

ISA-MXXMX

Single-Axis Robot: Medium X-Axis Mid-Support Type, Actuator Width 120mm, 200W, Straight Shape

ISPA-MXXMX

Single-Axis Robot: Medium X-Axis Mid-Support Type, Actuator Width 120mm, 200W, Straight Shape High-Precision Specification

Type	Medium X-axis (120-mm wide) mid-support type	Stroke	800 ~ 2000mm	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] - MXXMX - A - 200 - 30 - 2000 - 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 10mm	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	Rated	Maximum	Rated	Maximum	
ISA [ISPA] -MXXMX-A-200-30-***-T1-△-□	Absolute	200	30	800 ~ 2000	1 ~ 1500	0.3		Horizontal application only	25		Horizontal application		113	
ISA [ISPA] -MXXMX-A-200-20-***-T1-△-□			20		1 ~ 1000	0.3			40		169.5			
ISA [ISPA] -MXXMX-I-200-30-***-T1-△-□	Incremental		30		1 ~ 1500	0.3			25		113			
ISA [ISPA] -MXXMX-I-200-20-***-T1-△-□			20		1 ~ 1000	0.3			40		169.5			

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

*1.0G=9800mm/sec²

Options

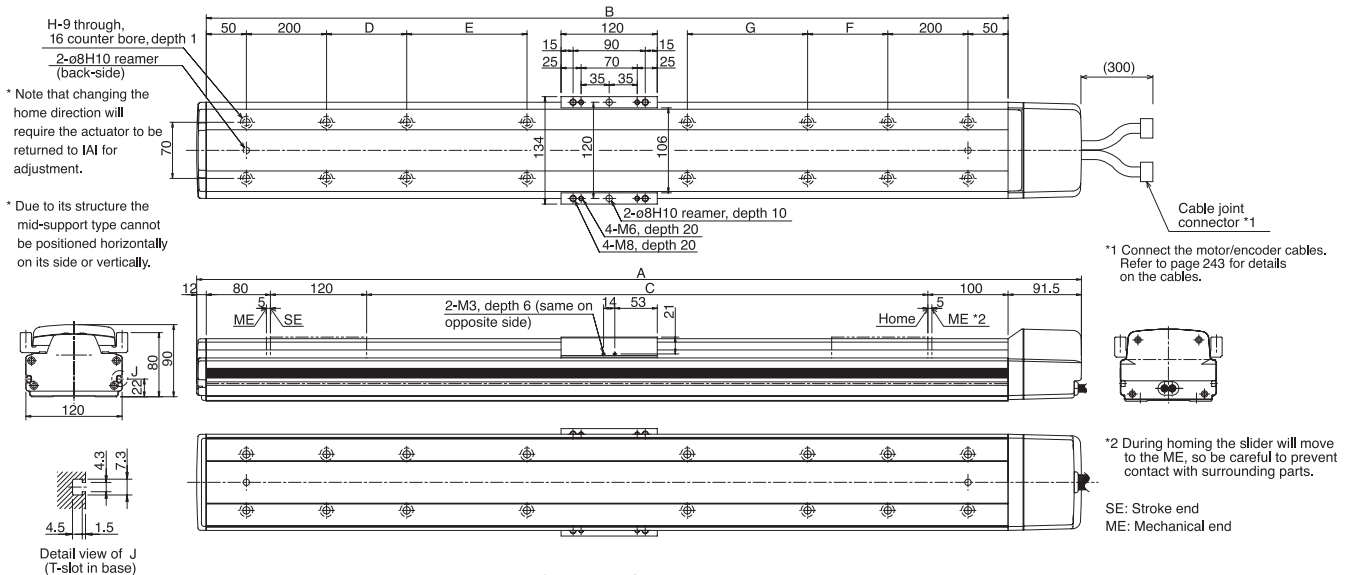
Name	Code	Page	Name	Code	Page
AQ seal	AQ	P13	Master-axis designation	LM	P14
Brake	B	P13	Master-axis designation (sensor on opposite side)	LLM	P14
Creep sensor	C	P13	Reverse homing specification	NM	P14
Creep sensor on opposite side	CL	P13	Guide with ball-retaining mechanism	RT	P14
Home limit switch	L	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 ø16mm, 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: 69.6N•m Mb: 99.0N•m Mc: 161.7N•m
Overhang load length	Ma direction: 600mm or less, Mb/Mc directions: 600mm 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



Dimensions, Weight and Maximum Speed by Stroke

Stroke	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
A	1203.5	1303.5	1403.5	1503.5	1603.5	1703.5	1803.5	1903.5	2003.5	2103.5	2203.5	2303.5	2403.5
B	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300
C	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000
D	0	0	200	250	300	350	400	450	500	550	600	650	700
E	0	0	0	0	0	0	0	0	0	0	0	0	0
F	200	200	200	250	300	350	400	450	500	550	600	650	700
G	0	0	0	0	0	0	0	0	0	0	0	0	0
H	10	10	12	12	12	12	12	12	12	12	16	16	16
Weight (kg)	15.0	16.1	17.1	18.2	19.2	20.3	21.3	22.4	23.4	24.5	25.5	26.6	27.6
Maximum speed (mm/s)	1500						1425	1200	1050	900	825	750	675
Lead 30	1000						950	800	700	600	550	500	450
Lead 20													

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	



Caution

(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.