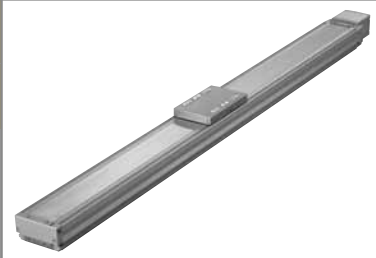


ISDB-LX-200

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

ISPDB-LX-200

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



Model Specification Items

Series	LX	Encoder type	200	Lead	Stroke	Applicable controller	Cable length	Options
ISDB: Standard specification ISPDB: High precision specification	Type	A: Absolute specification I: Incremental specification	200: 200W	40: 40mm 20: 20mm	1000: 1000mm 1600: 1600mm (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

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	
ISDB[ISPDB]-LX-①-200-40-②-③-④-⑤	Absolute Incremental	200	40	1000~1600	1~1800	0.4	Designed exclusively for horizontal use	15	Designed exclusively for horizontal use	85.5				
ISDB[ISPDB]-LX-①-200-20-②-③-④-⑤			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

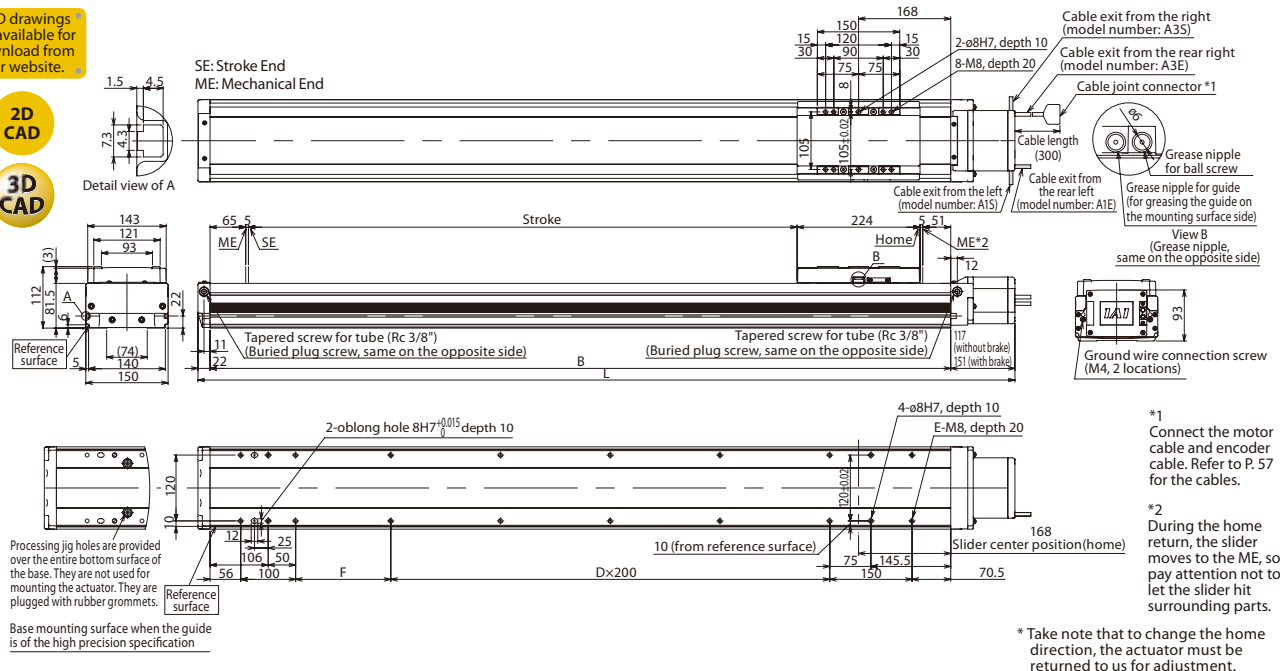
Positioning repeatability (Note 2)	±0.01mm (±0.005mm)
Drive method (Note 3)	Ball screw ø16mm, rolled C10 [equivalent to rolled C5]
Lost Motion (Note 4)	0.05mm [0.02mm] max.
Dynamic allowable load moment (Note 5)	Ma: 104.9N·m Mb: 149.9N·m Mc: 248.9N·m
Overhang load length	Ma direction: 750mm max. Mb, 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
Protection structure	IP30
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 0.5kg. * The maximum speed (mm/s) varies depending on the stroke.

Stroke	1000		1100		1200		1300		1400		1500		1600	
	L	B	D	E	F	Mass (kg)	Maximum speed (mm/s)	L	B	D	E	F	Mass (kg)	Maximum speed (mm/s)
without brake	1489	1589	1689	1789	1889	1989	2089	1523	1623	1723	1823	1923	2023	2123
with brake	1350	1450	1550	1650	1750	1850	1950	4	5	5	6	6	7	7
Lead 30	16	18	18	20	20	22	22	173.5	73.5	73.5	73.5	73.5	73.5	73.5
Lead 20	29.7	31.4	33.2	35.0	36.7	38.5	40.2	1200	1150	1000	950	830	1800	1660

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 ISPDB series. Other specification values apply commonly to the ISDB and ISPDB. (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)