

ISB-MXM-100

Single-axis robot/Medium, X-axis, standard slider type/Actuator
width: 120mm/100W Straight shape

ISPB-MXM-100

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width: 120mm/100W Straight shape **High precision specification**

Model Specification Items

Series — **MXM** — Encoder type — **100** — Lead — Stroke — Applicable controller — Cable length — Options

ISB: Standard specification
ISPB: High precision specification

A: Absolute specification
I: Incremental specification

100: 100W
30: 30mm
20: 20mm
10: 10mm
5: 5mm

100: 100mm
?:
1100: 1100mm
(in 50mm increments)

T1: XSEL-J/K
T2: SCON
SSEL
XSEL-P/Q

N: None
S: 3m
M: 5m
X□□: Specified length

Refer to the options table below.



* Refer to P. 10 for the details of items comprising the model number.

Model Number/Specification

Model number	Encoder type	Motor output (W)	Lead (mm)	Stroke in 50mm increments (mm)	Speed (mm/s)	Acceleration (Note 1)				Payload (Note 1)				Rated thrust (N)
						Horizontal (G)		Vertical (G)		Horizontal (kg)		Vertical (kg)**		
						Rated	Maximum	Rated	Maximum	Rated acceleration	Maximum acceleration	Rated acceleration	Maximum acceleration	
ISB[ISPB]-MXM-[1]-100-30-[2]-[3]-[4]-[5]	Absolute/Incremental	100	30	100~1100	1~1800	0.4	1.2	0.4	1.2	15	3	2.5	1	56.6
ISB[ISPB]-MXM-[1]-100-20-[2]-[3]-[4]-[5]			20		1~1200	0.4	1.2	0.4	1	23	6	5	2.5	84.9
ISB[ISPB]-MXM-[1]-100-10-[2]-[3]-[4]-[5]			10		1~600	0.4	0.7	0.4	0.6	45	20	10	7	169.8
ISB[ISPB]-MXM-[1]-100-5-[2]-[3]-[4]-[5]			5		1~300	0.2	0.5	0.2	0.4	85	45	20	15	339.7

*In the above model numbers, [1] indicates the encoder type, [2] indicates the stroke, [3] indicates the applicable controller, [4] indicates the cable length, and [5] indicates the option(s).
**If the guide with ball retention mechanism (RT) is used, the vertical payload decreases by 0.5kg. (Please also refer to P.9).

Option

Name	Model number	Reference page	Name	Model number	Reference page
Cable exit from the left	A1S	→P11	Home limit switch	L	→P11
Cable exit from the rear left	A1E	→P11	Home limit switch on the opposite side	LL	→P11
Cable exit from the right	A3S	→P11	Master axis specification	LM	→P12
Cable exit from the rear right	A3E	→P11	Master axis specification (sensor on the opposite side)	LLM	→P12
AQ seal (standard feature)	AQ	→P11	Non-motor side specification	NM	→P12
Brake	B	→P11	Guide with ball retention mechanism	RT	→P12
Creep sensor	C	→P11	Slave axis specification	S	→P12
Creep sensor on the opposite side	CL	→P11	High straightness, precision specification	ST	→P13

