

# ISB-MXXM-200

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

# ISPB-MXXM-200

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



## Model Specification Items

Series	MXMX	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	800: 800mm 2000: 2000mm (in 100mm 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/sec<sup>2</sup>

Model number	Encoder type	Motor output (W)	Lead (mm)	Stroke in 100mm 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]-MXXM-①-200-30-②-③-④-⑤	Absolute	200	30	800~2000	1~1800	0.4	Designed exclusively for horizontal use		30	Designed exclusively for horizontal use		113.9		
ISB[ISPB]-MXXM-①-200-20-②-③-④-⑤	Incremental		20		1~1200	0.4			45			170.9		

\* 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

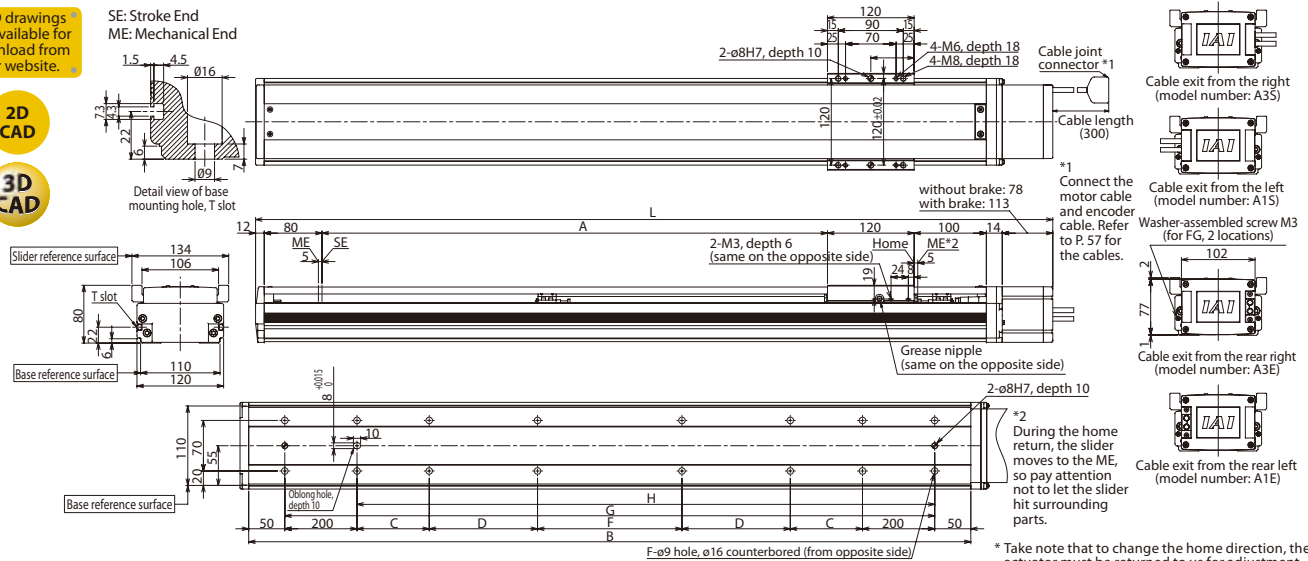
Positioning repeatability (Note 2)	±0.01mm (±0.005mm)
Drive method (Note 3)	Ball screw Ø16mm, rolled C10 [equivalent to rolled C5]
Lost Motion (Note 4)	0.05mm [0.02mm] max.
Dynamic allowable load moment (Note 5)	Ma: 69.6N·m Mb: 99.0N·m Mc: 161.7N·m
Overhang load length	Ma direction: 600mm max. Mb, Mc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



## 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	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	
L	without brake	1204	1304	1404	1504	1604	1704	1804	1904	2004	2104	2204	2304	2404
	with brake	1239	1339	1439	1539	1639	1739	1839	1939	2039	2139	2239	2339	2439
A	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	
B	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
C	200	200	200	250	300	350	400	450	500	550	200	200	200	
D	0	0	0	0	0	0	0	0	0	0	400	450	500	
E	200	300	400	400	400	400	400	400	400	400	400	400	400	
F	12	12	12	12	12	12	12	12	12	12	16	16	16	
G	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	
H	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	
Mass (kg)	16.5	17.8	19.1	20.3	21.6	22.9	24.1	25.4	26.7	28.0	29.2	30.5	31.8	
Maximum speed (mm/s)	Lead 30	1800			1650	1500	1425	1200	1050	900	825	750	675	
	Lead 20	1200			1100	1000	950	800	700	600	550	500	450	

## 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			Positioner pulse train control	→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)