

SSPA-MXM-400

High Precision Specification

±5µm High precision

Medium X-axis

High Rigidity

Actuator width 130 mm

400 w



Model Specification Items	SSPA	MXM		400				T2		
	Series	Type	Encoder type	Motor type	Lead	Stroke	Applicable controller	Cable length	Options*	
	A: Absolute specification I: Incremental specification	400: 400W	40: 40mm 20: 20mm 10: 10mm	100: 100mm 200: 200mm 1300: 1300mm (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)		
SSPA-MXM-①-400-40-②-T2-③-④	400	40	45	6	169.6	100~1300 (Every 50mm)
SSPA-MXM-①-400-20-②-T2-③-④		20	90	12	339.1	
SSPA-MXM-①-400-10-②-T2-③-④		10	120	25	678.3	

Legend: ① Encoder type ② Stroke ③ Cable length ④ Options

CAUTION (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.

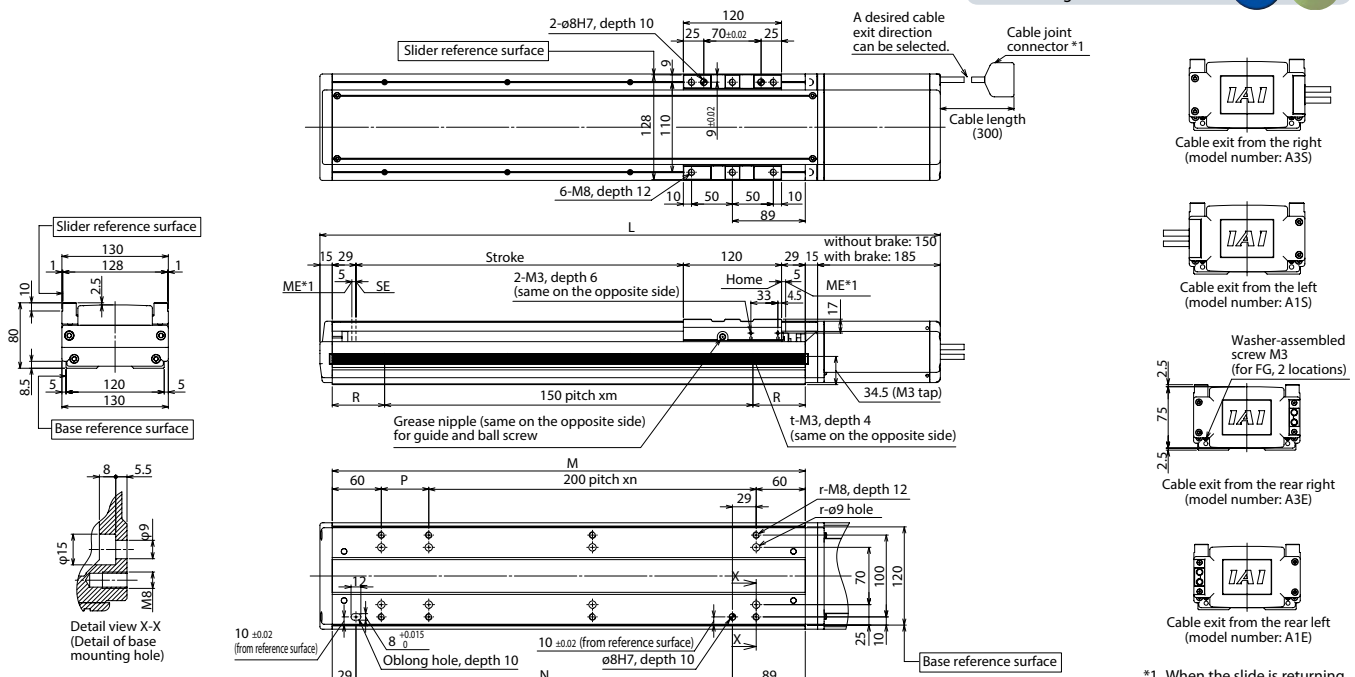
Option					
Name	Model number	Reference page	Name	Model number	Reference page
Cable exit from the left	A1S	→P10	Master axis specification (sensor on the opposite side)	LLM	→P11
Cable exit from the rear left	A1E	→P10	Electrolytic black coating (stroke 100~300)	MD	→P11
Cable exit from the right	A3S	→P10	Electrolytic black coating (stroke 350~600)	MD	→P11
Cable exit from the rear right	A3E	→P10	Electrolytic black coating (stroke 650~900)	MD	→P11
AQ seal (standard feature)	AQ	→P10	Electrolytic black coating (stroke 950~1300)	MD	→P11
Brake	B	→P10	Non-motor end specification	NM	→P11
Creep sensor	C	→P10	Guide with ball retention mechanism	RT	→P11
Creep sensor on the opposite side	CL	→P10	Slave axis specification	S	→P11
Home limit switch	L	→P10	High straightness, precision specification (stroke 100~600)	ST	→P12
Home limit switch on the opposite side	LL	→P10	High straightness, precision specification (stroke 650~1300)	ST	→P12
Master axis specification	LM	→P11			

Actuator Specifications	
Positioning repeatability	±0.005mm
Drive method	Ball screw φ20mm, equivalent to rolled C5
Lost motion	0.02mm max.
Dynamic allowable load moment (*)	Ma: 107N·m Mb: 107N·m Mc: 276N·m
Overhang load length	Ma direction: 600mm max. Mb, Mc directions: 600mm max
Dynamic straightness (Note 2)	0.015mm/m max.
Base	Material: Cast iron with coating
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



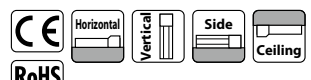
Dimensions and Mass by Stroke

Stroke	Dimensions (mm)																			Mass (kg)						
	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200	1250	1300	
L	without brake	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158	1208	1258	1308	1358	1408	1458	1508	1558	1608	1658
	with brake	493	543	593	643	693	743	793	843	893	943	993	1043	1093	1143	1193	1243	1293	1343	1393	1443	1493	1543	1593	1643	1693
M	278	328	378	428	478	528	578	628	678	728	778	828	878	928	978	1028	1078	1128	1178	1228	1278	1328	1378	1428	1478	
N	160	210	260	310	360	410	460	510	560	610	660	710	760	810	860	910	960	1010	1060	1110	1160	1210	1260	1310	1360	
P	158	208	258	308	358	408	458	508	558	608	658	708	758	808	858	908	958	1008	1058	1108	1158	1208	1258	1308	1358	
R	64	14	39	64	14	39	64	14	39	64	14	39	64	14	39	64	14	39	64	14	39	64	14	39	64	
m	1	2	2	2	3	3	3	4	4	4	4	5	5	5	6	6	7	7	7	8	8	8	8	9	9	
n	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	
r	4	4	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	
t	2	3	3	3	4	4	4	4	5	5	5	6	6	6	7	7	8	8	8	9	9	9	10	10	10	
Mass (kg)	Lead 40	12.4	13.5	14.6	15.7	16.7	17.8	18.9	20.0	21.1	22.2	23.2	24.3	25.4	26.5	27.6	28.7	29.7	30.8	31.9	33.0	34.1	35.2	36.2	37.3	38.4
	Lead 20																									
Maximum speed (mm/s)	Lead 10																									
		600																								

- *1 When the slide is returning to its home position, please be careful of interference from surfacing 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 48.5mm 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 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)	



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