

ISB-MXL-200

ISPB-MXL-200

±10µm
Standard

Battery-less absolute

Medium X-axis

Long Slider type

Actuator width 120 mm

200 w

High Precision Specification
±3µm
High precision

Model Specification Items

Series	Type	Encoder type	Motor type	Lead	Stroke	Applicable controller	Cable length	Options*
ISB: Standard specification ISPB: High precision specification	MXL — WA	200	T2	30: 30mm 20: 20mm 10: 10mm 5: 5mm	120: 120mm 1070: 1070mm (Every 50mm)	T2: SCON MSCON SSEL XSEL-P/Q XSEL-RA/SA	N : None S : 3m M : 5m X□□ : Specified length	Refer to the options table below.



- Please refer to P.9 for more information about the model specification items.
- Controller is not included.

Please be sure to include the AQ seal (AQ) and one of the symbols for cable exit direction.

Actuator Specifications

Model number	Motor output (W)	Lead (mm)	Payload (Note 1)	Rated thrust (N)	Stroke (mm)
			Horizontal (kg)	Vertical (kg)	
ISB[ISPB]-MXL-WA-200-30-①-T2-②-③	200	30	30	6	113.9
ISB[ISPB]-MXL-WA-200-20-①-T2-②-③		20	45	10	170.9
ISB[ISPB]-MXL-WA-200-10-①-T2-②-③		10	90	20	341.8
ISB[ISPB]-MXL-WA-200-5-①-T2-②-③		5	110	40	683.6

• Legend: ① Stroke ② Cable length ③ Options

- (Note 1) The value of payload is when operating at an acceleration of 0.4G. (0.2G For 5mm lead) When the acceleration is increased, the payload will be reduced. Please contact IAI for more information.
- (Note 2, 3, 4) The values in [] apply only to the ISPDBCR series. Other specifications apply to both the ISDBCR and ISPDBCR.
- (Note 5) The value of dynamic straightness is when the high straightness, precision specification option is specified.

Option

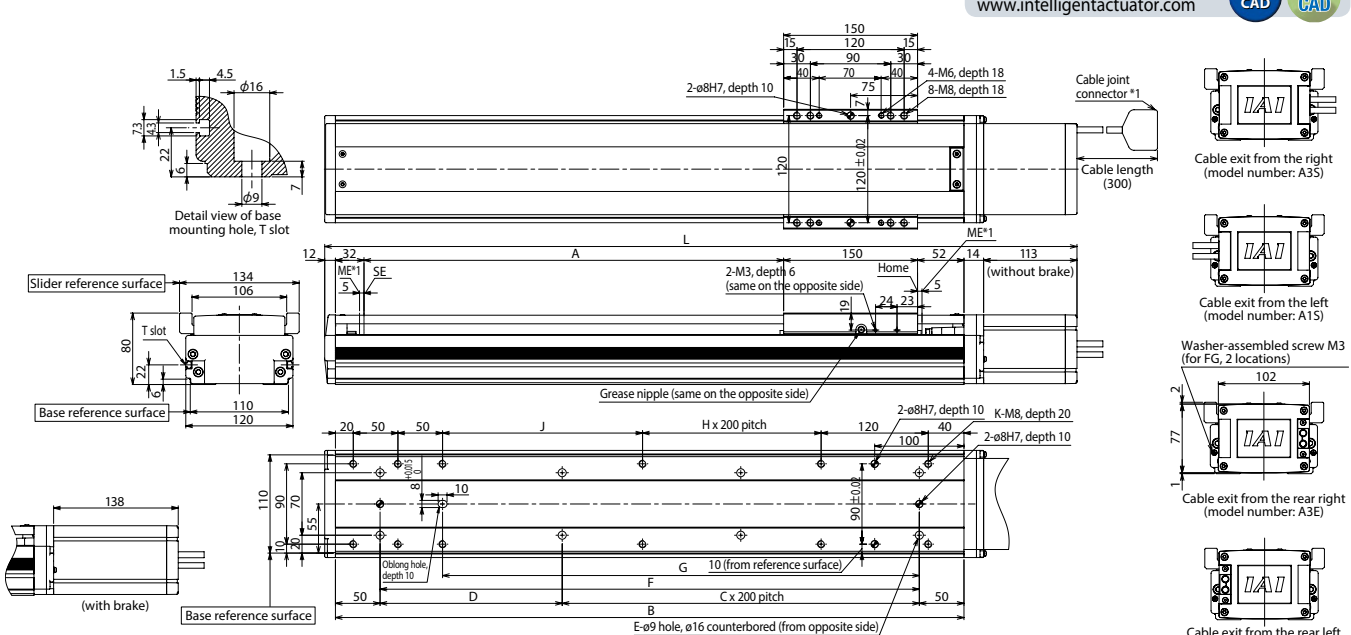
Name	Model number	Reference page	Name	Model number	Reference page
Cable exit from the left	A1S	→P10	Home limit switch on the opposite side	LL	→P10
Cable exit from the rear left	A1E	→P10	Master axis specification	LM	→P11
Cable exit from the right	A3S	→P10	Master axis specification (sensor on the opposite side)	LLM	→P11
Cable exit from the rear right	A3E	→P10	Non-motor end specification	NM	→P11
AQ seal (standard feature)	AQ	→P10	Slave axis specification	S	→P11
Brake	B	→P10	High straightness, precision specification (stroke 120~570)	ST	→P12
Creep sensor	C	→P10	High straightness, precision specification (stroke 620~1070)	ST	→P12
Creep sensor on the opposite side	CL	→P10	Double slider specification	W	→P11
Home limit switch	L	→P10			

