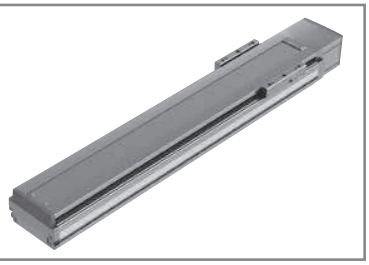
ISB-MXM-200

Single-axis robot/Medium, X-axis, standard slider type/Actuator width: 120mm/200W Straight shape

ISPB-MXM-200

Single-axis robot/Medium, X-axis, standard slider type/Actuator width: 120mm/200W Straight shape **High precision specification**



Model Specification Items

□ — MXM — □ — 200 — □ — □ — □ — □ — □ — □

Series	Type	Encoder type	Motor type	Lead	Stroke	Applicable controller	Cable length	Options
ISB: Standard specification ISPB: High precision specification		A: Absolute specification I: Incremental specification	200: 200W	30: 30mm 20: 20mm 10: 10mm 5: 5mm	100: 100mm 〜 1100: 1100mm (in 50 mm 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

*1.0G=9800mm/sec²

Model number	Encoder type	Motor output (W)	Lead (mm)	Stroke in 50mm increments (mm)	Speed (mm/s)	Acceleration (Note 1) Horizontal (G) Rated	Acceleration (Note 1) Horizontal (G) Maximum	Acceleration (Note 1) Vertical (G) Rated	Acceleration (Note 1) Vertical (G) Maximum	Payload (Note 1) Horizontal (kg) Rated acceleration	Payload (Note 1) Horizontal (kg) Maximum acceleration	Payload (Note 1) Vertical (kg) Rated acceleration	Payload (Note 1) Vertical (kg) Maximum acceleration	Rated thrust (N)
ISB[ISPB]-MXM-①-200-30-②-③-④-⑤	Absolute Incremental	200	30	100~1100	1~1800	0.4	1.2	0.4	1.2	30	9	6	2	113.9
ISB[ISPB]-MXM-①-200-20-②-③-④-⑤			20		1~1200	0.4	1.2	0.4	1	45	12	10	5	170.9
ISB[ISPB]-MXM-①-200-10-②-③-④-⑤			10		1~600	0.4	0.7	0.4	0.6	90	40	20	15	341.8
ISB[ISPB]-MXM-①-200-5-②-③-④-⑤			5		1~300	0.2	0.5	0.2	0.4	110	80	40	30	683.6

*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).

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

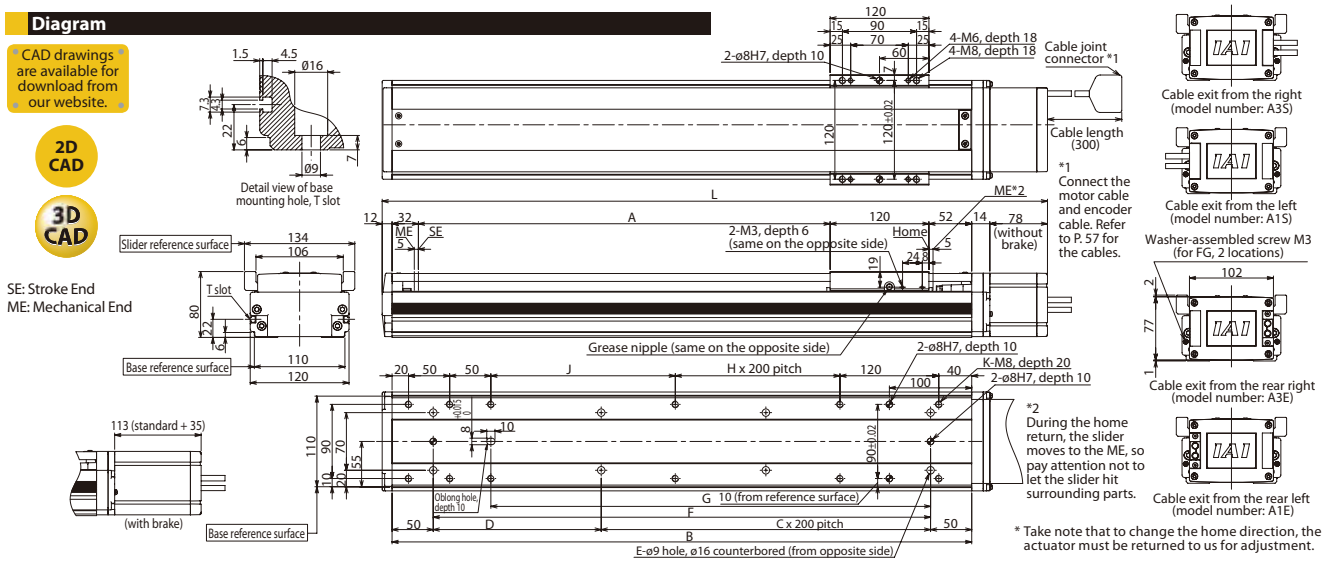
Positioning repeatability (Note 2)	±0.01mm [±0.005mm]
Drive method (Note 3)	Ball screw Ø16mm, rolled C10 [equivalent to rolled C5]
Lost Motion (Note 4)	0.05mm [0.02mm] max.
Dynamic allowable load moment (Note 5)	Ma: 69.6N•m Mb: 99.0N•m Mc: 161.7N•m
Overhang load length	Ma direction: 600mm max. Mb, Mc 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.

2D CAD

3D CAD



* Take note that to change the home direction, the actuator must be returned to us for adjustment.

■ Dimensions, Mass and Maximum Speed by Stroke

*If the brake is equipped, the mass increases by 0.6kg. *The maximum speed (mm/s) varies depending on the stroke.

Stroke		100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
L	without brake	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158	1208	1258	1308	1358	1408
	with brake	443	493	543	593	643	693	743	793	843	893	943	993	1043	1093	1143	1193	1243	1293	1343	1393	1443
A		100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
B		304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204	1254	1304
C		0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5
D		204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204
E		4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14
F		204	254	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
G		134	184	234	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034	1084	1134
H		0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4
J		24	74	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224
K		10	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18
Mass (kg)		6.4	7.1	7.7	8.4	9.0	9.6	10.2	10.9	11.5	12.2	12.8	13.4	14.0	14.7	15.3	16.0	16.6	17.3	17.9	18.5	19.1
Maximum speed (mm/s)	Lead 30	1800													1290		1045		860		690	
	Lead 20	1200													860		695		570		460	
	Lead 10	600													430		345		280		230	
	Lead 5	300													215		170		140		115	

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			Single-phase 100/200 VAC	→P56
SSEL	2 axes				→P56
SCON	1 axis		Positioner pulse train control		→P56

CAUTION

(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)