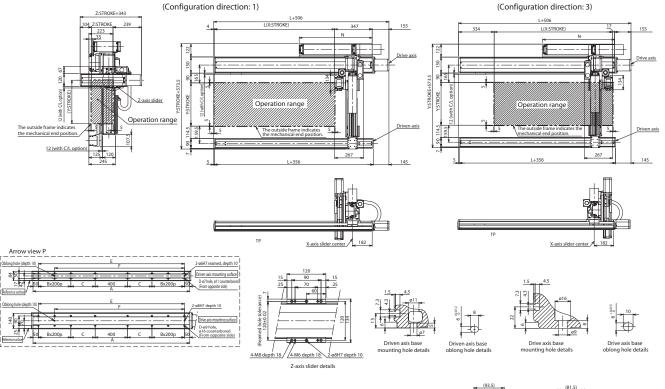
ICSB3 [ICSPB3]-GF HB2 -CT-CT (Cable track specification)

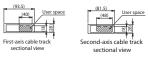






* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.





(38)	
xis cable tra	ick
onal view	

X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514
A	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
В	1	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3
C	225	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575
D	12	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20
E	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750
F	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375

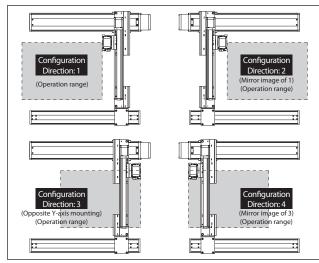
ICSB 3	B-GF	B	3		±1	Oµm I Standard	Battery-	X-Y-Z	XYBG+ZB IY Side Gantry	High Speed	X: Lg (400W) Y: Md (200W)	
ICSPE				High-Preci Specificat			bsolute	3-axis	Z Base Mount)		Z: Md (200W)	
Model Specificati Items	ON Series ICSB3: Standard 3-axis specification ICSPB3: High	GF HB3 Type Refer to Model Specification	Encoder Type WA: Battery-less 10 Absolute	00: 1000mm Re 2 Op	Deption Y-axis Stro fer to 30: 300mn ptions 2 able 90: 900mn	Refer to 1 Options	10:100mm F	option	T2 — Applicable Controllers T2: SCON SSEL XSEL-P/O	Cable Length 3L: 3m 5L: 5m □L: Specifie	Y-axis - Z-axis Cable Management Refer to Explanation	
	precision 3-axis specification	table below	(Ev	very 100mm) be	elow. (Every 50mn	n) below. (I	Every 50mm)	below.	XSEL-RA/SA* *Coming soon	length	Designations below	



XY configuration direction *1	Z-axis speed type *2	Model
	н	ICSB3[ICSPB3]-GF1HB3H-①-23-45-67-T2-8-9
1	м	ICSB3[ICSPB3]-GF1HB3M-1-23-46-67-T2-8-9
	L	ICSB3[ICSPB3]-GF1HB3L-①-② ③-④ ⑤-⑥ ⑦-T2-⑧-⑨
	Н	ICSB3[ICSPB3]-GF2HB3H-D-23-45-67-T2-8-9
2	м	ICSB3[ICSPB3]-GF2HB3M-①-② ③-④ ⑤-⑥ ⑦-T2-⑧-⑨
	L	ICSB3[ICSPB3]-GF2HB3L-D-23-45-67-T2-8-9
	н	ICSB3[ICSPB3]-GF3HB3H-①-23-45-67-T2-8-9
3	м	ICSB3[ICSPB3]-GF3HB3M-①-②③-④⑤-⑥⑦-T2-⑧-⑨
	L	ICSB3[ICSPB3]-GF3HB3L-①-②③-④⑤-⑥⑦-T2-⑧-⑨
	н	ICSB3[ICSPB3]-GF4HB3H-D-23-45-67-T2-8-9
4	М	ICSB3[ICSPB3]-GF4HB3M-①-②③-④⑤-⑥⑦-T2-⑧-⑨
	L	ICSB3[ICSPB3]-GF4HB3L-1-23-65-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of [] through [] in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis	Config	guration	1

* Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXMX-①-400-20-②-T2-①-③	\rightarrow Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM04-N-0-0-2	—
Y-axis	ISB[ISPB]-MXM-1-200-20-4-T2-1-5	\rightarrow Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-1-200-10-6-T2-11-7	\rightarrow Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names. Note that the strokes are indicated in mm (millimeters). * Lead is specified with ⑧ in the above model names. 20: For Z-axis Heldium Speed type 10: For Z-axis Medium Speed type 5: For Z avis Law Send turner.

5: For Z-axis Low Speed type

Cable exit direction is specified with in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	100: 1000mm 2 250: 2500mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm 2 90: 900mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 50: 500mm
0	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-CT: Cable track - Cable track

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number.

When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification	NM	See P.353
Guide with ball-retaining mechanism *3	RT	See P.354

 The Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information.

3 Cannot be selected for High-Precision Specification.
 * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol.
 Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	200W/20mm (H), 10mm (M), 5mm (L)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters). (Note 2) The cable length is the length between the X-axis connector box and the controller. A Notes The standard lengths are 3m and 5m, but other lengths can also be specified in meters.

The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

Payloa	a d (kg) (No	ote 3)																						
■GF□HB	33H		GF	НВЗМ						G	F□HB	3L												
	Y-axis st	roke				Y-axis strok	2				_						Y	-axis str	oke					
	300~9	00		3	00~700	750 8	00 85	900				300	350	400	450	500	550	600	650	700	750	800	850	900
100				100		20.0 2	0.0 18.	4 16.3			100	31.8	31.4	31.1	30.7	30.3	29.9	29.5	29.1	26.1	23.3	20.0	18.4	16.3
150				150		20.0 2	0.0 17.	7 15.6			150	31.1	30.7	30.4	30.0	29.6	29.2	28.8	28.4	25.4	22.6	20.1	17.7	15.6
ي 200			ي ا	200		20.0 1	9.5 17.	I 15.0		e	200	30.5	30.1	29.8	29.4	29.0	28.6	28.2	27.8	24.8	22.0	19.5	17.1	15.0
250			stroke	250		20.0 1	8.8 16.	4 14.3		trok	250	29.8	29.4	29.1	28.7	28.3	27.9	27.5	27.1	24.1	21.3	18.8	16.4	14.3
300 IS	10.0)	<u> </u>	300	20.0		8.2 15.			-axis stroke	300	29.2	28.8	28.5	28.1	27.7	27.3	26.9	26.5	23.5	20.7	18.2	15.8	13.7
250 300 350	_		NI -	350			7.6 15.			Z-ax	350	28.6	28.2	27.9	27.5	27.1	26.7	26.3	25.9	22.9	20.1	17.6	15.2	13.1
400	_			400			7.0 14.		_	14	400	28.0	27.6	27.3	26.9	26.5	26.1	25.7	25.3	22.3	19.5	17.0	14.6	12.5
450	_			450			6.3 13.		_		450	27.3	26.9	26.6	26.2	25.8	25.4	25.0	24.6	21.6	18.8	16.3	13.9	11.8
500				500		18.2 1	5.7 13.	3 11.2			500	26.7	26.3	26.0	25.6	25.2	24.8	24.4	24.0	21.0	18.2	15.7	13.3	11.2
																						_		
	100~300	300~500	550~700	750~800	850~900	1,000~1,200		1400	1500			1700	1800	1900	2000	_	_		2300	2400	2500			
X-axis			-			1200	1150	1000	950		830	740	650	590	540	49	0 4	140	410	370	340	_		
Y-axis	-		200	860	695								_											
Z-axis	120	00									_													
■GF□HB	33M																							
	100~300	300~500	550~700	750~800	850~900	1,000~1,200	1300	1400	1500) '	1600	1700	1800	1900	2000	210	0 2	200	2300	2400	2500			
X-axis			_			1200	1150	1000	950		830	740	650	590	540	49	0 4	140	410	370	340	7		
Y-axis	—	12	200	860	695								—											
Z-axis	60	10									—													
■GF□HB	33L																							
	100~300	300~500	550~700	750~800	850~900	1,000~1,200	1300	1400	1500) '	1600	1700	1800	1900	2000	210	0 2	200	2300	2400	2500			
X-axis			_			1200	1150	1000	950		830	740	650	590	540	49	0 4	140	410	370	340			

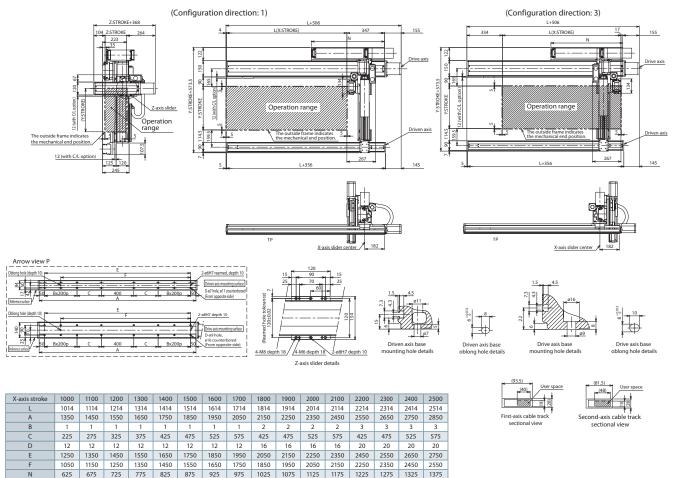
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ICSB3 [ICSPB3]-GF HB3 -CT-CT (Cable track specification)



* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.



ICSB3	-GB [∃HS	1	±10µm	Battery- less		High Speed Y: Sml (60W)	Ω
ICSPB ■ Model				ISION I High Precision	Absolute 3-av	T2 Slider)	Type Z: Sml (60W)	
Specification ltems	CSB3: Standard 3-axis specification ICSPB3: High precision 3-axis specification	Type	Encoder X-axis Stroke/C Type X-axis Stroke/C WA: Battery-less 10: 100mm Re Absolute 2 0 100: 1000mm t	Option Y-axis Stroke/Option efer to 30:300mm Refer to ptions a Options table 60:600mm table eleow. (Every 50mm) below.		T2: SCON	Cable Yaxis-Zaxis Cable Length Management 3L: 3m 5L: 5m Refer to Explanation IL: Specified of Model length Designations below	

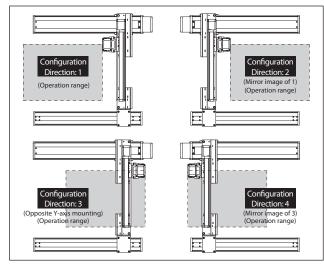


XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GB1HS1M-①-23-45-67-T2-8-9
I	L	ICSB3[ICSPB3]-GB1HS1L-1]-23-43-67-T2-8-9
2	М	ICSB3[ICSPB3]-GB2HS1M-①-23-46-67-T2-6-9
2	L	ICSB3[ICSPB3]-GB2HS1L-1]-23-43-67-T2-8-9
3	М	ICSB3[ICSPB3]-GB3HS1M-①-23-45-67-T2-8-9
5	L	ICSB3[ICSPB3]-GB3HS1L-1]-23-43-67-T2-8-9
4	М	ICSB3[ICSPB3]-GB4HS1M-①-23-45-67-T2-8-9
4	L	ICSB3[ICSPB3]-GB4HS1L-①-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ⑨ in the model names above

*2 The payload and the max speed may vary depending on the type of Z-axis.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

	Name of axis	Model	Reference page
	X-axis (Drive axis)	ISB[ISPB]-MXM-①-100-20-②-T2-①-③	\rightarrow Please contact IAI for more details
2	K-axis (Driven axis)	ISB-SXM01-N-0-0-2	-
	Y-axis	ISB[ISPB]-SXM-①-60-16-④-T2-①-⑤	\rightarrow Please contact IAI for more details
	Z-axis	ISB[ISPB]-SXM-①-60-⑩-⑥-T2-①-⑦	\rightarrow Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names. Note that the strokes are indicated in mm (millimeters). * Lead is specified with ⑧ in the above model names. 8: For Z-axis Medium Speed type

4: For Z-axis Low Speed type

* Cable exit direction is specified with [1] in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	10: 100mm 2 100: 1000mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm 2 60: 600mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 30: 300mm
0	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number.

When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353
Guide with ball-retaining mechanism *4	RT	See P.354

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
*2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the

direction, but the creep sensor is specified in the model name as "C" and the nome limit switch as "L" regardless of I mounting position. *3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM). To set the Z-axis descent position as home, remove the non-motor end (NM) designation. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment. *4 Cannot be selected for High-Precision Specification.

* To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	100W/20mm
Y-axis motor output/lead	60W/16mm
Z-axis motor output/lead	60W/8mm (M), 4mm (L)

Applicable Controllers

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Contact IAI. The controller for this system needs to be purchased/prepared separately.