Common Specifications

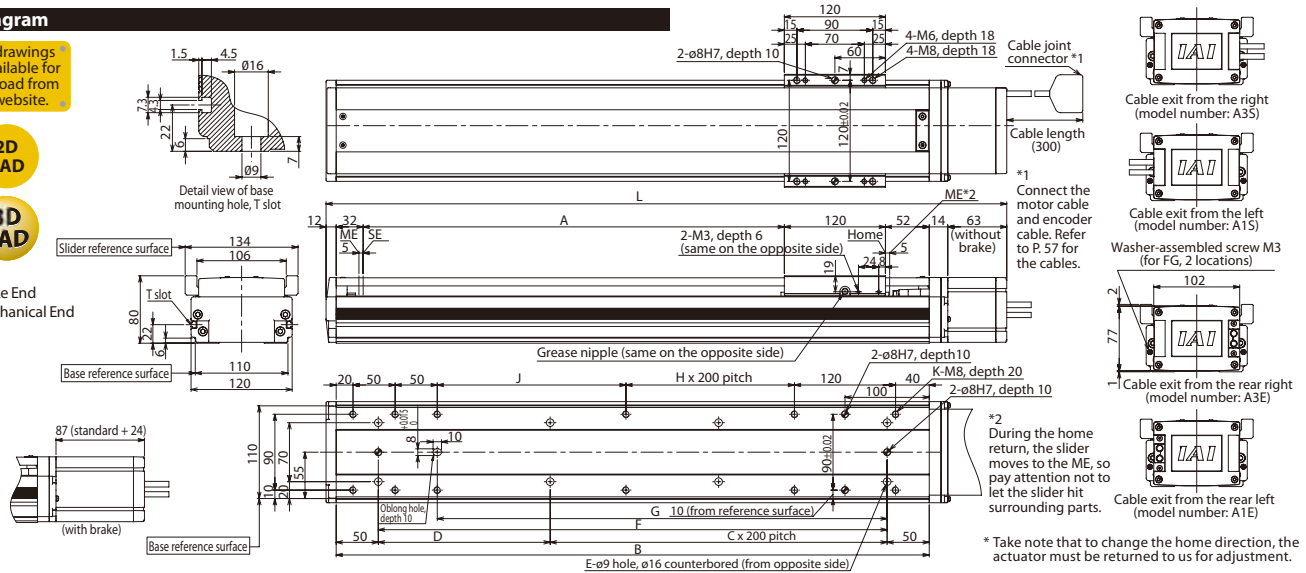
Positioning repeatability (Note 2)	±0.01mm [±0.005mm]
Drive method (Note 3)	Ball screw Ø16mm, rolled C10 [equivalent to rolled C5]
Lost Motion (Note 4)	0.05mm [0.02mm] max.
Dynamic allowable load moment (Note 5)	Ma: 69.6N·m Mb: 99.0N·m Mc: 161.7N·m
Overhang load length	Ma direction: 600mm max. Mb, Mc directions: 600mm max.
Dynamic straightness (Note 6)	0.02mm/m max.
Base	Material: Aluminum, with white alumite treatment
Applicable controller	T1: XSEL-J/K T2: XSEL-P/Q, SSEL, SCON
Cable length (Note 7)	N: None, S: 3m, M: 5m, X□□: Specified length
Ambient operating temperature/humidity	0 to 40°C, 85%RH max. (non-condensing)

Diagram

CAD drawings are available for download from our website.



SE: Stroke End
ME: Mechanical End



Dimensions, Mass and Maximum Speed by Stroke

Stroke	L																			Mass (kg)		
	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000		1050	1100
without brake	393	443	493	543	593	643	693	743	793	843	893	943	993	1043	1093	1143	1193	1243	1293	1343	1393	6.0
	with brake	417	467	517	567	617	667	717	767	817	867	917	967	1017	1067	1117	1167	1217	1267	1317	1367	
A	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	6.6
B	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204	1254	1304	7.2
C	0	0	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	4	5	5	5	7.9
D	204	254	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204	8.5
E	4	4	6	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	9.2
F	204	254	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204	9.8
G	134	184	234	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034	1084	1134	10.4
H	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	11.0
J	24	74	124	174	224	274	324	374	424	474	524	574	624	674	724	774	824	874	924	974	1024	11.7
K	10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18	12.3
Maximum speed (mm/s)	Lead 30	1800	1290	1045	860	690	570	460	360	270	215	170	140	115	95	80	69	60	53	47	42	37
	Lead 20	1200	860	695	570	460	360	270	215	170	140	115	95	80	69	60	53	47	42	37	33	29
	Lead 10	600	430	345	280	230	180	140	115	95	80	69	60	53	47	42	37	33	29	26	23	20
	Lead 5	300	215	170	140	115	95	80	69	60	53	47	42	37	33	29	26	23	20	18	16	14

Applicable Controller Specifications

Applicable Controller	Maximum number of controlled axes	Connectable encoder type	Operating method	Power-supply voltage	Reference page
X-SEL-P/Q	6 axes	Absolute/incremental	Program	Single/three-phase 200 VAC	→P56
X-SEL-J/K	4 axes			→P56	
SSEL	2 axes			→P56	
SCON	1 axis			→P56	



(Note 1) Refer to P. 9 for the relationship of acceleration and payload. (Notes 2, 3, 4) The values in [] apply to the ISPB series. Other specification values apply commonly to the ISB and ISPB.

(Note 5) When the traveling life is 10,000km.

(Note 6) The value of dynamic straightness is when the high straightness, precision specification (option) is specified.

(Note 7) The maximum cable length is 30m. Specify a desired length in meters. (Example. X08 = 8m)