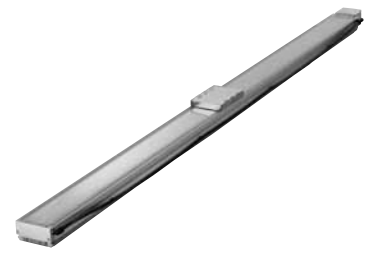


ISDBCR-LX-200

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

ISPDBCR-LX-200

Single-axis robot for cleanroom/Large, 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
ISDBCR: Standard specification ISPDBCR: High precision specification	Type	A: Absolute specification I: Incremental specification	200: 200W	40: 40mm 20: 20mm	1000: 1000mm 2500: 2500mm (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)	Suction flow rate (N ℓ /min)		
						Horizontal (G)		Vertical (G)		Horizontal (kg)				Vertical (kg)	
						Rated	Maximum	Rated	Maximum	Rated acceleration	Maximum acceleration			Rated acceleration	Maximum acceleration
ISDBCR[ISPDBCR]-LX-①-200-40-②-③-④-⑤	Absolute Incremental	200	40	1000~2500	1~1800	0.4				15	Designed exclusively for horizontal use	85.5	180		
ISDBCR[ISPDBCR]-LX-①-200-20-②-③-④-⑤			20		1~1200	0.4				45	Designed exclusively for horizontal use	170.9	120		

*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
			Suction tube joint on the opposite side	VR	→P12

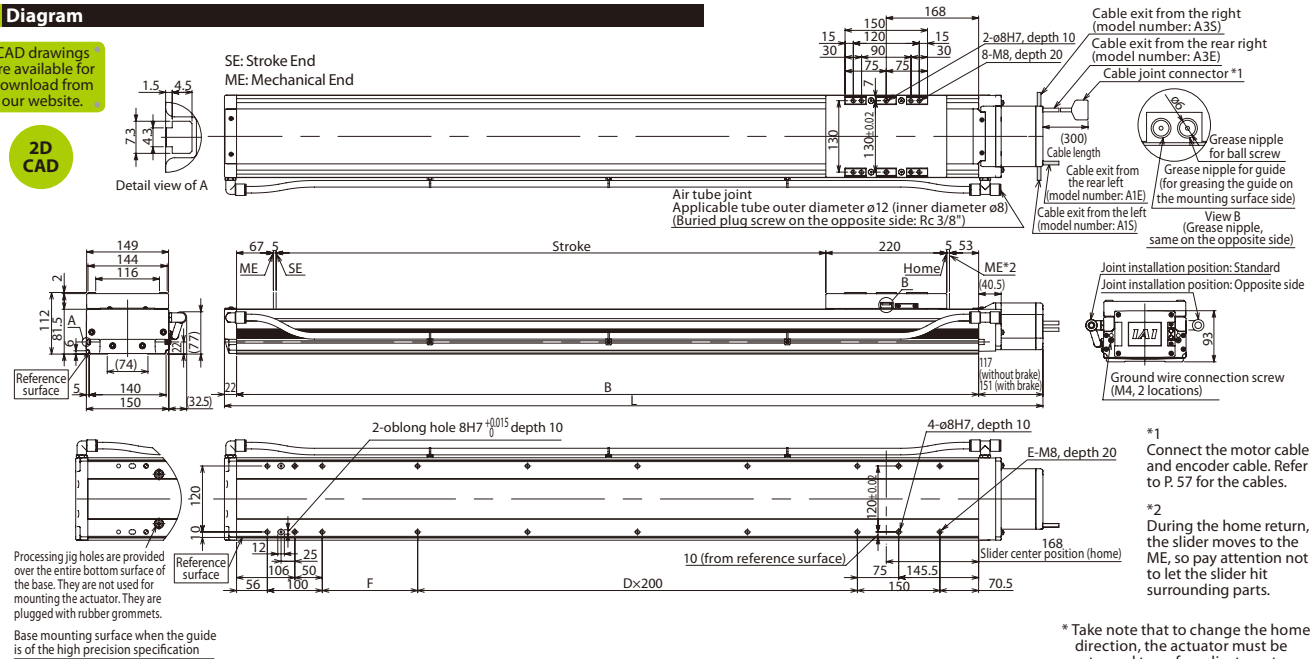
Common Specifications

Positioning repeatability (Note 2)	±0.01mm (±0.005mm)
Drive method (Note 3)	Ball screw ϕ 20mm, 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
Grease	Low dust-raising grease (for ball screw and guide)
Cleanliness degree	Class 10 (0.1 μ m per 1cf)
Suction tube joint	Quick connect joint, applicable tube outer diameter ϕ 12mm

Diagram

CAD drawings are available for download from our website.

2D CAD



Dimensions, Mass and Maximum Speed by Stroke

Stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	
L	without brake	1489	1589	1689	1789	1889	1989	2089	2189	2289	2389	2489	2589	2689	2789	2889	2989
	with brake	1523	1623	1723	1823	1923	2023	2123	2223	2323	2423	2523	2623	2723	2823	2923	3023
B	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	
D	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	
E	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30	32	
F	173.5	73.5	173.5	73.5	173.5	73.5	173.5	73.5	173.5	73.5	173.5	73.5	173.5	73.5	173.5	73.5	
Mass (kg)	29.8	31.5	33.2	35.0	36.7	38.4	40.2	41.9	43.6	45.4	47.1	48.8	50.6	52.3	54.0	55.8	
Maximum speed (mm/s)	Lead 40	1800															
	Lead 20	1200															
			1150	1000	950	830	740	650	590	540	490	440	410	370	340		

*If the brake is equipped, the mass increases by 0.5kg. *The maximum speed (mm/s) varies depending on the stroke.

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 ISPDBCR series. Other specification values apply commonly to the ISDBCR and ISPDBCR.
(Note 5)	The value of dynamic straightness is when the high straightness, precision specification (option) is specified.
(Note 6)	The maximum cable length is 30m. Specify a desired length in meters. (Example. X08 = 8m)
(Note 7)	