Actuator Specifications

Positioning repeatability (Note 2)	±0.01mm [±0.003mm]
Drive method (Note 3)	Ball screw φ16mm, rolled C10 [equivalent to rolled C5]
Lost motion (Note 4)	0.05mm [0.02mm] max.
Dynamic allowable load moment (**)(**)	Ma: 123N·m Mb: 176N·m Mc: 227N·m
Overhang load length(**)	Ma direction: 750mm max. Mb, Mc directions: 750mm max
Dynamic straightness (Note 5)	0.02mm/m max.
Base	Material: Aluminum, with white alumite treatment
Ambient operating temperature/humidity	0 to 40°C, 85%RH max. (non-condensing)

* Assumes a standard rated life of 10,000km. The operational life will vary depending on operation and installation conditions. Please refer to P16 for details on operational life.
** Please refer to P13 for the dynamic allowable load moment and overhang load length for the double slider option.

Diagram



Dimensions and Mass by Stroke

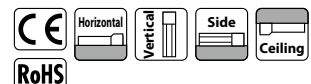
Stroke	120	170	220	270	320	370	420	470	520	570	620	670	720	770	820	870	920	970	1020	1070
L without brake	493	543	593	643	693	743	793	843	893	943	993	1043	1093	1143	1193	1243	1293	1343	1393	1443
L with brake	518	568	618	668	718	768	818	868	918	968	1018	1068	1118	1168	1218	1268	1318	1368	1418	1468
A	120	170	220	270	320	370	420	470	520	570	620	670	720	770	820	870	920	970	1020	1070
B	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204	1254	1304
C	0	1	1	1	1	2	2	2	2	3	3	3	4	4	4	4	5	5	5	5
D	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204	254	104	154	204
E	4	6	6	6	6	8	8	8	8	10	10	10	10	10	12	12	12	14	14	14
F	254	304	354	404	454	504	554	604	654	704	754	804	854	904	954	1004	1054	1104	1154	1204
G	184	234	284	334	384	434	484	534	584	634	684	734	784	834	884	934	984	1034	1084	1134
H	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4
J	74	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224	274	124	174	224
K	10	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18
Mass (kg)	6.7	7.4	8.0	8.7	9.3	9.9	10.5	11.2	11.8	12.5	13.1	13.7	14.3	15.0	15.6	16.3	16.9	17.6	18.2	18.9
Maximum speed (mm/s)	Lead 30	1800																		
	Lead 20	1200																		
	Lead 10	600																		
	Lead 5	300																		

- *1 During the home return, the slider moves to the ME, so pay attention not to let the slider hit surrounding parts.
* Please return the actuator to us if a home direction change is necessary after purchase.
* The allowable moment offset reference position is 37.5mm from the slider work mounting position.

Applicable Controllers

Applicable Controller	Maximum number of controlled axes	Operating method			Power-supply voltage	Maximum number of positioning points	Reference page
		Positioner	pulse train control	program			
SCON-CB/CGB	1 axes	●	●	-	Single-phase AC100/200 V	512 (768 for network spec.)	Please contact IAI for more information.
SCON-LC/LCG	1 axes	-	-	●		512 (768 for network spec.)	
SCON-CAL/CGAL	1 axes	●	-	-		512 (768 for network spec.)	
MSCON-C	6 axes	This model is network-compatible only.				256	
SSEL-CS	2 axes	●	-	-		20000	
XSEL-P/Q/RA/SA	8 axes	-	-	●		55,000 (depend on type)	
					Single-phase AC200V / three-phase AC200V		

• The type of compatible networks will vary depending on controller. Please contact IAI for more information.



* Some limitations may apply to Vertical/side/ceiling mountings depending on the model. Please contact IAI for more information.