

ISP-WXM-600

Single-Axis Robot: Super-Large X-Axis Long Slider Type, Actuator Width 198mm, 600W, Straight Shape High-Precision Specification



Type	Super-large X-axis (198-mm wide) long slider type	Stroke	100 ~ 1300mm	Load capacity	150kg (horizontal)/60kg (vertical)
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Model specification items — Series — Type — Encoder type — Motor output — Lead — Stroke — Applicable controller — Cable length — Options

ISP - WXM - I - 600 - 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-600-40-***-T1-△-L-□	Absolute	600	40	100 ~ 1300	1 ~ 2000	0.3	1.0	0.3	1.0	60	18	14	5	255
ISP-WXM-A-600-20-***-T1-△-L-□			20		1 ~ 1000	0.3	1.0	0.3	0.8	120	36	29	15	510
ISP-WXM-A-600-10-***-T1-△-L-□			10		1 ~ 500	0.3	0.6	0.3	0.5	150	75	60	40	1020
ISP-WXM-I-600-40-***-T1-△-L-□	Incremental	600	40	100 ~ 1300	1 ~ 2000	0.3	1.0	0.3	1.0	60	18	14	5	255
ISP-WXM-I-600-20-***-T1-△-L-□			20		1 ~ 1000	0.3	1.0	0.3	0.8	120	36	29	15	510
ISP-WXM-I-600-10-***-T1-△-L-□			10		1 ~ 500	0.3	0.6	0.3	0.5	150	75	60	40	1020

* 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

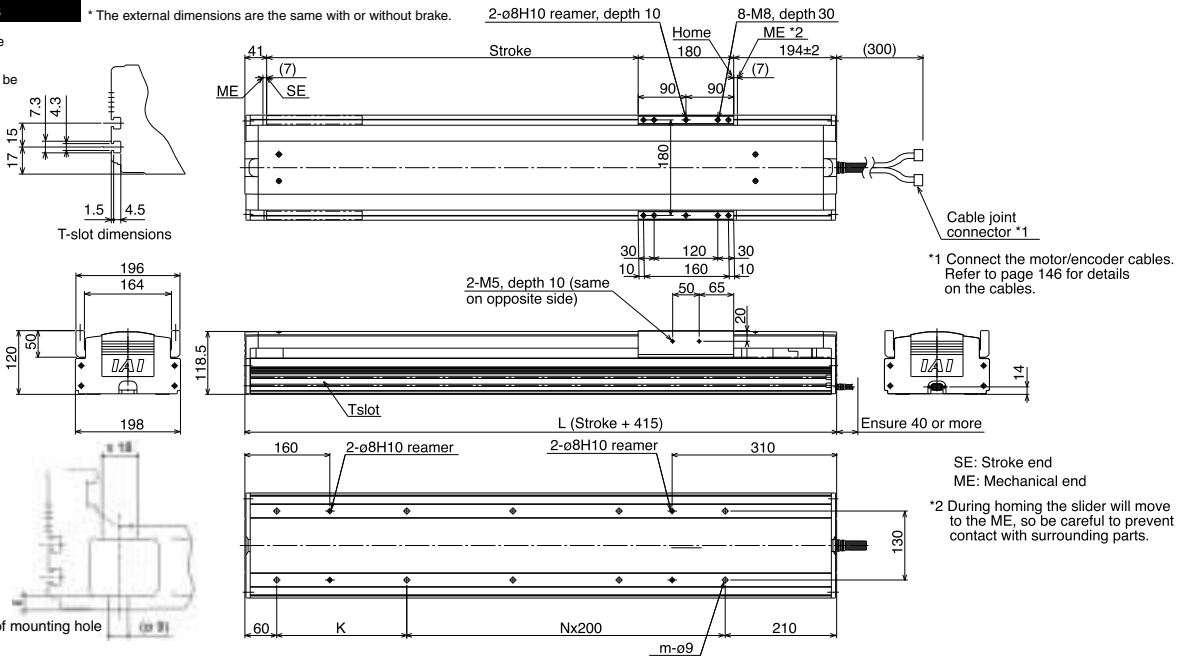
* Refer to page 10 for the details of common specification items.

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

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

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



Dimensions, Weight and Maximum Speed by Stroke

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300
L	515	615	715	815	915	1015	1115	1215	1315	1415	1515	1615	1715
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)	17.0	19.0	21.0	23.0	25.0	26.9	28.9	30.9	32.9	34.8	36.8	38.8	40.8
Maximum speed (mm/s)	2000								1670	1390	1170	1000	865
	1000								835	695	585	500	430
	500								415	345	290	250	215

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

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).

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

* Refer to page 9 for other points to note.