

ISB-SXM-100

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



Model Specification Items	ISB	SXM	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	100: 100mm 1100: 1100mm (Every 50mm)	T2: SCON M: SCON S: SEL X: SEL-P/Q X: SEL-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)	Horizontal Payload (kg)	Vertical Payload (kg)	Rated thrust (N)	Stroke (mm)
ISB-SXM-WA-100-36-①-T2-②-③	100	36	10	2	47.2	100~1100 (Every 50mm)

- Legend: ① Stroke ② Cable length ③ Options
- If the guide with ball retention mechanism (RT) is used, the vertical payload decreases by 0.5kg.



- (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	Guide with ball retention mechanism	RT	→P11
Brake	B	→P10	Slave axis specification	S	→P11
Creep sensor	C	→P10	High straightness, precision specification (stroke 100~600)	ST	→P12
Creep sensor on the opposite side	CL	→P10	High straightness, precision specification (stroke 650~1100)	ST	→P12
Home limit switch	L	→P10	Double slider specification	W	→P11

Actuator Specifications

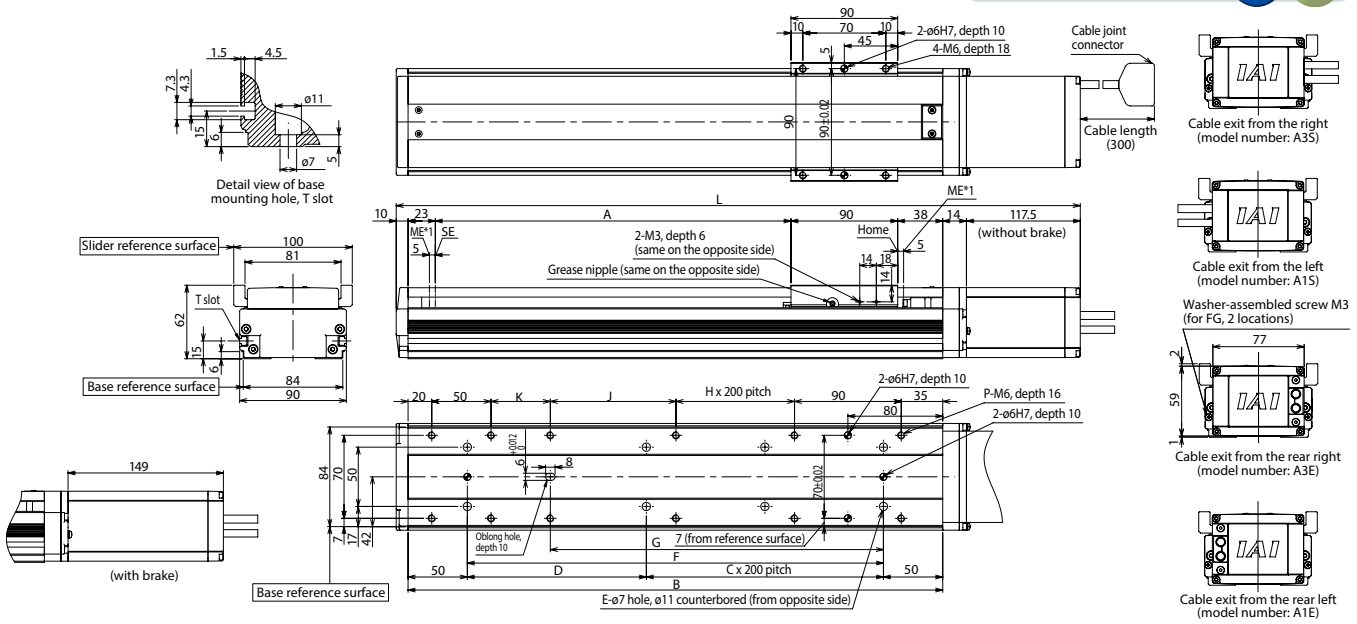
Positioning repeatability	±0.01mm
Drive method	Ball screw φ12mm, rolled C10
Lost motion	0.05mm max.
Dynamic allowable load moment (**)(**)	Ma: 32.9N·m Mb: 47.0N·m Mc: 76.8N·m
Overhang load length(**)	Ma direction: 450mm max. Mb, Mc directions: 450mm max
Dynamic straightness (Note 2)	0.02mm/m max.
Base	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.

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



Diagram



- *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.

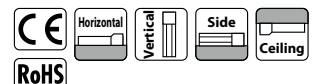
Dimensions and Mass by Stroke

Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	
L	without brake	392.5	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	424	474	524	574	624	674	724	774	824	874	924	974	1024	1074	1124	1174	1224	1274	1324	1374	1424
A	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	
B	251	301	351	401	451	501	551	601	651	701	751	801	851	901	951	1001	1051	1101	1151	1201	1251	
C	0	0	0	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	4	5	5	
D	151	201	251	101	151	201	251	101	151	201	251	101	151	201	251	101	151	201	251	101	151	
E	4	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	
F	151	201	251	301	351	401	451	501	551	601	651	701	751	801	851	901	951	1001	1051	1101	1151	
G	131	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	4	
J	56	56	106	156	206	256	106	156	206	256	106	156	206	256	106	156	206	256	106	156	206	
K	0	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	
P	8	10	10	10	10	10	12	12	12	14	14	14	14	16	16	16	16	16	18	18	18	
Mass (kg)	without brake	3.2	3.6	4.0	4.3	4.7	5.0	5.4	5.7	6.1	6.5	6.8	7.2	7.5	7.9	8.2	8.6	8.9	9.3	9.7	10.0	10.4
	with brake	3.5	3.9	4.3	4.6	5	5.3	5.7	6	6.4	6.8	7.1	7.5	7.8	8.2	8.5	8.9	9.2	9.6	10	10.3	10.7
Maximum speed (mm/s)	Lead 36	1100	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.)	
M: SCON-C	6 axes	This model is network-compatible only.				256	
S: SEL-CS	2 axes	●	-	-		20000	
X: SEL-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.