	(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).
	(Note 2) The cable length is the length between the X-axis connector box and the controller.
\wedge	The standard lengths are 3m and 5m, but other lengths can also be specified in meters.
Votes	The maximum length is 15m.
	(Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the

acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

■GB□HS1M

100 150

200

250 300

Dimensions

150

200

250

300

850 900 900 950 950 1000 1000

900

950

950 950 1000 1000 1050 1050

1100 1100

1000 1000 1050 1050

Z-axis stroke

GB⊟HS1L

				١	'-axis strok	e		
		300	350	400	450	500	550	600
a,	100	8.0	7.9	7.6	7.2	6.9	6.5	6.2
stroke	150	7.6	7.6	7.3	6.9	6.6	6.1	5.8
s st	200	7.2	7.2	6.9	6.5	6.2	5.8	5.5
-axis	250	6.9	6.9	6.6	6.1	5.8	5.4	5.1
Ň	300	6.6	6.6	6.3	5.9	5.6	5.2	4.8

Maximum Speed by Stroke (mm/s) (Note 4)

Y-axis stroke 300~600

43

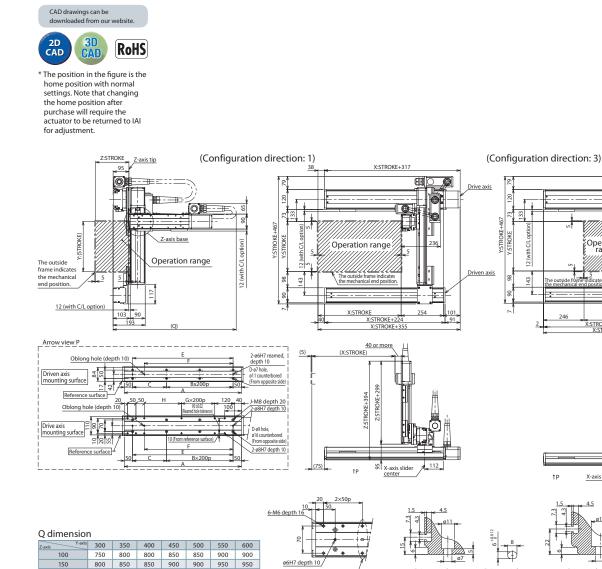
3.9

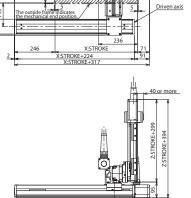
3.1

2.8

■GB□H	51M							∎GB⊟HS	1L					
	100~300	300~600	650~700	750~800	850~900	950~1000			100~300	300~600	650~700	750~800	850~900	950~1000
X-axis		1200 860 695 570 X-axis 1200				860 695 570				860	695	570		
Y-axis	-	960		<u> </u>				Y-axis	-	960		-	_	
Z-axis	480		_					Z-axis	240			-		

ICSB3 [ICSPB3]-GB HS1 -SC-SC (Self-standing cable specification)





30 (X-axis base to Z-axis base mounting surface)

8B

Operation range

,101

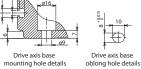
Drive axis

tΡ X-axis slider center 1,112

6 40012 8 40012	
Driven axis base	Drive axis
oblong hole details	mounting ho

Driven axis base

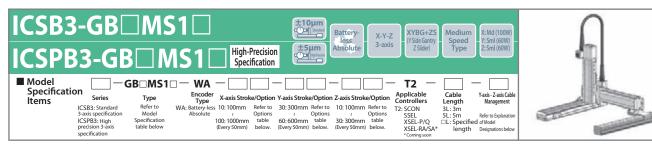
mounting hole details



X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
В	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5
C	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	204	254	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104
F	134	184	234	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4
н	24	74	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18

No M6 holes (2 locations) at 100st

Z-axis base details

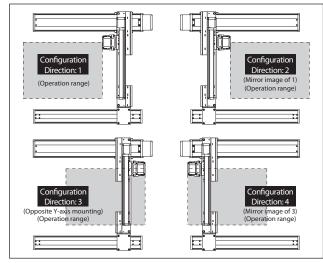


Model Specification	* Items in brackets [] are for the High-Precision Specification.
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XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GB1MS1M-1]-2] 3-4] 5-6] 7-T2-8-9
1	L	ICSB3[ICSPB3]-GB1MS1L-1-23-45-67-T2-8-9
2	М	ICSB3[ICSPB3]-GB2MS1M-①-②③-④⑤-⑥⑦-T2-⑧-⑨
2	L	ICSB3[ICSPB3]-GB2MS1L-1-23-45-67-T2-8-9
3	М	ICSB3[ICSPB3]-GB3MS1M-1]-2] 3-4] 5-6] 7-T2-8-9
3	L	ICSB3[ICSPB3]-GB3MS1L-1)-23-45-67-T2-8-9
4	М	ICSB3[ICSPB3]-GB4MS1M-1]-2] 3-4] 5-6] 7-T2-8-9
4	L	ICSB3[ICSPB3]-GB4MS1L-1-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.





Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXM-1-100-10-2-T2-1-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM01-N-0-0-2	—
Y-axis	ISB[ISPB]-SXM-①-60-8-④-T2-11-⑤	\rightarrow Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-①-60-⑩-⑥-T2-①-⑦	\rightarrow Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names. Note that the strokes are indicated in mm (millimeters). * Lead is specified with ⑧in the above model names. 8: For Z-axis Medium Speed type

4: For Z-axis Low Speed type

Cable exit direction is specified with (1) in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	10: 100mm 2 100: 1000mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm 2 60: 600mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 30: 300mm
0	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number.

When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353
Guide with ball-retaining mechanism *4	RT	See P.354

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
*2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position Please refer to P.11 for more information.

Please refer to P.11 for more information. *3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM). To set the Z-axis descent position as home, remove the non-motor end (NM) designation. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment. *4 Cannot be selected for High-Precision Specification. * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	100W/10mm
Y-axis motor output/lead	60W/8mm
Z-axis motor output/lead	60W/8mm (M), 4mm (L)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters). (Note 2) The cable length is the length between the X-axis connector box and the controller. The standard lengths are 3m and 5m, but other lengths can also be specified <u>Motes</u> in meters. The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

GB□MS1M

GB□MS1M ■GB□MS1L					51L	
Y-axis stroke					_	Y-axis stroke
300~600		300~600				300~600
a	100	4.3		a	100	11.3
stroke	150	3.9		roke	150	10.9
is st	200	3.5		is str	200	10.5
Z-axis	250	3.1		Z-axi	250	10.1
	300	2.8			300	9.8

Maximum Speed by Stroke (mm/s) (Note 4)

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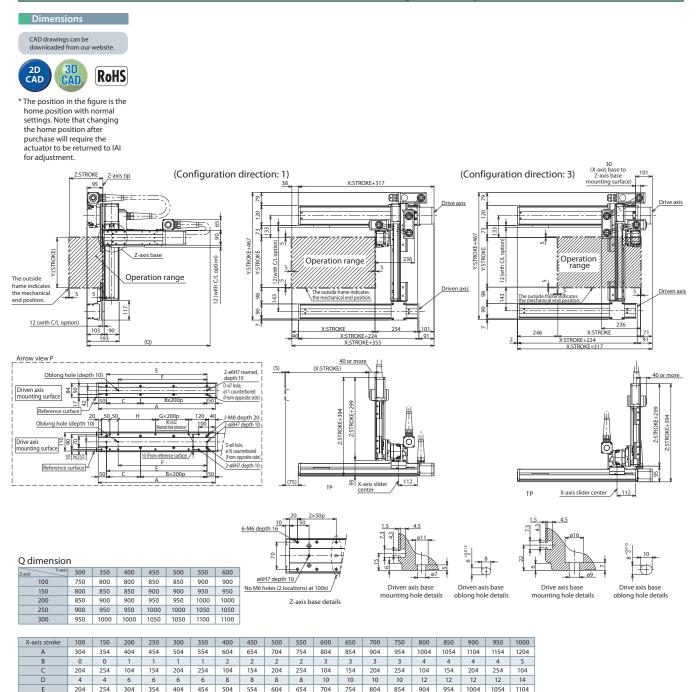
184 234

284 334

174 224

■GB□MS1M						■GB□MS	51L						
	100~300	300~600	650~700	750~800	850~900	950~1000		100~300	300~600	650~700	750~800	850~900	950~1000
X-axis		600		430 345 280		X-axis		600		430	345	280	
Y-axis	-	480		-	_		Y-axis	-	480		-	_	
Z-axis	480			-			Z-axis	240			-		

ICSB3 [ICSPB3]-GB MS1 -SC-SC (Self-standing cable specification)



634 684

124 174

 984 1034

274 124

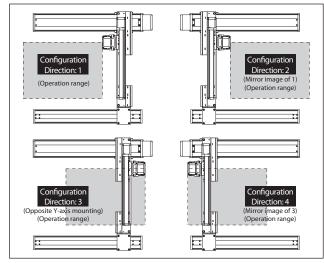
ICSB 3	8-GC [∃HS	1		±10µm Standard		Y-Z (Y Side Gantry	High Speed	X: Md (200W) Y: Md (100W)	Ω
ICSPE				High-Pr Specifi	±5µm	Absolute 3-	axis Z Slider)	Туре	Z: Sml (60W)	
Model Specificati Items	ON Series ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis specification	GC HS1 Type Refer to Model Specification table below	WA: Battery-less 1 Absolute	X-axis Strok	Y-axis Stroke/Option 30: 300mm Refer to 2 Options 70: 700mm table (Every 50mm) below.	-	to T2: SCON ns SSEL XSEL-P/Q	Cable Length 3L: 3m 5L: 5m □L: Specifie length		



XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GC1HS1M-①-23-46-67-T2-8-9
1	L	ICSB3[ICSPB3]-GC1HS1L-1-23-45-67-T2-8-9
2	М	ICSB3[ICSPB3]-GC2HS1M-①-23-46-67-T2-8-9
2	L	ICSB3[ICSPB3]-GC2HS1L-1]-23-43-67-T2-8-9
3	М	ICSB3[ICSPB3]-GC3HS1M-①-23-46-67-T2-8-9
5	L	ICSB3[ICSPB3]-GC3HS1L-1]-23-45-67-T2-8-9
4	М	ICSB3[ICSPB3]-GC4HS1M-①-23-05-67-T2-8-9
4	L	ICSB3[ICSPB3]-GC4HS1L-①-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of [] through [] in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.





Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXM-1-200-20-2-12-11-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM01-N-0-0-2	-
Y-axis	ISB[ISPB]-MXM-①-100-20-④-T2-①-⑤	\rightarrow Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-1-60-10-6-T2-11-7	→ Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names. Note that the strokes are indicated in mm (millimeters). * Lead is specified with ⑧ in the above model names. 8: For Z-axis Medium Speed type

4: For Z-axis Low Speed type

* Cable exit direction is specified with 🕕 in the above model names. Please refer to P.11 for the exit directions.

Explanation	of Model	Designations
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No.	Description	Notation					
1	Encoder type	WA: Battery-less Absolute					
2	X-axis stroke (Note 1)	10: 100mm 2 100: 1000mm					
3	X-axis option	Refer to Options table below.					
4	Y-axis stroke (Note 1)	30: 300mm 2 70: 700mm					
5	Y-axis option	Refer to Options table below.					
6	Z-axis stroke (Note 1)	10: 100mm 2 40: 400mm					
7	Z-axis option	Refer to Options table below.					
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m					
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable					

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number.

When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353
Guide with ball-retaining mechanism *4	RT	See P.354

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
*2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as *C" and the home limit switch as *L" regardless of the mounting position.
Please refer to P.11 for more information.

