

ISDB-MX-400

±10μm Standard
Battery-less absolute
Simple Dust Proof
Medium type
Mid-Support type
Actuator width 120mm
400w



Model Specification Items	ISDB	MX	WA	400	48			T2		
	Series	Type	Encoder type	Motor type	Lead	Stroke	Stroke	Applicable controller	Cable length	Options*
			WA: Battery-less absolute	400: 400W	48: 48mm	800: 800mm 1600: 1600mm (Every 50mm)	T2: SCON 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)		
ISDB-MX-WA-400-48-①-T2-②-③	400	48	20	—	141.3	800~1600 (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. 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	→P11	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 800~1300)	ST	→P12
Creep sensor on the opposite side	CL	→P10	High straightness, precision specification (stroke 1350~1600)	ST	→P12
Home limit switch	L	→P10			

Actuator Specifications

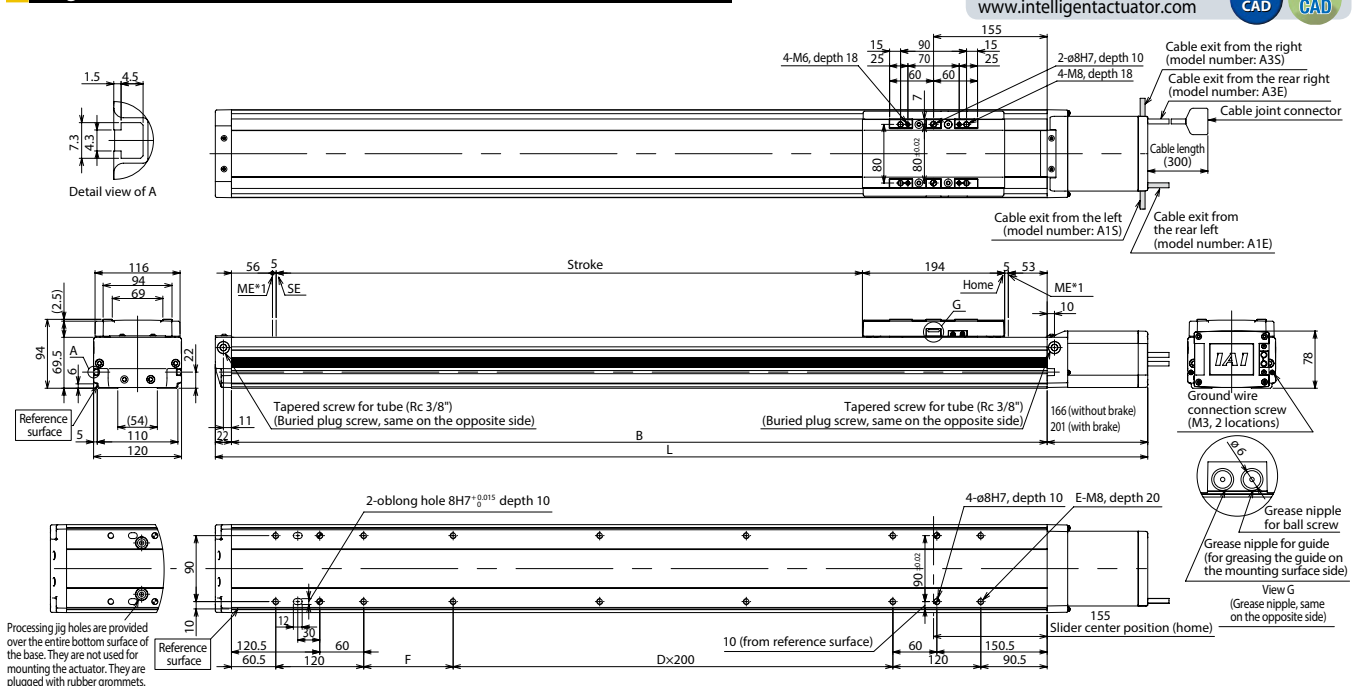
Positioning repeatability	±0.01mm
Drive method	Ball screw φ16mm, rolled C10
Lost motion	0.05mm max.
Dynamic allowable load moment (*)	Ma: 81.0N·m Mb: 116N·m Mc: 189N·m
Overhang load length	Ma direction: 600mm max. Mb, Mc directions: 600mm max
Dynamic straightness (Note 2)	0.02mm/m max.
Base	Material: Aluminum, with white alumite treatment
Protection structure	IP30
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.

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 51.5mm from the slider work mounting position.

Dimensions and Mass by Stroke

Stroke	Stroke																	
	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	1350	1400	1450	1500	1550	1600	
L	without brake	1301	1351	1401	1451	1501	1551	1601	1651	1701	1751	1801	1851	1901	1951	2001	2051	2101
	with brake	1336	1386	1436	1486	1536	1586	1636	1686	1736	1786	1836	1886	1936	1986	2036	2086	2136
B	1113	1163	1213	1263	1313	1363	1413	1463	1513	1563	1613	1663	1713	1763	1813	1863	1913	
D	3	3	3	3	4	4	4	4	4	5	5	5	5	6	6	6	6	7
E	14	14	14	14	16	16	16	16	16	18	18	18	18	20	20	20	20	22
F	122	172	222	272	322	372	422	472	522	572	622	672	722	772	822	872	922	972
Mass (kg)	without brake	18.9	19.5	20.2	20.8	21.4	22.1	22.7	23.4	24.0	24.6	25.3	25.9	26.6	27.2	27.8	28.5	29.1
	with brake	19.5	20.1	20.7	21.4	22	22.7	23.3	23.9	24.6	25.2	25.9	26.5	27.1	27.8	28.4	29.1	29.7
Maximum speed (mm/s)	Lead 48	1700	1750	1800	1850	1900	1950	2000	2050	2100	2150	2200	1990	1860	1745	1640	1540	1450

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 AC200V	512 (768 for network spec.)	Please contact IAI for more information.
SCON-LC/LCG	1 axes	-	-	●			
SSEL-CS	2 axes	●	●	●	Single-phase AC100/200V	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.

