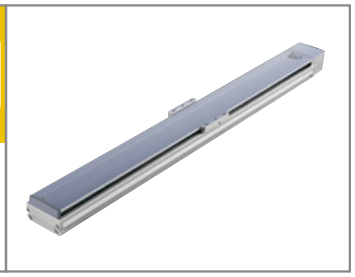
ISB-MXMX-400

±10μm Standard | Battery-less absolute | Medium X-axis | Mid-Support type | Actuator width 120 mm | 400 W



Model Specification Items

Series	Type	Encoder type	Motor type	Lead	Stroke	Applicable controller	Cable length	Options*
ISB	MXMX	WA	400	48	☐	T2	☐	☐
		WA: Battery-less absolute	400: 400W	48: 48mm	800: 800mm ~ 2000: 2000mm (Every 50mm)	T2: SCON SSEL XSEL-P/Q XSEL-RA/SA	N : None S : 3m M : 5m X☐☐: Specified length	Refer to the optionsptions 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) Horizontal (kg)	Payload (Note 1) Vertical (kg)	Rated thrust (N)	Stroke (mm)
ISB-MXMX-WA-400-48-①-T2-②-③	400	48	20	—	141.3	800~2000 (Every 50mm)

- Legend: ① Stroke ② Cable length ③ Options

CAUTION

(Note 1) The value of payload is when operating at an acceleration of 0.4G. 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
Cable exit from the left	A1S	➔P10
Cable exit from the rear left	A1E	➔P10
Cable exit from the right	A3S	➔P10
Cable exit from the rear right	A3E	➔P10
AQ seal (standard feature)	AQ	➔P10
Brake	B	➔P10
Creep sensor	C	➔P10
Creep sensor on the opposite side	CL	➔P10
Home limit switch	L	➔P10

Name	Model number	Reference page
Home limit switch on the opposite side	LL	➔P10
Master axis specification	LM	➔P11
Master axis specification (sensor on the opposite side)	LLM	➔P11
Non-motor end specification	NM	➔P11
Guide with ball retention mechanism	RT	➔P11
Slave axis specification	S	➔P11
High straightness, precision specification (stroke 800~1300)	ST	➔P12
High straightness, precision specification (stroke 1350~1900)	ST	➔P12
High straightness, precision specification (stroke 1950~2000)	ST	➔P12

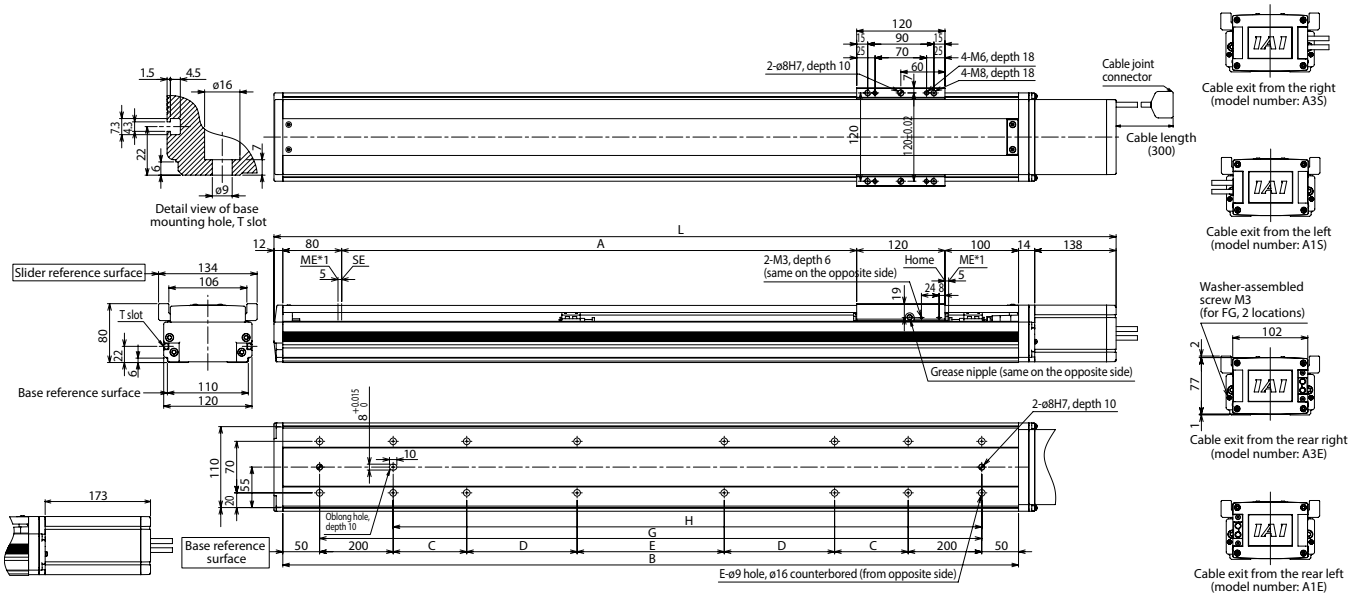
Actuator Specifications

Positioning repeatability	±0.01mm
Drive method	Ball screw φ16mm, rolled C10
Lost motion	0.05mm max.
Dynamic allowable load moment (*)	Ma: 81.0N·m Mb: 116N·m Mc: 189N·m
Overhang load length	Ma direction: 600mm max. Mb, Mc directions: 600mm 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.

Diagram

CAD drawings can be downloaded from our website.
www.intelligentactuator.com
2D CAD 3D CAD



*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 37.5mm from the slider work mounting position.

Dimensions and Mass by Stroke

Stroke	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000
L without brake	1264	1314	1364	1414	1464	1514	1564	1614	1664	1714	1764	1814	1864	1914	1964	2014	2064	2114	2164	2214	2264	2314	2364	2414	2464
L with brake	1299	1349	1399	1449	1499	1549	1599	1649	1699	1749	1799	1849	1899	1949	1999	2049	2099	2149	2199	2249	2299	2349	2399	2449	2499
A	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000
B	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2250	2300
C	200	200	200	200	200	225	250	275	300	325	350	375	400	425	450	475	500	525	550	575	200	200	200	200	200
D	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	400	425	450	475	500
E	200	250	300	350	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400
F	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	16	16	16	16	16
G	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200
H	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	1650	1700	1750	1800	1850	1900	1950	2000
Mass (kg) without brake	17.1	17.7	18.4	19.0	19.6	20.3	20.9	21.5	22.2	22.8	23.4	24.1	24.7	25.4	26.0	26.6	27.3	27.9	28.5	29.2	29.8	30.4	31.1	31.7	32.3
Mass (kg) with brake	17.7	18.3	19	19.6	20.2	20.9	21.5	22.1	22.8	23.4	24	24.7	25.3	25.9	26.6	27.2	27.8	28.5	29.1	29.8	30.4	31	31.7	32.3	32.9
Maximum speed (mm/s) Lead 48	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	2065	1925	1805	1690	1590	1495	1410	1335	1265	1195	1135	1080	1025	980

Applicable Controllers

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

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

CE RoHS Horizontal Vertical Side Ceiling