Please refer to P.11 for more information. *3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM). To set the Z-axis descent position as home, remove the non-motor end (NM) designation. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment. *4 Cannot be selected for High-Precision Specification. * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

common specifica	tions in brackets [] are for the high riceision specification.				
Drive system	Ball screw, rolled C10 [equivalent to rolled C5]				
Positioning repeatability	±0.01mm [±0.005mm]				
Lost motion 0.05mm [0.02mm] or less					
Guide	Integrated with base				
Base	Material: Aluminum with white alumite treatment				
X-axis motor output/lead	200W/20mm				
Y-axis motor output/lead	100W/20mm				
Z-axis motor output/lead	60W/8mm (M), 4mm (L)				

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters). (Note 2) The cable length is the length between the X-axis connector box and the controller. The standard lengths are 3m and 5m, but other lengths can also be specified in meters. <u>A</u> Notes

The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

400

HS	1M	G	с□нѕ	1L
	Y-axis stroke		_	Y-axis stroke
	300~700			300~700
)	4.3		100	11.3
)	3.9	a	150	10.9
)	3.5	Z-axis stroke	200	10.5
)	3.1	s st	250	10.1
)	2.8	-axi	300	9.8
)	2.4	Z	350	9.4
2	2.1		400	9.1

Maximum Speed by Stroke (mm/s) (Note 4)

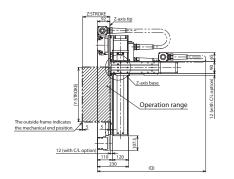
	100~300	300~400	450~700	750~800	850~900	950~1000			
X-axis		1200			695	570			
Y-axis	-	12	00		-				
Z-axis	4	80		-	-				

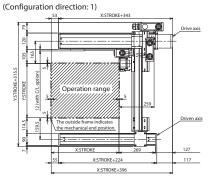
■GC□HS	1L						
	100~300	300~400	450~700	750~800	850~900	950~1000	
X-axis		1200		860	695	570	
Y-axis	—	12	00	-			
Z-axis	24	10		-	_		

ICSB3 [ICSPB3]-GC HS1-SC-SC (Self-standing cable specification)

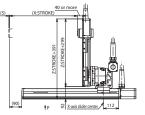


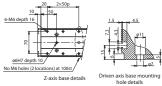
^b The position in the figure is the home position with normal settings. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

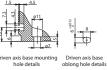


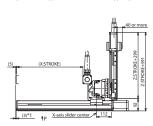


Arrow view P 1. 1 D-ø ø11 2-ø8H7 de J-M8 depth 20 100 2-ø8H7 depth 10 Drive axis opposite side









(Configuration direction: 3)

(X-axis base end surface to Z-axis base mo

Operation

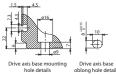
range

X:STROKE+22

X:STR

ting surface) 🎽

*1 Amount of Y-axis connector box protrusion when X-axis moves to the mechanical end position



Q dimension

	Y-axis	300	350	400	450	500	550	600	650	700
	100	800	800	800	850	850	900	900	950	950
	150	850	850	850	900	900	950	950	1000	1000
	200	900	900	900	950	950	1000	1000	1050	1050
	250	950	950	950	1000	1000	1050	1050	1100	1100
	300	1000	1000	1000	1050	1050	1100	1100	1150	1150
	350	1050	1050	1050	1100	1100	1150	1150	1200	1200
	400	1100	1100	1100	1150	1150	1200	1200	1250	1250
_										

X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
В	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5
C	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	204	254	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104
F	134	184	234	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4
Н	24	74	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18

Drive axis base blong hole details

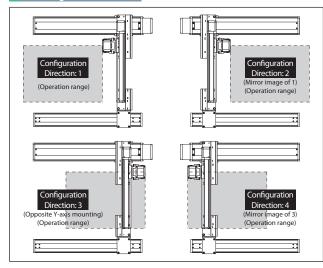
ICSB	B-GC [∃HS	3M		±10µm Standard	Battery- less X-Y		High Speed	X: Md (200W)	Ω
				 recision ication	±5µm	Absolute 3-a	Z Slider)	Туре	Z: Md (200W)	
Specificati ltems	Series ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis specification	GC HS3I Type Refer to Model Specification table below	Encoder Type WA: Battery-less Absolute			40:400mm table	Applicable Controllers T2: SCON SSEL XSEL-P/Q XSEL-RA/SA*	Cable Length 3L: 3m 5L: 5m L: Specifie length		



XY configuration direction *1	Z-axis speed type	Model
1	м	ICSB3[ICSPB3]-GC1HS3M-①-23-46-67-T2-8-9
2	М	ICSB3[ICSPB3]-GC2HS3M-1-23-46-67-T2-8-9
3	М	ICSB3[ICSPB3]-GC3HS3M-①-23-45-67-T2-8-9
4	М	ICSB3[ICSPB3]-GC4HS3M-①-23-465-67-T2-6-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of 🗊 through 🗊 in the model names above.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXM-1-200-20-2-12-10-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM01-N-0-0-2	—
Y-axis	ISB[ISPB]-MXM-1-100-20-4-T2-10-5	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-①-200-10-⑥-T2-⑩-⑦	→ Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names. Note that the strokes are indicated in mm (millimeters). * Cable exit direction is specified with ll lo in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	10: 100mm 2 100: 1000mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm ² 70: 700mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 40: 400mm
0	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number.

Туре	Model	Reference page		
X-axis cable exit direction	*	See P.11, P.353		
AQ seal (standard equipment)	AQ	See P.353		
Brake (equipped as standard on Z-axis) *1	В	See P.353		
Creep sensor *2	C/CL	See P.353		
Home limit switch *2	L/LL	See P.353		
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353		
Guide with ball-retaining mechanism *4	RT	See P.354		

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
*2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information.

Please refer to P.11 for more information. *3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM). To set the Z-axis descent position as home, remove the non-motor end (NM) designation. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment. *4 Cannot be selected for High-Precision Specification. * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]		
Positioning repeatability	±0.01mm [±0.005mm]		
Lost motion	0.05mm [0.02mm] or less		
Guide	Integrated with base		
Base	Material: Aluminum with white alumite treatment		
X-axis motor output/lead	200W/20mm		
Y-axis motor output/lead	100W/20mm		
Z-axis motor output/lead	200W/10mm		

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

	(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).
	(Note 2) The cable length is the length between the X-axis connector box and the controller.
A Notes	The standard lengths are 3m and 5m, but other lengths can also be specified in meters. The maximum length is 15m.
	(Note 3) The rated acceleration is 0.4G. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced.

(Note 4) Please note that a longer stroke will result in a lower max speed.

■GC□HS3M

	_		Y-axis stroke											
		300	350	400	450	500	550	600	650	700				
	100	13.1	13.1	13.1	13.0	13.0	13.0	13.0	12.9	11.9				
۵	150	12.5	12.4	12.4	12.4	12.4	12.4	12.3	12.3	11.2				
stroke	200	11.9	119	11.9	11.9	11.8	11.8	11.8	11.8	10.6				
s st	250	11.3	11.3	11.3	11.2	11.2	11.2	11.2	11.1	9.9				
-axis	300	10.8	10.7	10.7	10.7	10.7	10.6	10.6	10.6	9.3				
Ż-	350	10.2	10.2	10.2	10.1	10.1	10.1	10.1	10.1	8.7				
	400	9.7	9.7	9.6	9.6	9.6	9.6	9.5	9.3	8.1				

Maximum Speed by Stroke (mm/s) (Note 4)

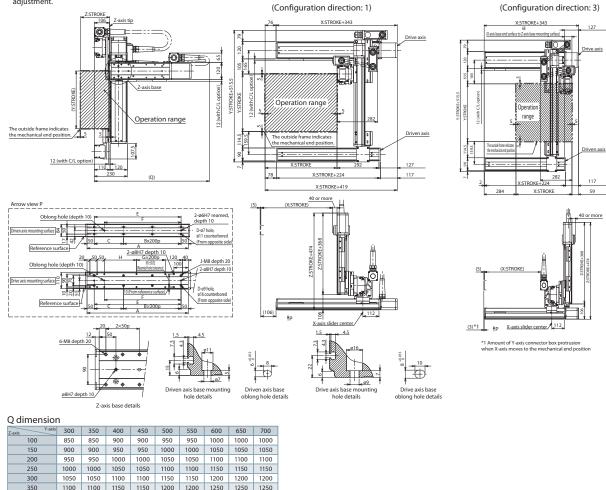
■GC□HS3M

	100~300	300~400	450~700	750~800	850~900	950~1000	
X-axis		1200		860	695	570	
Y-axis	—	12	00	-			
Z-axis	60	00		-	-		

ICSB3 [ICSPB3]-GC HS3M-SC-SC (Self-standing cable specification)



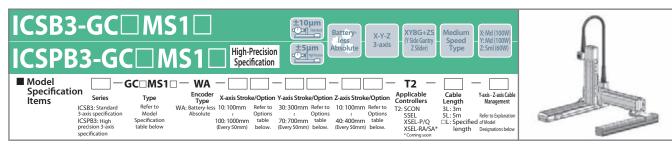
*The position in the figure is the home position with normal settings. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.



 350
 1100
 1100
 1150
 1200
 1200
 1250
 1250

 400
 1150
 1150
 1200
 1200
 1250
 1300
 1300

X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
В	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5
C	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	204	254	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104
F	134	184	234	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4
Н	24	74	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18

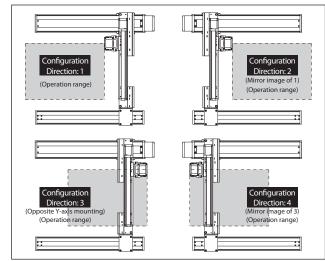


Model Specification	* Items in brackets [] are for the High-Precision Specification.
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XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GC1MS1M-1]-2]3-4]5-6]7-T2-6-9
I	L	ICSB3[ICSPB3]-GC1MS1L-D-23-45-67-T2-8-9
2	М	ICSB3[ICSPB3]-GC2MS1M-1]-23-45-67-T2-8-9
2	L	ICSB3[ICSPB3]-GC2MS1L-1-23-45-67-T2-8-9
3	М	ICSB3[ICSPB3]-GC3MS1M-1]-23-46-67-T2-8-9
3	L	ICSB3[ICSPB3]-GC3MS1L-1-23-45-67-T2-8-9
4	М	ICSB3[ICSPB3]-GC4MS1M-1]-2] 3-4] 5-6] 7-T2-8-9
	L	ICSB3[ICSPB3]-GC4MS1L-D-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of [1] through [2] in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.





Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXM-1-100-10-2-T2-1-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM01-N-0-0-2	—
Y-axis	ISB[ISPB]-MXM-①-100-10-④-T2-①-⑤	\rightarrow Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-1-60-10-6-T2-11-7	→ Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ⑦ in the above model names.

In the above model names. Note that the strokes are indicated in mm (millimeters). Lead is specified with [1] in the above model names. 8: For Z-axis Medium Speed type 4: For Z-axis Low Speed type

Cable exit direction is specified with 1 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	10: 100mm 2 100: 1000mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm ² 70: 700mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 40: 400mm
0	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353
Guide with ball-retaining mechanism *4	RT	See P.354

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
*2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor and home limit switch, the mounting position.
*3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM).
*3 The configuration position a fine position after purchase will require the actuator to be returned to IAI for adjustment.
*4 Cannot be selected for High-Precision Specification.
*1 To set the Z-axis descent position a fine normal setting, indicate the cable exit direction symbol.
Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	100W/10mm
Y-axis motor output/lead	100W/10mm
Z-axis motor output/lead	60W/8mm (M), 4mm (L)

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters). (Note 2) The cable length is the length between the X-axis connector box and the controller <u>A</u> Notes The standard lengths are 3m and 5m, but other lengths can also be specified in meters.

The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

Z-axis

F

н

J

184 234

74 124

284 334

384 434

174 224 274 124 174 224 274

534 584

_	MS1M

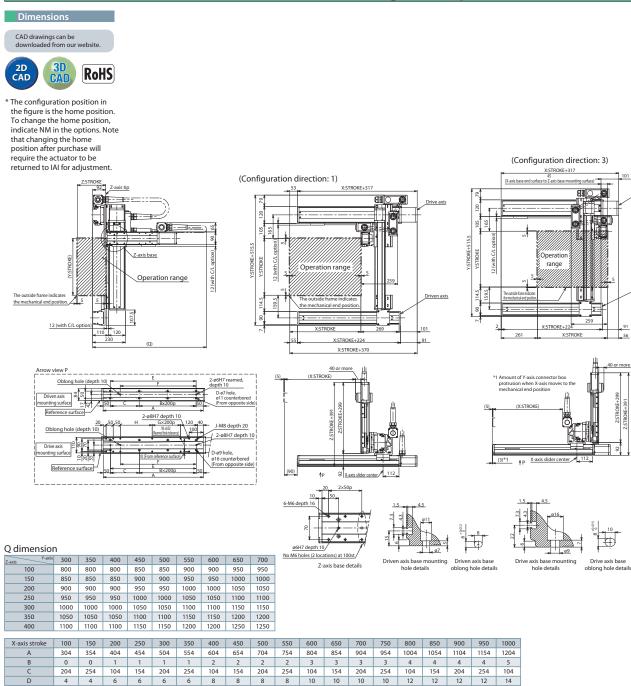
G	с⊡м	51M		G	с⊡м	51L
		Y-axis stroke				Y-axis stroke
	\sim	300~700				300~700
	100	4.3			100	11.3
۵	150	3.9		И	150	10.9
- Å	200	3.5		-axi	200	10.5
Z-axis stroke	250	3.1		is stroke	250	10.1
-axi	300	2.8			300	9.8
N	350	2.4		e	350	9.4
	400	2.1			400	9.1

Maximum Speed by Stroke (mm/s) (Note 4)

■GC□MS1M ■GC□MS1L 100~300 300~400 450~700 750~800 850~900 950~1000 100~300 300~400 450~700 750~800 850~900 950~1000 X-axis X-axis Y-axi

ICSB3 [ICSPB3]-GC MS1 -SC-SC (Self-standing cable specification)

Z-axis



634 684

124 174 224

784 834

274 124

884 934 984 1034

274 124

174 224

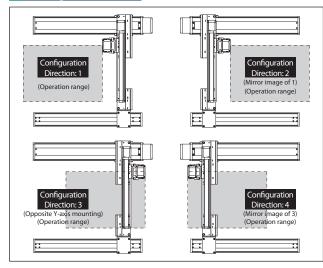
ICSB	B-GC [53M			±10µm Sardard	Battery-	X-Y-Z		Medium Speed	X: Md (100W) Y: Md (100W)	Ω
ICSPE ■ Model				High-F Speci	recision fication		Absolute	3-axis	T2 -	Туре	Z: Md (200W)	
Specificati Items	Series ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis specification	Type Refer to Model Specification table below	Encoder Type WA: Battery-less Absolute		Refer to Options	a Y-axis Stroke/Option 30: 300mm Refer to	10: 100mm ¿	Refer to Options table	Applicable Controllers T2: SCON SSEL XSEL-P/Q XSEL-RA/SA* *Coming soon	Cable Length 3L: 3m 5L: 5m L: Specifie length	Y-axis - Z-axis Cable Management Refer to Explanation d of Model Designations below	



