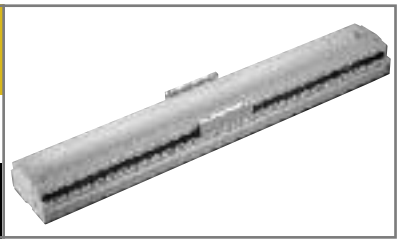
ISP-WXM-750

Single-Axis Robot: Super-Large X-Axis Long Slider Type, Actuator Width 198mm, 750W, Straight Shape

High-Precision Specification



Type	Stroke	Load capacity
Super-large X-axis (198-mm wide) long slider type	100 ~ 1300mm	150kg (horizontal)/37kg (vertical)

■ Model specification items

Series	Type	Encoder type	Motor output	Lead	Stroke	Applicable controller	Cable length	Options
ISP – WXM –	I	–	750	– 40 –	1300 –	T1	–	S – C – L

* 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	Rated acceleration	Maximum acceleration	Rated acceleration	Maximum acceleration	
ISP-WXM-A-750-40-✻✻✻-T1-△-□	Absolute	750	40	100 ~ 1300	1 ~ 2000	0.3	1.0	0.3	1.0	75	22	18	7	319
ISP-WXM-A-750-20-✻✻✻-T1-△-□			20		1 ~ 1000	0.3	1.0	0.3	0.8	150	45	37	20	638
ISP-WXM-I-750-40-✻✻✻-T1-△-□	Incremental		40		1 ~ 2000	0.3	1.0	0.3	1.0	75	22	18	7	319
ISP-WXM-I-750-20-✻✻✻-T1-△-□			20		1 ~ 1000	0.3	1.0	0.3	0.8	150	45	37	20	638

* 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	Reverse homing specification	NM	➔ P14
Creep sensor	C	➔ P13	Slave-axis designation	S	➔ P14
Home limit switch	L	➔ P13			

* The WXM type comes standard with a home limit switch (L).

Common Specifications

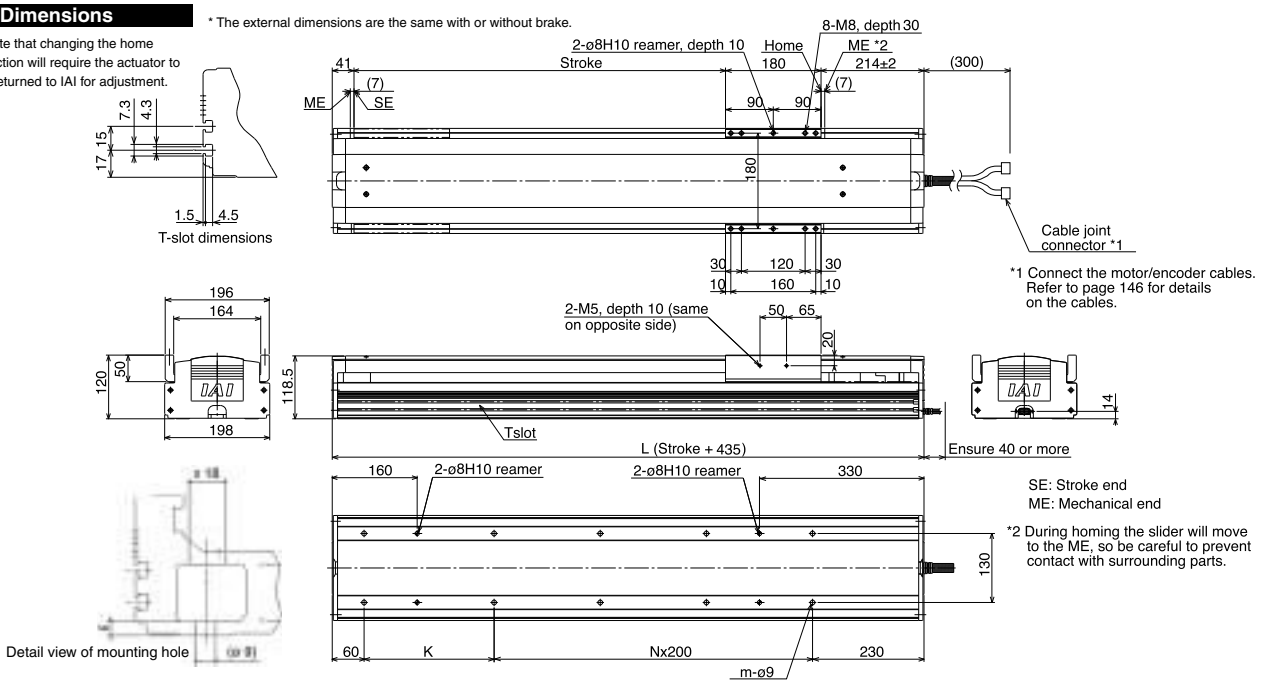
* Refer to page 10 for the details of common specification items.

Positioning repeatability	±0.01mm
Drive system	Ball screw ø20mm, rolled C5
Backlash	0.02mm or less
Guide	Integrated with base
Allowable load moment	Ma: 139.2N • m Mb: 199.9N • m Mc: 391N • m
Overhung load length	Ma direction: 900mm or less, Mb/Mc directions: 900mm or less
Base	Material: Aluminum with white alumite treatment
Cable length (Note 3)	N: No cable, S: 3m, M: 5m, X□□ : Length specification

Dimensions

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

* The external dimensions are the same with or without brake.



■ Dimensions, Weight and Maximum Speed by Stroke

Stroke		100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
L		535	635	735	835	935	1035	1135	1235	1335	1435	1535	1635	1735
K		245	145	245	145	245	145	245	145	245	145	245	145	245
N		–	1	1	2	2	3	3	4	4	5	5	6	6
m		4	6	6	8	8	10	10	12	12	14	14	16	16
Weight (kg)		18.0	20.0	22.0	24.0	26.0	27.9	29.9	31.9	33.9	35.8	37.8	39.8	41.8
Maximum speed (mm/s)	Lead 40	2000								1670	1390	1170	1000	865
	Lead 20	1000								835	695	585	500	430

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	➔ P241
E-Con	1 axis	Absolute/incremental	×	○	×	AC100/200V	➔ P227
P-Driver	1 axis	Incremental	×	×	○	AC100/200V	➔ P234

* The WXM type comes standard with a home limit switch, so use a controller of limit switch specification.

Caution

(Note 1) A longer stroke will result in a lower maximum speed to prevent the ball screw from reaching a dangerous speed. (Refer to the above table for the maximum speed at a given stroke.)
(Note 2) Refer to page 40 for the relationship of acceleration and load capacity.
(Note 3) 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.