

ISB-SXL-100

±10μm Standard
Battery-less absolute
Small X-axis
Long Slider type
Actuator width 90mm
100W



Model Specification Items	ISB	SXL	WA	100	36			T2		
	Series	Type	Encoder type	Motor type	Lead	Stroke	Applicable controller	Cable length	Options*	
			WA: Battery-less absolute	100: 100W	36: 36mm	130: 130mm 1080: 1080mm (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-SXL-WA-100-36-①-T2-②-③	100	36	10	2	130~1080 (Every 50mm)

• Legend: ① Stroke ② Cable length ③ Options

(Note 1) The value of payload is when operating at an acceleration of 0.4G. When the acceleration is increased, the payload will be reduced. Please contact IAI for more information.

(Note 2) The value of dynamic straightness is when the high straightness, precision specification option is specified.

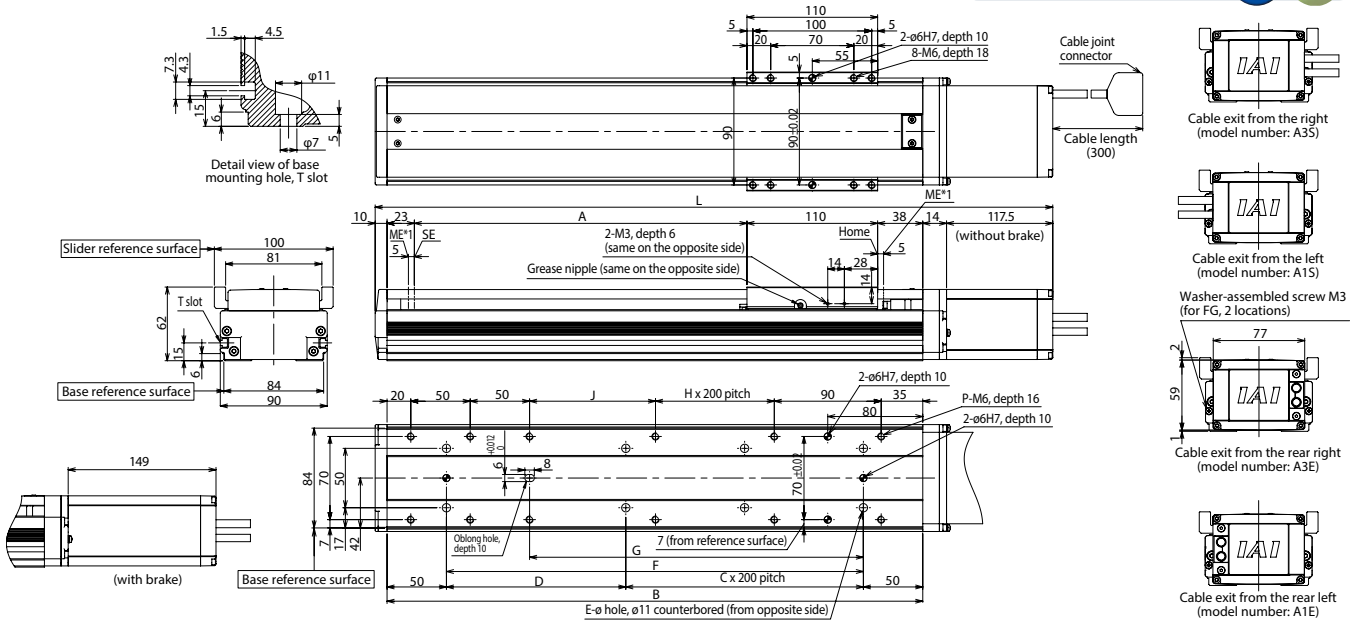
Option					
Name	Model number	Reference page	Name	Model number	Reference page
Cable exit from the left	A1S	→P10	Home limit switch on the opposite side	LL	→P10
Cable exit from the rear left	A1E	→P10	Master axis specification	LM	→P11
Cable exit from the right	A3S	→P10	Master axis specification (sensor 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 130~580)	ST	→P12
Creep sensor	C	→P10	High straightness, precision specification (stroke 630~1080)	ST	→P12
Creep sensor on the opposite side	CL	→P10	Double slider specification	W	→P11
Home limit switch	L	→P10			

Actuator Specifications	
Positioning repeatability	±0.01mm
Drive method	Ball screw φ12mm, rolled C10
Lost motion	0.05mm max.
Dynamic allowable load moment (*)(**)	Ma: 46.3N·m Mb: 66.2N·m Mc: 89.0N·m
Overhang load length(**)	Ma direction: 550mm max. Mb, Mc directions: 550mm max
Dynamic straightness (Note 2)	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

CAD drawings can be downloaded from our website.
www.intelligentactuator.com



- *1 When the slider is returning to its home position, Please be careful of interference from surrounding objects, as it will travel until it reaches the ME.
- ME: Mechanical End SE: Stroke End
- * Please return the actuator to us if a home direction change is necessary after purchase.
- * The allowable moment offset reference position is 30mm from the slider work mounting position.

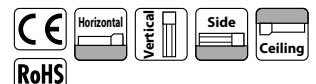
Dimensions and Mass by Stroke

Stroke	130	180	230	280	330	380	430	480	530	580	630	680	730	780	830	880	930	980	1030	1080	
L	without brake	442.5	492.5	542.5	592.5	642.5	692.5	742.5	792.5	842.5	892.5	942.5	992.5	1042.5	1092.5	1142.5	1192.5	1242.5	1292.5	1342.5	1392.5
	with brake	474	524	574	624	674	724	774	824	874	924	974	1024	1074	1124	1174	1224	1274	1324	1374	1424
A	130	180	230	280	330	380	430	480	530	580	630	680	730	780	830	880	930	980	1030	1080	
B	301	351	401	451	501	551	601	651	701	751	801	851	901	951	1001	1051	1101	1151	1201	1251	
C	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	
D	201	251	301	351	401	451	501	551	601	651	701	751	801	851	901	951	1001	1051	1101	1151	
E	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	
F	201	251	301	351	401	451	501	551	601	651	701	751	801	851	901	951	1001	1051	1101	1151	
G	131	181	231	281	331	381	431	481	531	581	631	681	731	781	831	881	931	981	1031	1081	
H	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	
J	56	106	156	206	256	306	356	406	456	506	556	606	656	706	756	806	856	906	956	1006	
P	10	10	10	10	10	12	12	12	12	14	14	14	14	14	16	16	16	16	18	18	
Mass (kg)																					
without brake	3.7	4.1	4.4	4.8	5.1	5.5	5.8	6.2	6.6	6.9	7.3	7.6	8.0	8.3	8.7	9.0	9.4	9.8	10.1	10.5	
with brake	4	4.4	4.7	5.1	5.4	5.8	6.1	6.5	6.9	7.2	7.6	7.9	8.3	8.6	9	9.3	9.7	10.1	10.4	10.8	
Maximum speed (mm/s)																					
Lead 36	1425	1700	1925	2075	2125	2160	2160	2160	2160	2000	1740	1520	1340	1190	1065	960	865	790	721	660	

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.