XY Configuratior direction *1	Z-axis speed type	Model
1	М	ICSB3[ICSPB3]-GC1MS3M-1]-23-45-67-T2-8-9
2	М	ICSB3[ICSPB3]-GC2MS3M-1]-23-45-67-T2-8-9
3	М	ICSB3[ICSPB3]-GC3MS3M-1]-23-43-67-T2-8-9
4	М	ICSB3[ICSPB3]-GC4MS3M-1]-23-43-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of 11 through 19 in the model names above.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXM-1-100-10-2-T2-10-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM01-N-0-0-2	-
Y-axis	ISB[ISPB]-MXM-①-100-10-④-T2-⑩-⑤	\rightarrow Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-1-200-10-6-T2-10-0	→ Please contact IAI for more details

Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names. Note that the strokes are indicated in mm (millimeters). * Cable exit direction is specified with ⑧ in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	10: 100mm 2 100: 1000mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm ₹ 70: 700mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 40: 400mm
0	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in <u>alphabetical order</u>.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353
Guide with ball-retaining mechanism *4	RT	See P.354

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position.
 Please refer to P.11 for more information.
 *3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM). To set the Z-axis descent position as home, remove the non-motor end (NM) designation.
 Note that C-hanging the home position after purchase will require the actuator to be returned to IAI for adjustment.
 *4 Cannot be selected for Hing-Precision Specification.
 *To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol.
 Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]			
Positioning repeatability	±0.01mm [±0.005mm]			
Lost motion	0.05mm [0.02mm] or less			
Guide	Integrated with base			
Base	Material: Aluminum with white alumite treatment			
X-axis motor output/lead	100W/10mm			
Y-axis motor output/lead	100W/10mm			
Z-axis motor output/lead	200W/10mm			

Applicable Controllers

No

Contact IAI. The controller for this system needs to be purchased/prepared separately

act init. The controller for this system needs to be purchased, prepared separately.						
	(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).					
	(Note 2) The cable length is the length between the X-axis connector box and the controller. The standard lengths are 3m and 5m, but other lengths can also be specified in meters.					
otes	The maximum length is 15m. (Note 3) The rated acceleration is 0.4G. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.					

■GC□MS3M

		Y-axis stroke							
		300~400	450	500	550	600	650	700	
	100	14.3	14.3	14.3	14.3	14.3	14.0	11.9	
e	150	13.6	13.6	13.6	13.6	13.6	13.3	11.2	
stroke	200	13.0	13.0	13.0	13.0	13.0	12.7	10.6	
s st	250	12.3	12.3	12.3	12.3	12.3	12.0	9.9	
-axis	300	11.7	11.7	11.7	11.7	11.7	11.4	9.3	
Ż	350	11.1	11.1	11.1	10.9	10.9	10.3	8.7	
	400	10.5	10.4	10.1	9.8	9.6	9.3	8.1	

Maximum Speed by Stroke (mm/s) (Note 4)

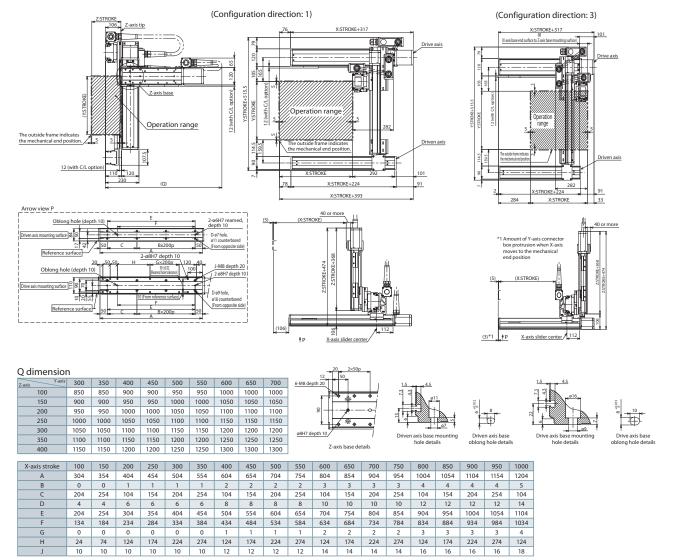
■GC□MS3M

	100~300	300~400	450~700	750~800	850~900	950~1000	
X-axis		600		430	345	280	
Y-axis	—	60	600		—		
Z-axis	6	00		-	_		

ICSB3 [ICSPB3]-GC MS3M-SC-SC (Self-standing cable specification)



* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.

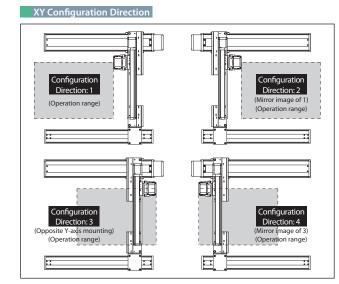


ICSB	B-GD HS	1	t10µm Battery- Lless		Ω
ICSPE	B3-GD□H	S1 High-Precision Specification	4bsolute 3-axis	ZSlider) Long Type Z:Sml (60W)	
Model Specificati Items	Series Type	Encoder X-axis Stroke/Option Y-a Type X-axis Stroke/Option Y-a WA: Battery-less 80:800mm Refer to 30 Absolute 2 Options 200: 2000mm table 70	axis Stroke/Option Z-axis Stroke/Option 0: 300mm Refer to 0: 300mm Lable 0: 700mm table 40: 400mm table 40: 400mm table 40: 400mm table	Applicable Controllers Cable Length Yavis-Zavis Cable X: SCN SEL 970 XSEL-970 L: Specified of Model XSEL-87ASA* length Designations Selow "Coming con	

Model Specification	* Items in brackets [] are for the High-Precision Specification.
---------------------	--

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GD1HS1M-①-②③-④⑤-⑥⑦-T2-⑧-⑨
'	L	ICSB3[ICSPB3]-GD1HS1L-1-23-45-67-T2-8-9
2	М	ICSB3[ICSPB3]-GD2HS1M-①-23-45-67-T2-8-9
2	L	ICSB3[ICSPB3]-GD2HS1L-1-23-45-67-T2-8-9
3	М	ICSB3[ICSPB3]-GD3HS1M-①-②③-④⑤-⑥⑦-T2-⑧-⑨
5	L	ICSB3[ICSPB3]-GD3HS1L-①-23-45-67-T2-8-9
4	М	ICSB3[ICSPB3]-GD4HS1M-1]-2] 3-4] 5-6] 7-T2-8-9
4	L	ICSB3[ICSPB3]-GD4HS1L-1)-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of []] through []] in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXMX-1-200-20-2-12-11-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM02-N-0-0-2	—
Y-axis	ISB[ISPB]-MXM-①-100-20-④-T2-①-⑤	\rightarrow Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-1]-60-10-6-T2-11-7	→ Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ⑦ in the above model names.

In the above model names. Note that the strokes are indicated in mm (millimeters). * Lead is specified with lim in the above model names. 8: For Z-axis Medium Speed type 4: For Z-axis Low Speed type

* Cable exit direction is specified with 1 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	80: 800mm ₹ 200: 2000mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm ₹ 70: 700mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 40: 400mm
7	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-SC: Cable track - Self-standing cable

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in <u>alphabetical order</u>.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353
Guide with ball-retaining mechanism *4	RT	See P.354

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details. "2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the

direction, but the creep sensor is specified in the model name as C and the normal methods as a regroup of a mounting position. Please refer to P.11 for more information. *3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM). To set the Z-axis descent position as home, remove the non-motor end (NM) designation. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment. *4 Cannot be selected for High-Precision Specification. *To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol.

Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	200W/20mm
Y-axis motor output/lead	100W/20mm
Z-axis motor output/lead	60W/8mm (M), 4mm (L)

Applicable Controllers

Notes

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters). (Note 2) The cable length is the length between the X-axis connector box and the controller. The standard lengths are 3m and 5m, but other lengths can also be specified \triangle in meters.

The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.



G	■GD□HS1M					
	_	Y-axis stroke				
	\sim	300~700				
	100	4.3				
a	150	3.9				
rok	200	3.5				
Z-axis stroke	250	3.1				
-axi	300	2.8				
Z	350	2.4				
	400	2.1				
GD HS1L						
	_	Y-axis stroke				
	\sim	300~700				

11.3 10.9

10.5 10.1 9.8

9.4

9.1

Maximum Speed by Stroke (mm/s) (Note 4)

	100~300	300~400	450~700	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
X-axis		-		1200	1100	1000	950	800	700	600	550	500	450
Y-axis	-	- 1200						—					
Z-axis	4	80						—					

GD⊡HS1L

	100~300	300~400	450~700	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
X-axis		-		1200	1100	1000	950	800	700	600	550	500	450
Y-axis	—	- 1200						_					
Z-axis	24	240						-					

ICSB3 [ICSPB3]-GD HS1 -CT-SC (Cable track - Self-standing cable specification)

Dimensions

100 150

350

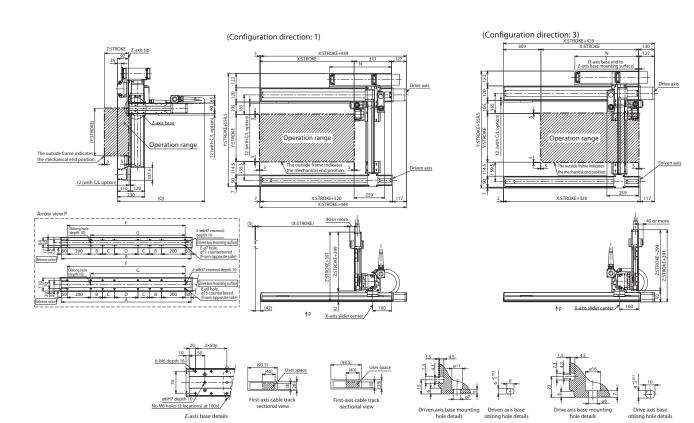
400

Z-axis stroke 200 250 300



[•] The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be

returned to IAI for adjustment.



X-axis stroke	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
A	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
В	200	200	200	250	300	350	400	450	500	550	200	200	200
C	0	0	0	0	0	0	0	0	0	0	400	450	500
D	200	300	400	400	400	400	400	400	400	400	400	400	400
E	12	12	12	12	12	12	12	12	12	12	16	16	16
F	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
G	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
N	525	575	625	675	725	775	825	875	925	975	1025	1075	1125

Q dimensio	n								
Z-axis Y-axis	300	350	400	450	500	550	600	650	700
100	800	800	800	850	850	900	900	950	950
150	850	850	850	900	900	950	950	1000	1000
200	900	900	900	950	950	1000	1000	1050	1050
250	950	950	950	1000	1000	1050	1050	1100	1100
300	1000	1000	1000	1050	1050	1100	1100	1150	1150
350	1050	1050	1050	1100	1100	1150	1150	1200	1200
400	1100	1100	1100	1150	1150	1200	1200	1250	1250

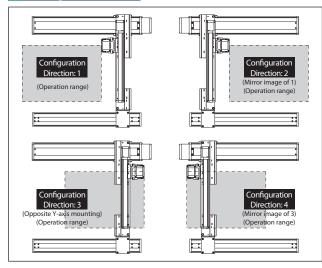
ICSB3-GD HS3M	Battery- Liess XYBG+ZS High X:Md (200W) Viside Ganty Speed Viside (Ganty Speed Viside	Ω
ICSPB3-GD HS3M High-Precision Specification	Absolute 3-axis ("Juceanity" Speed ZSilder/ Long Type Z:Md (2000)	41
I ILEIIIS I IVE IVE	Applicable Cable Yaxis -Zaxis Cable Management	
3-axis specification Model Absolute a Options ICSPB3: High Specification 200: 2000mm table 70	300mm Refer to 10: 100mm Refer to 10ptions ≀ Options SSEL SL: 5m Refer b Eplanation 700mm table 40: 400mm table XSEL-P/Q □L: Specified of Model XSEL-P/Q □L: Specified of Model XSEL-RA/SA* length Designations below *********************************	5.9

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type	Model
1	м	ICSB3[ICSPB3]-GD1HS3M-①-②③-④⑤-⑥⑦-T2-⑧-⑨
2	М	ICSB3[ICSPB3]-GD2HS3M-1]-23-45-67-T2-8-9
3	М	ICSB3[ICSPB3]-GD3HS3M-1]-2]3-4]5-6]7-T2-8-9
4	м	ICSB3[ICSPB3]-GD4HS3M-1-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of 🗊 through 🗊 in the model names above.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-MXMX-1-200-20-2-12-10-3	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM02-N-0-0-2	—
Y-axis	ISB[ISPB]-MXM-①-100-20-④-T2-⑩-⑤	\rightarrow Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-1-200-10-6-T2-10-0	\rightarrow Please contact IAI for more details

Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names. Note that the strokes are indicated in mm (millimeters). * Cable exit direction is specified with ⑧ in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	80: 800mm ₹ 200: 2000mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm ² 70: 700mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 40: 400mm
0	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-SC: Cable track - Self-standing cable

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number. When selecting multiple options, specify them in <u>alphabetical order</u>.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353
Guide with ball-retaining mechanism *4	RT	See P.354

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details. *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the

direction, but the creep sensor is specified in the model name as C and the norme infinitis written as C regioners or c mounting position. Please refer to P.11 for more information. *3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM). To set the Z-axis descent position as home, remove the non-motor end (NM) designation. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment. *4 Cannot be selected for High-Precision Specification.

