

ISA-LXMX-200

Single-Axis Robot: Large X-Axis Mid-Support Type, Actuator Width 150mm, 200W, Straight Shape

ISPA-LXMX-200

Single-Axis Robot: Large X-Axis Mid-Support Type, Actuator Width 150mm, 200W, Straight Shape High-Precision Specification

Type	Large X-axis (150-mm wide) mid-support type	Stroke	1000 ~ 2500mm	Load capacity	40kg (horizontal)
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Model specification items	Series	Type	Encoder type	Motor output	Lead	Stroke	Applicable controller	Cable length	Options
	ISA[ISPA]	- LXMX -	A -	200 -	20 -	2500 -	T1 -	S -	NM

* Refer to page 11 for the details of model specification items.

Models/Specifications

Model	Encoder type	Motor output (W)	Lead (mm)	Stroke (mm) In increments of 100mm	Speed (Note 1) (mm/s)	Acceleration (Note 2)		Load capacity (Note 2)		Rated thrust (N)
						Horizontal (G)	Vertical (G)	Horizontal (kg)	Vertical (kg)	
						Rated	Maximum	Rated	Maximum	
ISA [ISPA] -LXMX-A-200-20-***-T1-△-□	Absolute	200	20	1000 ~ 2500	1 ~ 1000	0.3	Horizontal application only	40	Horizontal application only	170.5
ISA [ISPA] -LXMX-I-200-20-***-T1-△-□	Incremental		20		1 ~ 1000	0.3		40	170.5	

* In the above model names, *** indicates the stroke, △ the cable length and □ the applicable options.

*1.0G=9800mm/sec²

Options

Name	Code	Page	Name	Code	Page
AQ seal	AQ	P13	Master-axis designation	LM	P14
Brake	B	P13	Master-axis designation (sensor on opposite side)	LLM	P14
Creep sensor	C	P13	Reverse homing specification	NM	P14
Creep sensor on opposite side	CL	P13	Guide with ball-retaining mechanism	RT	P14
Home limit switch	L	P14	Slave-axis designation	S	P14
Home limit switch on opposite side	LL	P14			

Common Specifications

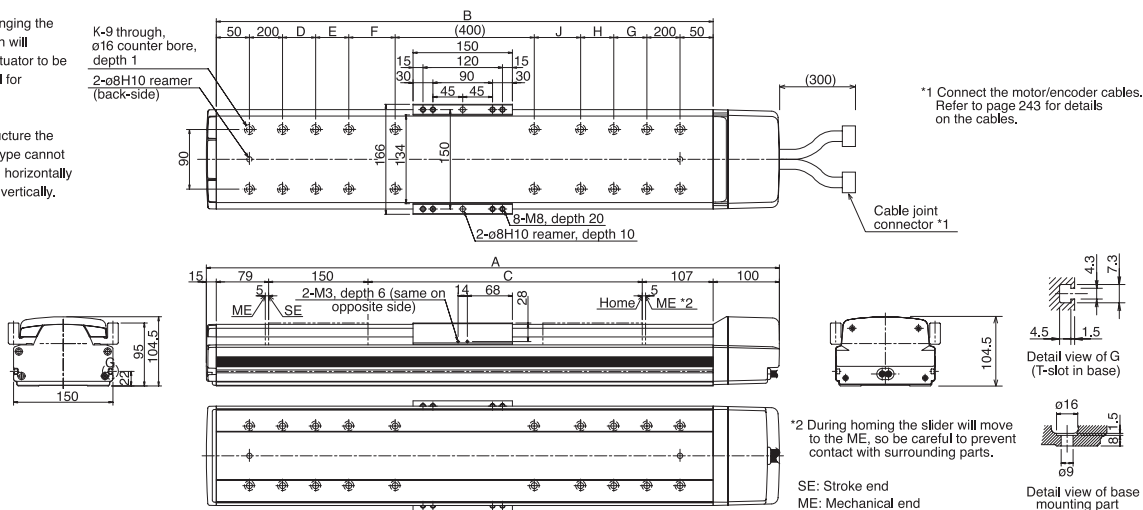
* Refer to page 10 for the details of common specification items.

Positioning repeatability (Note 3)	±0.02mm [±0.01mm]
Drive system (Note 4)	Ball screw ø20mm, rolled C10 [equivalent to rolled C5]
Lost motion (Note 5)	0.05mm or less [0.02mm or less]
Guide	integrated with base
Allowable static moment	Refer to page 242
Allowable dynamic moment	Ma: 104.9N·m Mb: 149.9N·m Mc: 248.9N·m
Overhang load length	Ma direction: 750mm or less, Mb/Mc directions: 750mm or less
Base	Material: Aluminum, with white alumite treatment
Cable length (Note 6)	N: None, S: 3m, M: 5m, X□□: Specified length
Ambient operating temperature/humidity	0 to 40°C, 85%RH max. (non-condensing)

Dimensions

* Note that changing the home direction will require the actuator to be returned to IA1 for adjustment.

* Due to its structure the mid-support type cannot be positioned horizontally on its side or vertically.



Dimensions, Weight and Maximum Speed by Stroke

Stroke	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500	
A	1465	1565	1665	1765	1865	1965	2065	2165	2265	2365	2465	2565	2665	2765	2865	2965	
B	1350	1450	1550	1650	1750	1850	1950	2050	2150	2250	2350	2450	2550	2650	2750	2850	
C	1014	1114	1214	1314	1414	1514	1614	1714	1814	1914	2014	2114	2214	2314	2414	2514	
D	225	275	325	375	425	475	525	575	200	200	200	200	200	200	200	200	
E	0	0	0	0	0	0	0	0	425	475	525	575	200	200	200	200	
F	0	0	0	0	0	0	0	0	0	0	0	0	425	475	525	575	
G	225	275	325	375	425	475	525	575	200	200	200	200	200	200	200	200	
H	0	0	0	0	0	0	0	0	425	475	525	575	200	200	200	200	
J	0	0	0	0	0	0	0	0	0	0	0	0	425	475	525	575	
K	12	12	12	12	12	12	12	12	16	16	16	16	20	20	20	20	
Weight (kg)	27.5	29.0	30.5	32.0	33.5	35.0	36.5	38.0	39.5	41.0	42.5	44.0	45.5	47.0	48.5	50.0	
Maximum speed (mm/s)	1000					950		830		740		650		590		540	

Applicable Controller Specifications

Applicable controller	Maximum number of controlled axes	Compatible encoder type	Program operation	Positioner operation	Pulse-train control	Supply voltage	Page
X-SEL	4 axes	Absolute/Incremental	○	△	×	AC100/200V	
E-Con	1 axis	Absolute/Incremental	×	○	×	AC100/200V	
P-Driver	1 axis	Incremental	×	×	○	AC100/200V	



(Note 1) The strokes that are set in increments of 50 mm are semi-standard settings.
 (Note 2) Refer to page 40 for the relationship of acceleration and load capacity.
 (Notes 3, 4, 5) The figures in brackets apply to the ISPA Series.
 Other specification values apply to both the ISA and ISPA Series.
 (Note 6) The maximum cable length is 30 m. Specify the desired length in meters (e.g., X08 = 8 m).

* Refer to page 9 for other points to note.