

# ISB-LXMX-200

Single-axis robot/Large, X-axis, mid-support type/Actuator width: 150mm/200W Straight shape

# ISPB-LXMX-200

Single-axis robot/Large, X-axis, mid-support type/Actuator width: 150mm/200W Straight shape **High precision specification**



## Model Specification Items

Series	LXMX	Encoder type	200	Motor type	200: 200W	Lead	20: 20mm	Stroke	1000: 1000mm 2500: 2500mm (in 100mm increments)	Applicable controller	T1: XSEL-J/K T2: SCON SSEL XSEL-P/Q	Cable length	N: None S: 3m M: 5m X□□: Specified length	Options	Refer to the options table below.
ISB: Standard specification ISPB: High precision specification		A: Absolute specification I: Incremental specification													

\* 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 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]-LXMX-①-200-20-②-③-④-⑤	Absolute Incremental	200	20	1000~2500	1~1200	0.4		Designed exclusively for horizontal use		45		Designed exclusively for horizontal use	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

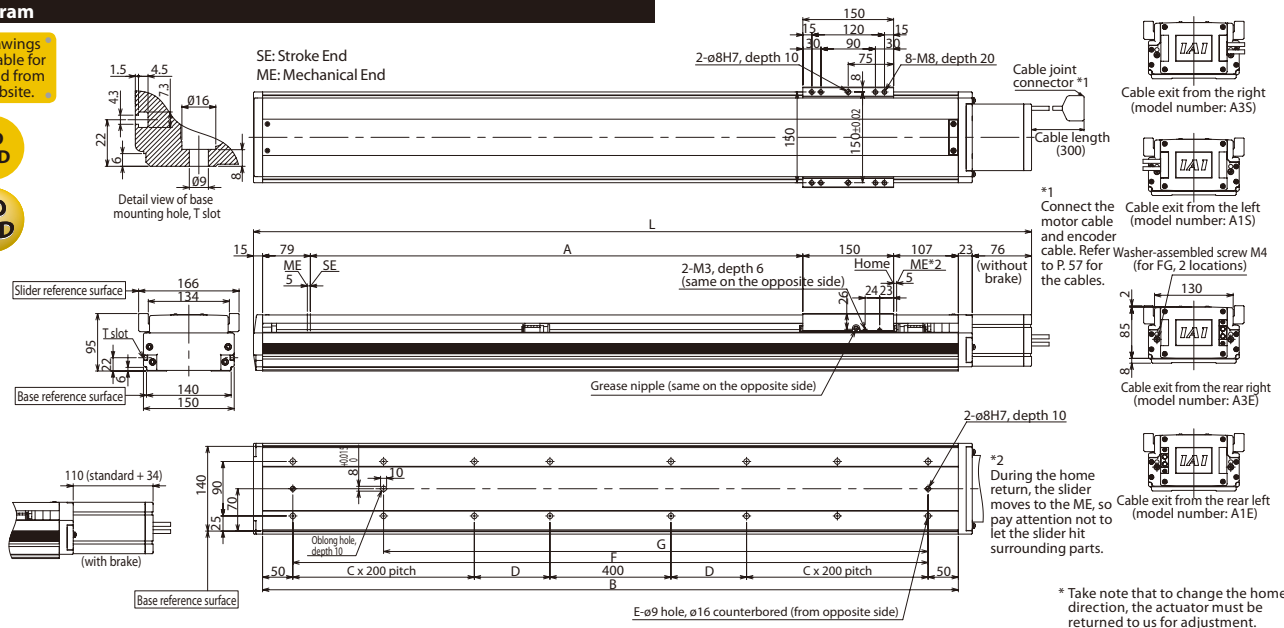
Positioning repeatability (Note 2)	±0.01mm (±0.005mm)
Drive method (Note 3)	Ball screw Ø20mm, rolled C10 [equivalent to rolled C5]
Lost Motion (Note 4)	0.05mm [0.02mm] max.
Dynamic allowable load moment (Note 5)	Ma: 104.9N·m Mb: 149.9N·m Mc: 248.9N·m
Overhang load length	Ma direction: 750mm max. Mb, Mc directions: 750mm 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	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	
L	without brake	1464	1564	1664	1764	1864	1964	2064	2164	2264	2364	2464	2564	2664	2764	2864	2964
	with brake	1498	1598	1698	1798	1898	1998	2098	2198	2298	2398	2498	2598	2698	2798	2898	2998
A	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514	
B	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	
C	1	1	1	1	1	1	1	2	2	2	2	3	3	3	3	3	
D	225	275	325	375	425	475	525	575	625	675	725	775	825	875	925	975	
E	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20	20	
F	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	
G	1050	1150	1250	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	
Mass (kg)	27.3	29.0	30.8	32.5	34.3	36.1	37.8	39.6	41.3	43.1	44.8	46.6	48.3	50.1	51.8	53.6	
Maximum speed (mm/s) Lead 20		1200		1150	1000	950	830	740	650	590	540	490	440	410	370	340	

## 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



(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)