* To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	200W/20mm
Y-axis motor output/lead	100W/20mm
Z-axis motor output/lead	200W/10mm

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

	(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).
	(Note 2) The cable length is the length between the X-axis connector box and the controller.
A Notes	The standard lengths are 3m and 5m, but other lengths can also be specified in meters. The maximum length is 15m.
	(Note 3) The rated acceleration is 0.4G. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced.
	(Note 4) Please note that a longer stroke will result in a lower max speed.

■GD□HS3M

			Y-axis stroke									
		300	350	400	450	500	550	600	650	700		
	100	13.1	13.1	13.1	13.0	13.0	13.0	13.0	12.9	11.9		
N	150	12.5	12.4	12.4	12.4	12.4	12.4	12.3	12.3	11.2		
-axis	200	11.9	119	11.9	11.9	11.8	11.8	11.8	11.8	10.6		
is st	250	11.3	11.3	11.3	11.2	11.2	11.2	11.2	11.1	9.9		
stroke	300	10.8	10.7	10.7	10.7	10.7	10.6	10.6	10.6	9.3		
e	350	10.2	10.2	10.2	10.1	10.1	10.1	10.1	10.1	8.7		
	400	9.7	9.7	9.6	9.6	9.6	9.6	9.5	9.3	8.1		

Maximum Speed by Stroke (mm/s) (Note 4)

■GD□HS3M

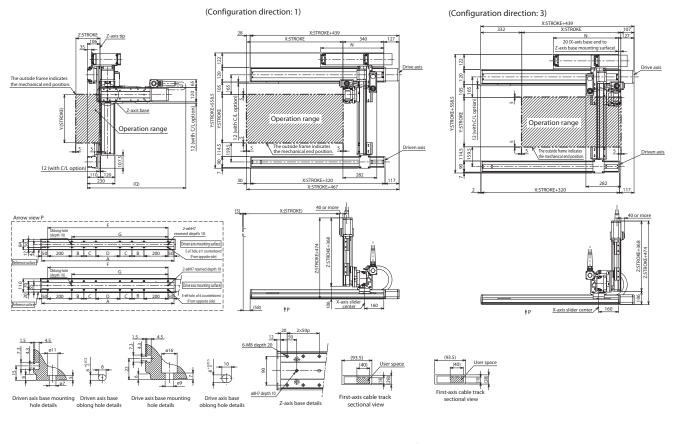
	100~300	300~400	450~700	800~1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
X-axis	-		1200	1100	1000	950	800	700	600	550	500	450	
Y-axis	-	12	00					-					
Z-axis	6	00						-					

ICSB3 [ICSPB3]-GD HS3M-CT-SC (Cable track - Self-standing cable specification)

Dimensions CAD drawings can be downloaded from our website.



* The configuration position in the figure is the home position. To change the home position, indicate NM in the options. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.



X-axis stroke	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
A	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
В	200	200	200	250	300	350	400	450	500	550	200	200	200
C	0	0	0	0	0	0	0	0	0	0	400	450	500
D	200	300	400	400	400	400	400	400	400	400	400	400	400
E	12	12	12	12	12	12	12	12	12	12	16	16	16
F	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200
G	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
N	525	575	625	675	725	775	825	875	925	975	1025	1075	1125

Q dimensior	۱								
Z-axis Y-axis	300	350	400	450	500	550	600	650	700
100	850	850	900	900	950	950	1000	1000	1000
150	900	900	950	950	1000	1000	1050	1050	1050
200	950	950	1000	1000	1050	1050	1100	1100	1100
250	1000	1000	1050	1050	1100	1100	1150	1150	1150
300	1050	1050	1100	1100	1150	1150	1200	1200	1200
350	1100	1100	1150	1150	1200	1200	1250	1250	1250
400	1150	1150	1200	1200	1250	1250	1300	1300	1300

ICSB3/ICSPB3-GD□HS3M

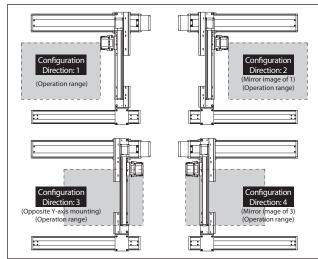
ICSB3	B-GE	∃HS		±10µm Standard	Battery- Jess 3-axi	(Y Side Gantry	High Speed Y: Md (200W)	A
Model	<u> </u>		- WA		Absolute	- T2 -	Type Z:Sml (60W)	
Items	Series ICSB3: Standard 3-axis specification ICSPB3: High precision 3-axis specification	Type Refer to Model Specification table below	iype	30: 300mm Refer to 30: 300mm Refer to 90: 900mm table		Applicable Controllers T2: SCON SSEL XSEL-P/Q XSEL-RA/SA* *Coming soon	Cable Y-axis - Z-axis Cable Length Management 3L: 3m 5L: 5m SL: Specified of Model length length Designations below	

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GE1HS1M-①-23-45-67-T2-8-9
1	L	ICSB3[ICSPB3]-GE1HS1L-1]-23-45-67-T2-8-9
2	М	ICSB3[ICSPB3]-GE2HS1M-①-23-45-67-T2-8-9
2	L	ICSB3[ICSPB3]-GE2HS1L-1]-23-45-67-T2-8-9
3	М	ICSB3[ICSPB3]-GE3HS1M-①-23-45-67-T2-8-9
5	L	ICSB3[ICSPB3]-GE3HS1L-1]-23-45-67-T2-8-9
4	М	ICSB3[ICSPB3]-GE4HS1M-①-23-45-67-T2-8-9
4	L	ICSB3[ICSPB3]-GE4HS1L-1]-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of []] through []] in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.





Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXM-①-400-20-②-T2-①-③	\rightarrow Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM03-N-0-0-2	-
Y-axis	ISB[ISPB]-MXM-①-200-20-④-T2-①-⑤	\rightarrow Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-①-60-10-6-T2-10-7	\rightarrow Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② In the above model names. Note that the strokes are indicated in mm (millimeters). * Lead is specified with ③ in the above model names. 8: For Z-axis Medium Speed type 4: For Z-axis Low Speed type

4: For Z-axis Low Speed type

Cable exit direction is specified with (1) in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	10: 100mm 2 100: 1000mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm 2 90: 900mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 40: 400mm
0	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number.

When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353
Guide with ball-retaining mechanism *4	RT	See P.354

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details. ² When selecting the creep sensor and home limits witch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mean sector and the sector secto

direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of t mounting position. *3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM). To set the Z-axis descent position as home, remove the non-motor end (NM) designation. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment. *4 Cannot be selected for High-Precision Specification.

* To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	60W/8mm (M), 4mm (L)
Applicable Control	lers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters). (Note 2) The cable length is the length between the X-axis connector box and the controller \triangle The standard lengths are 3m and 5m, but other lengths can also be specified in meters. Notes The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the

acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

128

Drive axis

Driven axis

145

40 or more

:STROKE+299

LROKE+406

Payload (kg) (Note 3)

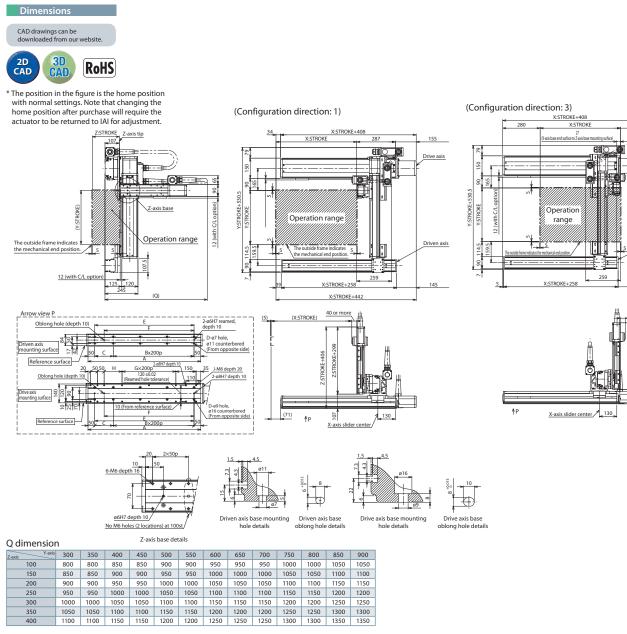
G	E⊟HS	1M		iE⊟HS
		Y-axis stroke		
		300~900		
	100	4.3		100
۵	150	3.9	a	150
2 ×	200	3.5	2 Å	200
Z-axis stroke	250	3.1	Z-axis stroke	250
-axi	300	2.8	-axi	300
И	350	2.4	И	350
	400	2.1		400

G	GE HS1L									
		Y-axis stroke								
		300~900								
	100	11.3								
e	150	10.9								
Tok	200	10.5								
Z-axis stroke	250	10.1								
-ax	300	9.8								
2	350	9.4								
	400	9.1								

Maximum Speed by Stroke (mm/s) (Note 4)

■GE□HS1M								■GE□HS1L							
	100~300	300~400	450~700	750~800	850~900	950~1000			100~300	300~400	450~700	750~800	850~900	950~1000	
X-axis	1200 920 765							X-axis		12		920	765		
Y-axis	-	- 1200 860				-		Y-axis	_	12	00	860	695	-	
Z-axis	4	480 —						Z-axis	24	40		-	-		

ICSB3 [ICSPB3]-GE HS1 -SC-SC (Self-standing cable specification)



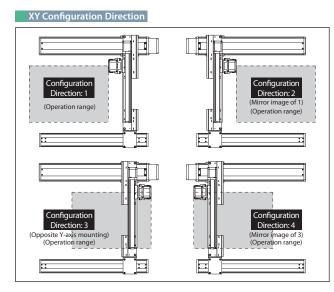
X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300
A	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238	1288	1338	1388	1438	1488	1538
В	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6
C	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16
E	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238	1288	1338	1388	1438
F	168	218	268	318	368	418	468	518	568	618	668	718	768	818	868	918	968	1018	1068	1118	1168	1218	1268	1318	1368
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
н	33	83	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20

	B-GE□H 33-GE□		±10µm ⊡isatar ±5µm Absolute X-Y-Z 3-axis		
Model Specificati Items		IS3 WA	axis Stroke/Option Z-axis Stroke/Option 3:300mm Refer to 10:100mm Refer to 0:000mm table 9:900mm table ery:50mm) below. (Every:50mm) below.	Applicable Controllers SEL -P/Q XSEL-P/Q LESL-RA/SA* Length Length SEL -Sm Refer to Explanation XSEL-P/Q L: Specified of Model XSEL-RA/SA* Length Designations below	

Model Specification	* Items in brackets [] are for the High-Precision Specification.
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XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GE1HS3M-①-23-45-67-T2-8-9
'	L	ICSB3[ICSPB3]-GE1HS3L-1]-23-45-67-T2-8-9
2	М	ICSB3[ICSPB3]-GE2HS3M-①-23-46-67-T2-6-9
2	L	ICSB3[ICSPB3]-GE2HS3L-1]-23-46-67-T2-8-9
3	М	ICSB3[ICSPB3]-GE3HS3M-①-23-45-67-T2-8-9
5	L	ICSB3[ICSPB3]-GE3HS3L-1]-2] 3-4] 5-6] 7-T2-8-9
4	М	ICSB3[ICSPB3]-GE4HS3M-D-23-45-67-T2-8-9
4	L	ICSB3[ICSPB3]-GE4HS3L-①-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of []] through []] in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page				
X-axis (Drive axis)	ISB[ISPB]-LXM-①-400-20-②-T2-①-③	→ Please contact IAI for more details				
X-axis (Driven axis)	ISB-SXM03-N-0-0-2	—				
Y-axis	ISB[ISPB]-MXM-①-200-20-④-T2-①-⑤	\rightarrow Please contact IAI for more details				
Z-axis	ISB[ISPB]-MXM-1-200-10-6-T2-11-7	\rightarrow Please contact IAI for more details				

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names. Note that the strokes are indicated in mm (millimeters). * Lead is specified with ⑧ in the above model names. 10: For Z-axis Medium Speed type

5: For Z-axis Low Speed type

* Cable exit direction is specified with (1) in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation							
1	Encoder type	WA: Battery-less Absolute							
2	X-axis stroke (Note 1)	10: 100mm 2 100: 1000mm							
3	X-axis option	Refer to Options table below.							
4	Y-axis stroke (Note 1)	30: 300mm ≀ 90: 900mm							
5	Y-axis option	Refer to Options table below.							
6	Z-axis stroke (Note 1)	10: 100mm 2 40: 400mm							
0	Z-axis option	Refer to Options table below.							
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m							
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable							

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number.

When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353
Guide with ball-retaining mechanism *4	RT	See P.354

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
*2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position.

Please refer to P.11 for more information.

Please refer to P.11 for more information. *3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM). To set the Z-axis descent position as home, remove the non-motor end (NM) designation. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment. *4 Cannot be selected for High-Precision Specification. * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]					
Positioning repeatability	±0.01mm [±0.005mm]					
Lost motion	0.05mm [0.02mm] or less					
Guide	ntegrated with base					
Base	Material: Aluminum with white alumite treatment					
X-axis motor output/lead	400W/20mm					
Y-axis motor output/lead	200W/20mm					
Z-axis motor output/lead	200W/10mm (M), 5mm (L)					

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

	(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).
Â	(Note 2) The cable length is the length between the X-axis connector box and the controller. The standard lengths are 3m and 5m, but other lengths can also be specified in meters.
Notes	The maximum length is 15m.
	(Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased the navload will be reduced.

(Note 4) Please note that a longer stroke will result in a lower max speed.

331 ICSB3/ICSPB3-GE□HS3□

Y-axis stroke 300-900 100 14.3 150 13.6 200 13.0 250 12.3 300 11.7 350 11.1 400 10.5

GE□HS3L

20

12 (with C/L option)

(5

7-axis stroke

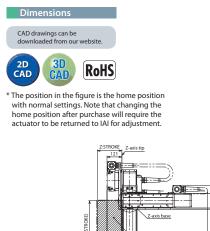
		Y-axis stroke												
		300	350	400	450	500	550	600	650	700	750	800	850	900
	100	32.9	32.9	32.9	32.8	32.8	32.8	32.8	29.7	26.7	23.9	21.4	19.0	16.9
axis stroke	150	32.3	32.2	32.2	32.2	32.2	32.2	32.1	29.0	26.0	23.2	20.7	18.3	16.2
	200	31.7	31.7	31.7	31.7	31.5	31.1	30.7	28.4	25.4	22.6	20.1	17.7	15.6
s st	250	29.7	29.4	29.0	28.7	28.3	27.9	27.6	27.3	24.7	21.9	19.4	17.0	14.9
	300	27.0	26.7	26.4	26.0	25.7	25.4	25.1	24.8	24.1	21.3	18.8	16.4	14.3
Ż	350	24.7	24.4	24.1	23.8	23.5	23.2	22.9	22.6	22.3	20.7	18.2	15.8	13.7
	400	22.6	22.4	22.1	21.8	21.5	21.2	21.0	20.7	20.4	20.1	17.6	15.2	13.1

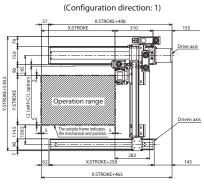
Maximum Speed by Stroke (mm/s) (Note 4)

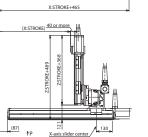
GE□HS	3M					
	100~300	300~400	450~700	750~800	850~900	950~1000
X-axis		12	00		920	765
Y-axis	—	12	00	860	695	-
Z-axis	60	00		-	_	

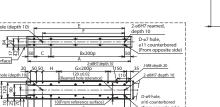
	GE HS3L								
		100~300	300~400	450~700	750~800	850~900	950~1000		
1	X-axis		12	00		920	765		
1	Y-axis	-	- 12		00 860		-		
1	Z-axis	300			-	-			

ICSB3 [ICSPB3]-GE HS3 -SC-SC (Self-standing cable specification)





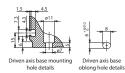




Operation range



Z-axis base details





X-axis slider center

(Configuration direction: 3)

X:STROKE+408

Operatior range

X:STROKE

ļ

1

282

145

303

165

12 (with C/L option



Q dimension

The outside frame in the mechanical end

12 (with C/L opti

Z-axis Y-axis	300	350	400	450	500	550	600	650	700	750	800	850	900
100	850	900	900	900	950	950	1000	1000	1050	1050	1100	1100	1150
150	900	950	950	950	1000	1000	1050	1050	1100	1100	1150	1150	1200
200	950	1000	1000	1000	1050	1050	1100	1100	1150	1150	1200	1200	1250
250	1000	1050	1050	1050	1100	1100	1150	1150	1200	1200	1250	1250	1300
300	1050	1100	1100	1100	1150	1150	1200	1200	1250	1250	1300	1300	1350
350	1100	1150	1150	1150	1200	1200	1250	1250	1300	1300	1350	1350	1400
400	1150	1200	1200	1200	1250	1250	1300	1300	1350	1350	1400	1400	1450

N 1 1 1	100	450	000	050	200	250	40.0	450	500	550	600	150	700	750	000	050	000	050	4000
X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238
В	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5
C	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138
F	168	218	268	318	368	418	468	518	568	618	668	718	768	818	868	918	968	1018	1068
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4
Н	33	83	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233	283	133
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18

ICSB3/ICSPB3-GE HS3

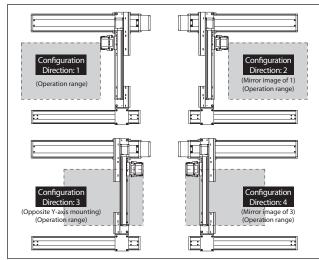
ICSB	less A-1-2 (Y Side Gantry Speed Y:	Lg (200W) Md (200W)
Model		Md (200W)
Specificati Items	Series Type Type X-axis Stroke/Option Y-axis Stroke/Option Z-axis Stroke/Option Z-axis Stroke/Option Controllers Length T [CSB3: Standard Refer to WA: Battery-less 10:100mm Refer to 30:300mm Refer to 10:100mm Refer to T2: SCON 31:3m	

Model Specification	* Items in brackets [] are for the High-Precision Specification.
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XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GE1MS1M-1]-2] 3-4] 5-6] 7-T2-8-9
1	L	ICSB3[ICSPB3]-GE1MS1L-1-23-45-67-T2-8-9
2	М	ICSB3[ICSPB3]-GE2MS1M-1-23-45-67-T2-8-9
2	L	ICSB3[ICSPB3]-GE2MS1L-1-23-45-67-T2-8-9
3	М	ICSB3[ICSPB3]-GE3MS1M-①-23-45-67-T2-8-9
5	L	ICSB3[ICSPB3]-GE3MS1L-1-23-45-67-T2-8-9
4	М	ICSB3[ICSPB3]-GE4MS1M-1]-2] 3-4] 5-6] 7-T2-8-9
	L	ICSB3[ICSPB3]-GE4MS1L-1-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of ① through ② in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.





Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXM-①-200-10-②-T2-①-③	\rightarrow Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM03-N-0-0-2	—
Y-axis	ISB[ISPB]-MXM-①-200-10-④-T2-①-⑤	\rightarrow Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-①-60-⑩-⑥-T2-①-⑦	\rightarrow Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ⑦ in the above model names.

In the above model names. Note that the strokes are indicated in mm (millimeters). Lead is specified with ⑩ in the above model names. 8: For Z-axis Medium Speed type 4: For Z-axis Low Speed type

* Cable exit direction is specified with 1 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	10: 100mm 2 100: 1000mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm 2 90: 900mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 40: 400mm
0	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number.

When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353
Guide with ball-retaining mechanism *4	RT	See P.354

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details. "2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the

direction, but the creep sensor is specified in the model name as "C" and the home limit switcn as "L" regardless or un mounting position. Please refer to P.11 for more information. *3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM). To set the Z-axis descent position a home, remove the non-motor end (NM) designation. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment. *4 C annot be selected for high-Precision Specification. * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	200W/10mm
Y-axis motor output/lead	200W/10mm
Z-axis motor output/lead	60W/8mm (M), 4mm (L)
Anneli sa bila Canatural	

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately.

	(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).
	(Note 2) The cable length is the length between the X-axis connector box and the controller.
\triangle	The standard lengths are 3m and 5m, but other lengths can also be specified in meters.
Notes	The maximum length is 15m.
	(Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased. the payload will be reduced.

(Note 4) Please note that a longer stroke will result in a lower max speed.

Payload (kg) (Note 3)

400

G	EDMS	51M	G	
		Y-axis stroke		
		300~900		
	100	4.3		
a	150	3.9	a	
Z-axis stroke	200	3.5	axis stroke	
s st	250	3.1	s st	
-axi	300	2.8	-axi	
Ň	350	2.4	N	

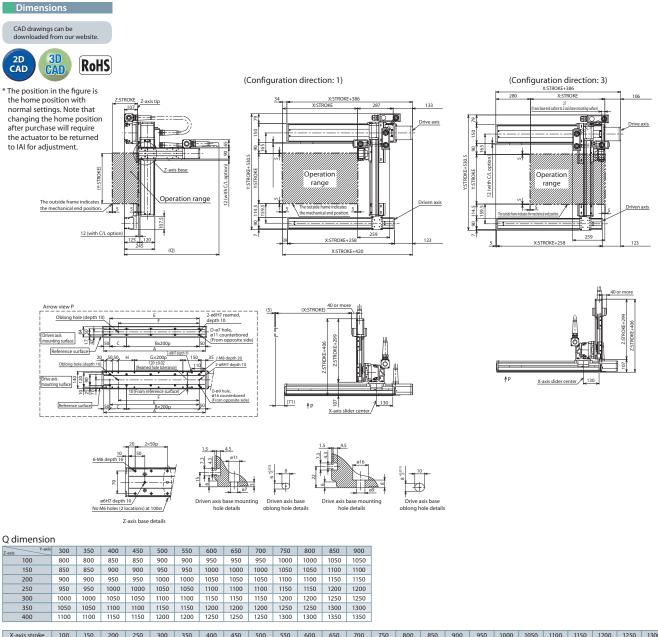
/	_	Y-axis stroke
	\sim	300~900
	100	11.3
Z-axis stroke	150	10.9
	200	10.5
s st	250	10.1
-axi	300	9.8
Ń	350	9.4
	400	9.1

Maximum Speed by Stroke (mm/s) (Note 4)

2.1

■GE□MS	IGE MS1M								■GE□MS1L							
	100~300	300~400	450~700	750~800	850~900	950~1000			100~300	300~400	450~700	750~800	850~900	950~1000		
X-axis		60	460	380		X-axis		6	460	380						
Y-axis	- 600 430			430	345	-		Y-axis	-	6	00	430	345	-		
Z-axis	48	30	<u> </u>					Z-axis	240		_					

ICSB3 [ICSPB3]-GE MS1 -SC-SC (Self-standing cable specification)



X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300
A	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238	1288	1338	1388	1438	1488	1538
В	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6
C	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16
E	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238	1288	1338	1388	1438
F	168	218	268	318	368	418	468	518	568	618	668	718	768	818	868	918	968	1018	1068	1118	1168	1218	1268	1318	1368
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
Н	33	83	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	18	20	20	20

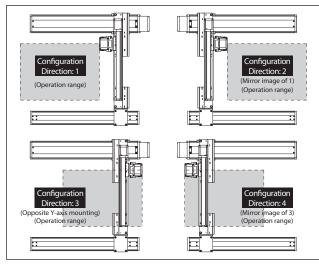
	B-GE□MS3 B3-GE□MS		t10µm Battery- less Absolute 3-axi		X: Lg (200W) Y: Md (200W) Z: Md (200W)	
Model Specificati Items	ion GE MS3L — Series Type ICSB3: Standard Refer to WA: B	WA	troke/Option Z-axis Stroke/Option mm Refer to 10:100mm Refer to Options mm table 40:400mm table mmm below. (Every 50mm) below.	Controllers Length T2: SCON 3L: 3m SSEL 5L: 5m XSEL-P/Q □L: Specified	Y-axis - Z-axis Cable Management Refer to Explanation d of Model Designations below	

Model Specification * Items in brackets [] are for the High-Precision Specification.

XY configuration direction *1	Z-axis speed type	Model
1	L	ICSB3[ICSPB3]-GE1MS3L-①-②③-④⑤-⑥⑦-T2-⑧-⑨
2	L	ICSB3[ICSPB3]-GE2MS3L-1-23-45-67-T2-8-9
3	L	ICSB3[ICSPB3]-GE3MS3L-①-②③-④⑤-⑥⑦-T2-⑧-⑨
4	L	ICSB3[ICSPB3]-GE4MS3L-1-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of 🗓 through 🗊 in the model names above.

XY Configuration Direction



Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
-axis (Drive axis)	ISB[ISPB]-LXM-①-200-10-②-T2-⑩-③	\rightarrow Please contact IAI for more details
axis (Driven axis)	ISB-SXM03-N-0-0-2	—
Y-axis	ISB[ISPB]-MXM-①-200-10-④-T2-⑩-⑤	\rightarrow Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-1-200-5-6-T2-0-7	\rightarrow Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ⑦ in the above model names. Note that the strokes are indicated in mm (millimeters).

* Cable exit direction is specified with 🔟 in the above model names. Please refer to P.11 for the exit directions.

Х-

X-a

Explanation of Model Designations

No.	Description	Notation							
1	Encoder type	WA: Battery-less Absolute							
2	X-axis stroke (Note 1)	10: 100mm 2 100: 1000mm							
3	X-axis option	Refer to Options table below.							
4	Y-axis stroke (Note 1)	30: 300mm ≀ 90: 900mm							
5	Y-axis option	Refer to Options table below.							
6	Z-axis stroke (Note 1)	10: 100mm 2 40: 400mm							
0	Z-axis option	Refer to Options table below.							
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m							
9	Y-axis - Z-axis Cable Management	SC-SC: Self-standing cable - Self-standing cable							

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number.

When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page		
X-axis cable exit direction	*	See P.11, P.353		
AQ seal (standard equipment)	AQ	See P.353		
Brake (equipped as standard on Z-axis) *1	В	See P.353		
Creep sensor *2	C/CL	See P.353		
Home limit switch *2	L/LL	See P.353		
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353		
Guide with ball-retaining mechanism *4	RT	See P.354		

 *1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
 *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position.

Please refer to P.11 for more information.

Please refer to P. I 1 for more information. *3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM). To set the Z-axis descent position as home, remove the non-motor end (NM) designation. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment. *4 Cannot be selected for High-Precision Specification. * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

all screw, rolled C10 [equivalent to rolled C5]						
±0.01mm [±0.005mm]						
.05mm [0.02mm] or less						
ntegrated with base						
Material: Aluminum with white alumite treatment						
200W/10mm						
200W/10mm						
200W/5mm						

Applicable Controllers

N

Contact IAI. The controller for this system needs to be purchased/prepared separately.

	(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).
	(Note 2) The cable length is the length between the X-axis connector box and the controller.
\wedge	The standard lengths are 3m and 5m, but other lengths can also be specified in meters.
lotes	The maximum length is 15m.
	(Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The

payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

(Configuration direction: 3)

ICSB3/ICSPB3-GE MS3L

83

Drive axis

Dri

123

Payload (kg) (Note 3)

■GE□MS3L

	< l						١	-axis strok	e					
		300	350	400	450	500	550	600	650	700	750	800	850	900
	100	34.3	34.3	34.3	34.3	34.3	34.3	33.1	29.7	26.7	23.9	21.4	19.0	16.9
e	150	33.6	33.6	33.6	33.6	33.6	33.6	32.4	29.0	26.0	23.2	20.7	18.3	16.2
1 ×	200	33.0	33.0	33.0	33.0	33.0	33.0	31.8	28.4	25.4	22.6	20.1	17.7	15.6
axis stroke	250	32.3	32.3	32.3	32.1	31.8	31.4	31.0	27.7	24.7	21.9	19.4	17.0	14.9
	300	30.1	29.8	29.5	29.1	28.8	28.4	28.1	27.1	24.1	21.3	18.8	16.4	14.3
Ż	350	27.5	27.2	26.9	26.5	26.2	25.9	25.6	25.3	23.5	20.7	18.2	15.8	13.7
	400	25.2	24.9	24.7	24.3	24.1	23.7	23.5	23.2	22.9	20.1	17.6	15.2	13.1

Maximum Speed by Stroke (mm/s) (Note 4)

■GE□MS3L

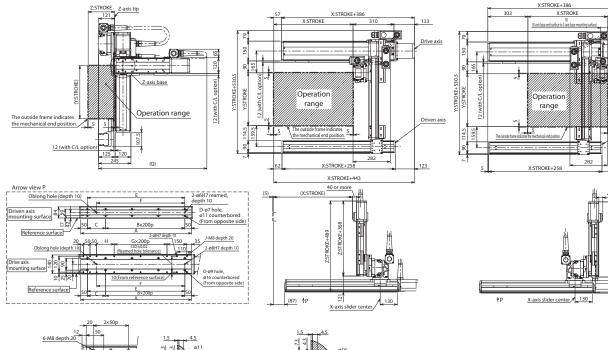
	100~300	300~400	450~700	750~800	850~900	950~1000	
X-axis		60	00		460	380	
Y-axis	—	60	00	430	345	-	
Z-axis	30	00		-	-		

ICSB3 [ICSPB3]-GE MS3L-SC-SC (Self-standing cable specification)

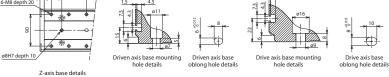


* The position in the figure is the home position with normal settings. Note that changing the home position after purchase will require

the actuator to be returned to IAI for adjustment.



(Configuration direction: 1)



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Q dimension	า																		
Z-axis Y-axis	300	350	400	450	500	550	600	650	700	750	800	850	900]					
100	850	900	900	900	950	950	1000	1000	1050	1050	1100	1100	1150]					
150	900	950	950	950	1000	1000	1050	1050	1100	1100	1150	1150	1200						
200	950	1000	1000	1000	1050	1050	1100	1100	1150	1150	1200	1200	1250]					
250	1000	1050	1050	1050	1100	1100	1150	1150	1200	1200	1250	1250	1300						
300	1050	1100	1100	1100	1150	1150	1200	1200	1250	1250	1300	1300	1350						
350	1100	1150	1150	1150	1200	1200	1250	1250	1300	1300	1350	1350	1400						
400	1150	1200	1200	1200	1250	1250	1300	1300	1350	1350	1400	1400	1450						
X-axis stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138	1188	1238
В	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5
C	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138	188	238	288	138
D	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14
E	238	288	338	388	438	488	538	588	638	688	738	788	838	888	938	988	1038	1088	1138
F	168	218	268	318	368	418	468	518	568	618	668	718	768	818	868	918	968	1018	1068
G	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4
Н	33	83	133	183	233	283	133	183	233	283	133	183	233	283	133	183	233	283	133
J	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18

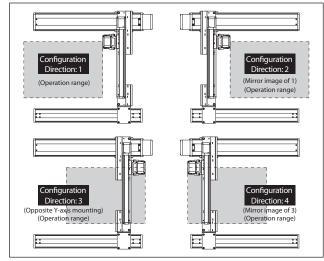
ICSB	B-GF□HS	1🗆	±10µm Battery- Jess		Ω
ICSPE	33-GF □H	S1 High-Precision Specification	4bsolute 3-axi	ZSlider)	
Model Specificati Items	Series Type	Encoder Type X-axis Stroke/Option Y-axis	s Stroke/Option Z-axis Stroke/Option	Applicable Cable Y-axis-Z-axis Cable Management	
	ICSB3: Standard Refer to 3-axis specification Model ICSPB3: High Specification precision 3-axis table below specification		2 Options ≥ Options 2 Options ≥ Options 20mm table 40:400mm table 50mm) below. (Every 50mm) below.	T2: SCON 3L: 3m SSEL 5L: 5m Refer to Explanation XSEL-P/Q □L: Specified of Model XSEL-RA/SA* length Designations below *Coming soon	China Sa

Model Specification	* Items in brackets [] are for the High-Precision Specification.
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XY configuration direction *1	Z-axis speed type *2	Model
1	М	ICSB3[ICSPB3]-GF1HS1M-①-23-45-67-T2-8-9
'	L	ICSB3[ICSPB3]-GF1HS1L-1]-23-45-67-T2-8-9
2	М	ICSB3[ICSPB3]-GF2HS1M-①-23-45-67-T2-6-9
2	L	ICSB3[ICSPB3]-GF2HS1L-1]-23-45-67-T2-8-9
3	М	ICSB3[ICSPB3]-GF3HS1M-①-23-45-67-T2-8-9
5	L	ICSB3[ICSPB3]-GF3HS1L-1]-23-45-67-T2-8-9
4	М	ICSB3[ICSPB3]-GF4HS1M-①-23-45-67-T2-8-9
4	L	ICSB3[ICSPB3]-GF4HS1L-①-23-45-67-T2-8-9

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of 🗓 through 🖗 in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.





Axis Configuration * Items in brackets [] are for the High-Precision Specification.

Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXMX-①-400-20-②-T2-①-③	→ Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM04-N-0-0-2	—
Y-axis	ISB[ISPB]-MXM-①-200-20-④-T2-①-⑤	\rightarrow Please contact IAI for more details
Z-axis	ISB[ISPB]-SXM-①-60-⑩-⑥-T2-①-⑦	→ Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names. Note that the strokes are indicated in mm (millimeters). * Lead is specified with ⑩ in the above model names. 8: For Z-axis Medium Speed type

4: For Z-axis Low Speed type

* Cable exit direction is specified with 1 in the above model names. Please refer to P.11 for the exit directions.

Explanation	of Model	Designations
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No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	100: 1000mm 2 250: 2500mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm 2 90: 900mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 40: 400mm
0	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-SC: Cable track - Self-standing cable

Options

The option codes should be entered after the stroke for each axis.

Make sure to indicate the standard equipped option in the model number.

When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353
Guide with ball-retaining mechanism *4	RT	See P.354

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details.
*2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information.

Please refer to P.11 for more information. *3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM). To set the Z-axis descent position as home, remove the non-motor end (NM) designation. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment. *4 Cannot be selected for High-Precision Specification. * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications * Items in brackets [] are for the High-Precision Specification.

Drive system	Ball screw, rolled C10 [equivalent to rolled C5]
Positioning repeatability	±0.01mm [±0.005mm]
Lost motion	0.05mm [0.02mm] or less
Guide	Integrated with base
Base	Material: Aluminum with white alumite treatment
X-axis motor output/lead	400W/20mm
Y-axis motor output/lead	200W/20mm
Z-axis motor output/lead	60W/8mm (M), 4mm (L)
Applicable Control	lors

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/prepared separately

(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters). (Note 2) The cable length is the length between the X-axis connector box and the Controller. The standard lengths are 3m and 5m, but other lengths can also be specified <u>A</u> Notes in meters. The maximum length is 15m.

(Note 3) The rated acceleration is 0.2G for Z-axis lead 4, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased, the payload will be reduced. (Note 4) Please note that a longer stroke will result in a lower max speed.

GF HS1M

xis stroke Y-axis stroke														
	$\overline{}$	_	Y-axis stroke											
		\sim	300~900											
		100	11.3											
		150	10.9											
-	z k	200	10.5											
	s st	250	10.1											
	-axi	300	9.8											
1		350	9.4											
		400	9.1											
		Z-axis stroke	100 150 200 250 300 350											

Maximum Speed by Stroke (mm/s) (Note 4)

■GF□HS1M

400

100

150

	100~300	300~400	450~700	750~800	850~900	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis	-				1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340	
Y-axis	-	12	00	860	695						_								
Z-axis	4	30				-													

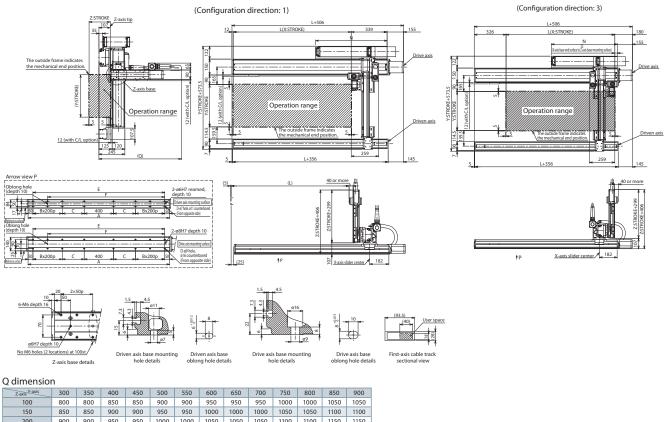
GF□HS1L

	100~300	300~400	450~700	750~800	850~900	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis			-			1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	-	12	00	860	695							_							
Z-axis	24	10								-									

ICSB3 [ICSPB3]-GF HS1 -CT-SC (Self-standing cable + Cable track specification)



* The position in the figure is the home position with normal settings. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.



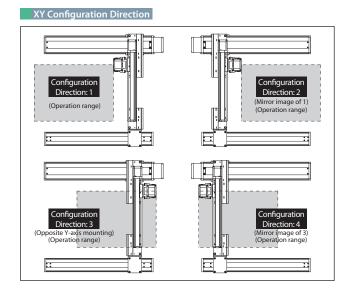
100	800	800	850	850	900	900	950	950	950	1000	1000	1050	1050			
150	850	850	900	900	950	950	1000	1000	1000	1050	1050	1100	1100			
200	900	900	950	950	1000	1000	1050	1050	1050	1100	1100	1150	1150]		
250	950	950	1000	1000	1050	1050	1100	1100	1100	1150	1150	1200	1200]		
300	1000	1000	1050	1050	1100	1100	1150	1150	1150	1200	1200	1250	1250]		
350	1050	1050	1100	1100	1150	1150	1200	1200	1200	1250	1250	1300	1300			
400	1100	1100	1150	1150	1200	1200	1250	1250	1250	1300	1300	1350	1350]		
X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2424	2514
A	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
В	1	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3
C	225	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575
D	12	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20
E	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750
F	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375

ICSB	B-GF□HS3□	Battery- Liess X-Y-Z XYBG+ZS Viside Ganty	High Speed Y: Lg (400W) Y: Md (200W)	Ω
ICSPE	B3-GF HS3 Specificatio	n ±5µm Absolute 3-axis Z Slider)	Long Type Z:Md (200W)	
Model Specificati	Series Type Type X-axis Stroke/Opt) —	Cable Y-axis -Z-axis Cable Length Management	
	ICSB3: Standard Refer to WA: Battery-less 100: 1000mm Refer 3-axis specification Model Absolute Optimum ICSPB3: High Specification 250: 2500mm table precision 3-axis table below (Every 100mm) belo specification	ns ? Options ? Options SSEL 90:900mm table 40:400mm table XSEL-P/Q [3L: 3m 5L: 5m Refer to Explanation L: Specified of Model length Designations below	CT

Model Specification	* Items in brackets [] are for the High-Precision Specification.
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XY configuration direction *1	Z-axis speed type *2	Model
	М	ICSB3[ICSPB3]-GF1HS3M-①-23-45-67-T2-8-9
1	L	ICSB3[ICSPB3]-GF1HS3L-1]-23-45-67-T2-8-9
2	М	ICSB3[ICSPB3]-GF2HS3M-①-23-45-67-T2-8-9
2	L	ICSB3[ICSPB3]-GF2HS3L-1]-23-45-67-T2-8-9
3	М	ICSB3[ICSPB3]-GF3HS3M-①-23-45-67-T2-8-9
5	L	ICSB3[ICSPB3]-GF3HS3L-1]-23-45-67-T2-8-9
4	М	ICSB3[ICSPB3]-GF4HS3M-①-23-45-67-T2-8-9
4	L	ICSB3[ICSPB3]-GF4HS3L-①-②3-④5-⑥⑦-T2-⑧-⑨

*1 Please refer to the following diagram under XY Configuration Direction. Please refer to the table on the right for details of []] through []] in the model names above. *2 The payload and the max speed may vary depending on the type of Z-axis.



Axis Config	* Items in brackets [] are for	or the High-Precision Specification.
Name of axis	Model	Reference page
X-axis (Drive axis)	ISB[ISPB]-LXMX-①-400-20-②-T2-①-③	\rightarrow Please contact IAI for more details
X-axis (Driven axis)	ISB-SXM04-N-0-0-2	—
Y-axis	ISB[ISPB]-MXM-①-200-20-④-T2-①-⑤	→ Please contact IAI for more details
Z-axis	ISB[ISPB]-MXM-①-200-⑩-⑥-T2-①-⑦	\rightarrow Please contact IAI for more details

* Refer to the symbols within the table Explanation of Model Designations at the upper right for ① through ② in the above model names. Note that the strokes are indicated in mm (millimeters). * Lead is specified with ⑩ in the above model names. 10: For 7 axis Medium Speed type

5: For Z-axis Low Speed type Cable exit direction is specified with 1 in the above model names. Please refer to P.11 for the exit directions.

Explanation of Model Designations

No.	Description	Notation
1	Encoder type	WA: Battery-less Absolute
2	X-axis stroke (Note 1)	100: 1000mm 2 250: 2500mm
3	X-axis option	Refer to Options table below.
4	Y-axis stroke (Note 1)	30: 300mm 2 90: 900mm
5	Y-axis option	Refer to Options table below.
6	Z-axis stroke (Note 1)	10: 100mm 2 40: 400mm
0	Z-axis option	Refer to Options table below.
8	Cable length (Note 2)	3L:3m 5L:5m □L:□m
9	Y-axis - Z-axis Cable Management	CT-SC: Cable track - Self-standing cable

Options

The option codes should be entered after the stroke for each axis. Make sure to indicate the standard equipped option in the model number.

When selecting multiple options, specify them in alphabetical order.

Туре	Model	Reference page
X-axis cable exit direction	*	See P.11, P.353
AQ seal (standard equipment)	AQ	See P.353
Brake (equipped as standard on Z-axis) *1	В	See P.353
Creep sensor *2	C/CL	See P.353
Home limit switch *2	L/LL	See P.353
Non-motor end specification *3 (standard Z-axis setting)	NM	See P.353
Guide with ball-retaining mechanism *4	RT	See P.354

*1 Brake option for X and/or Y axes increases the length of the motor unit(s). Please contact IAI for details. *2 When selecting the creep sensor and home limit switch, the mounting position differs according to the configuration direction, but the creep sensor is specified in the model name as "C" and the home limit switch as "L" regardless of the mounting position. Please refer to P.11 for more information.

Please refer to P.11 for more information. *3 The configuration position in the figure is the home position. The normal setting for Z-axis is non-motor end (NM). To set the Z-axis descent position as home, remove the non-motor end (NM) designation. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment. *4 Cannot be selected for High-Precision Specification. * To set a different X-axis cable exit direction from the normal setting, indicate the cable exit direction symbol. Please refer to P.11 for the cable exit direction of each axis.

Common Specifications	* Items in brackets [] are for the High-Precision Specification.
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	×				
Drive system	Ball screw, rolled C10 [equivalent to rolled C5]				
Positioning repeatability	±0.01mm [±0.005mm]				
Lost motion	0.05mm [0.02mm] or less				
Guide	Integrated with base				
Base	Material: Aluminum with white alumite treatment				
X-axis motor output/lead	400W/20mm				
Y-axis motor output/lead	200W/20mm				
Z-axis motor output/lead	200W/10mm (M), 5mm (L)				
Applicable Control	Applicable Controllers				

Applicable Controllers

Contact IAI. The controller for this system needs to be purchased/preod con

ntact IAI.	The controller for this system needs to be purchased/prepared separately.
	(Note 1) The strokes in the model names of the Cartesian Robots are specified in cm (centimeters).
	(Note 2) The cable length is the length between the X-axis connector box and the controller.
\triangle	The standard lengths are 3m and 5m, but other lengths can also be specified in meters.
Notes	The maximum length is 15m.
	(Note 3) The rated acceleration is 0.2G for Z-axis lead 5, and 0.4G for all others. The payload is based on operation at the rated acceleration. When the acceleration is increased the payload will be reduced

(Note 4) Please note that a longer stroke will result in a lower max speed.

339 ICSB3/ICSPB3-GF□HS3□

■GF□HS3M

GF□HS3L

Z-axis stroke

\sim	_	Y-axis stroke
		300~900
	100	14.3
۵	150	13.6
2 X	200	13.0
Z-axis stroke	250	12.3
-axi	300	11.7
И	350	11.1
	400	10.5

<		Y-axis stroke														
		300	350	400	450	500	550	600	650	700	750	800	850	900		
	100	32.9	32.9	32.9	32.8	32.8	32.8	32.8	29.7	26.7	23.9	21.4	19.0	16.9		
υ	150	32.3	32.2	32.2	32.2	32.2	32.2	32.1	29.0	26.0	23.2	20.7	18.3	16.2		
2	200	31.7	31.7	31.7	31.7	31.5	31.1	30.7	28.4	25.4	22.6	20.1	17.7	15.6		
201	250	29.7	29.4	29.0	28.7	28.3	27.9	27.6	27.3	24.7	21.9	19.4	17.0	14.9		
- ax	300	27.0	26.7	26.4	26.0	25.7	25.4	25.1	24.8	24.1	21.3	18.8	16.4	14.3		
1	350	24.7	24.4	24.1	23.8	23.5	23.2	22.9	22.6	22.3	20.7	18.2	15.8	13.7		
	400	22.6	22.4	22.1	21.8	21.5	21.2	21.0	20.7	20.4	20.1	17.6	15.2	13.1		

Maximum Speed by Stroke (mm/s) (Note 4)

■GF□HS3M

	100~300	300~400	450~700	750~800	850~900	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X-axis			_			1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340
Y-axis	— 120		00	860	695							-							
Z-axis	60	0								-									

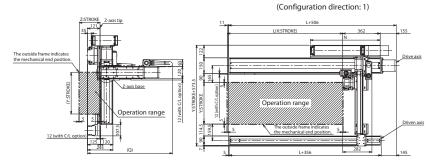
■GF□HS3L

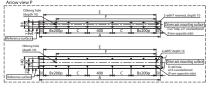
		100~300	300~400	450~700	750~800	850~900	1,000~1,200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
X	-axis	-				1200	1150	1000	950	830	740	650	590	540	490	440	410	370	340	
Y	-axis	—	12	00	860	695							_							
Z	-axis	30	00								_									

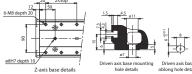
ICSB3 [ICSPB3]-GF HS3 -CT-SC (Cable track - Self-standing cable specification)

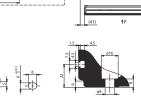


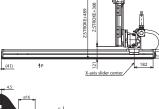
* The position in the figure is the home position with normal settings. Note that changing the home position after purchase will require the actuator to be returned to IAI for adjustment.







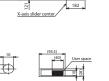




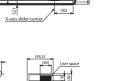




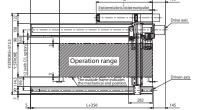




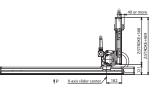








(Configuration direction: 3) L+506 L(X:STROK

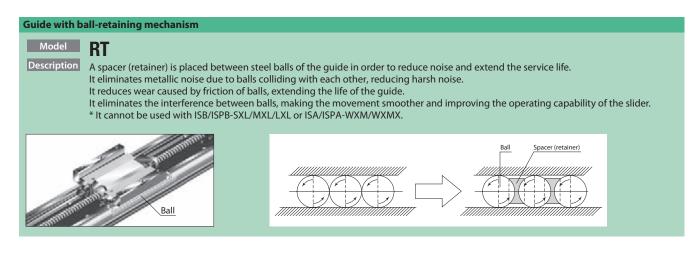


Q dimension

Z-axis Y-axis	300	350	400	450	500	550	600	650	700	750	800	850	900			
100	850	900	900	900	950	950	1000	1000	1050	1050	1100	1100	1150			
150	900	950	950	950	1000	1000	1050	1050	1100	1100	1150	1150	1200			
200	950	1000	1000	1000	1050	1050	1100	1100	1150	1150	1200	1200	1250			
250	1000	1050	1050	1050	1100	1100	1150	1150	1200	1200	1250	1250	1300			
300	1050	1100	1100	1100	1150	1150	1200	1200	1250	1250	1300	1300	1350			
350	1100	1150	1150	1150	1200	1200	1250	1250	1300	1300	1350	1350	1400			
400	1150	1200	1200	1200	1250	1250	1300	1300	1350	1350	1400	1400	1450			
X-axis stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
L	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2424	2514
A	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850
В	1	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3
C	225	275	325	375	425	475	525	575	425	475	525	575	425	475	525	575
D	12	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20
E	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750
F	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550
N	625	675	725	775	825	875	925	975	1025	1075	1125	1175	1225	1275	1325	1375

Cartesian Robot Options

Cable exit di	rection
Model Description Model Description	A1/A3 Specify when changing the actuator cable exit direction. A1S/A1E/A3S/A3E The exit direction of the actuator cable can be selected from back left, side left, back right and side right. * It is required to select an exit direction.
AQ seal Model Description	AQ AQ seal is a lubricant unit that uses a lubricating member made of lubricating oil solidified with resin. Because it is a porous member that contains a large amount of lubricating oil, the oil seeps out on the surface through capillary action. Lubricating oil is supplied by pressing the AQ seal on the surface of the guide and ball screw (steel ball rolling surface), enabling long-term use without maintenance in a synergistic effect by the combined use of the grease.
Brake	
Model Description	B When used vertically, this works as a holding mechanism that prevents the Z-axis slider from falling and damaging any attached fittings when the power or servo is turned off. As the Z-axis is designed to be used vertically, a brake will be equipped as a standard feature. For axes other than the Z-axis, please use the brake option as required.
Creep sensor	
Model Description	C / CL A sensor for performing homing at high speed. As homing is normally done by pressing the slider against the stopper on the motor side stroke end and reversing it, the homing speed is kept to 10~20mm/s. Therefore, types with long stroke take time until homing is completed. In order to shorten this, the proximity sensor is used to return the slider at high speed halfway through, then drop the speed to normal homing return speed just before home. The mounting position of the sensor is by default on the right side of the actuator body as viewed from the motor side (C) and the left side for the opposite type (CL). The mounting position of the sensor is determined by the axis configuration direction. Please refer to P.11 for more information.
Home limit s	witch
Model Description	L/LL When performing home return, the standard type determines the home position by pushing against the mechanical end and reversing. This option allows reverse motion to be triggered by sensor. Use when changing or adjusting the reversing position during home return or confirming that the home position has been reached. The mounting position of the limit switch and cover is by default on the right side of the actuator body as viewed from the motor side (L) and the left side for the opposite type (LL). The mounting position of the sensor is determined by the axis configuration direction. Please refer to P.11 for more information. *Information
Non-motor e	and specification
Model Description	NM The normal home position is set to the motor side, but this is the option to set the home position on the other side in order 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.)

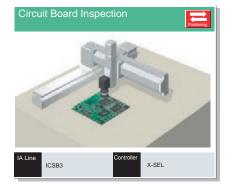


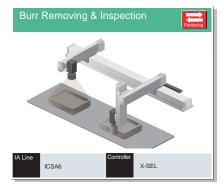
Cartesian Robot Application Examples

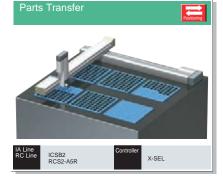




















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