

SSPA-SXM-200

High Precision Specification

±5µm High precision

Small X-axis

High Rigidity

Actuator width 100 mm

200 w



Model Specification Items	SSPA	SXM		200				T2		
	Series	Type	Encoder type	Motor type	Lead	Stroke	Applicable controller	Cable length	Options*	
	A: Absolute specification I: Incremental specification	200: 200W	30: 30mm 20: 20mm 10: 10mm	100: 100mm 20: 20mm 100: 1100mm (Every 50mm)	T2: SCON M: 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)	Horizontal Payload (kg)	Vertical Payload (kg)	Rated thrust (N)	Stroke (mm)
SSPA-SXM-①-200-30-②-T2-③-④	200	30	30	4	113.9	100~1100 (Every 50mm)
SSPA-SXM-①-200-20-②-T2-③-④		20	45	6	170.9	
SSPA-SXM-①-200-10-②-T2-③-④		10	90	12	341.8	

Legend: ① Encoder type ② Stroke ③ Cable length ④ 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	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 950~1100)	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 650~1100)	ST	→P12
Master axis specification	LM	→P11			

Actuator Specifications

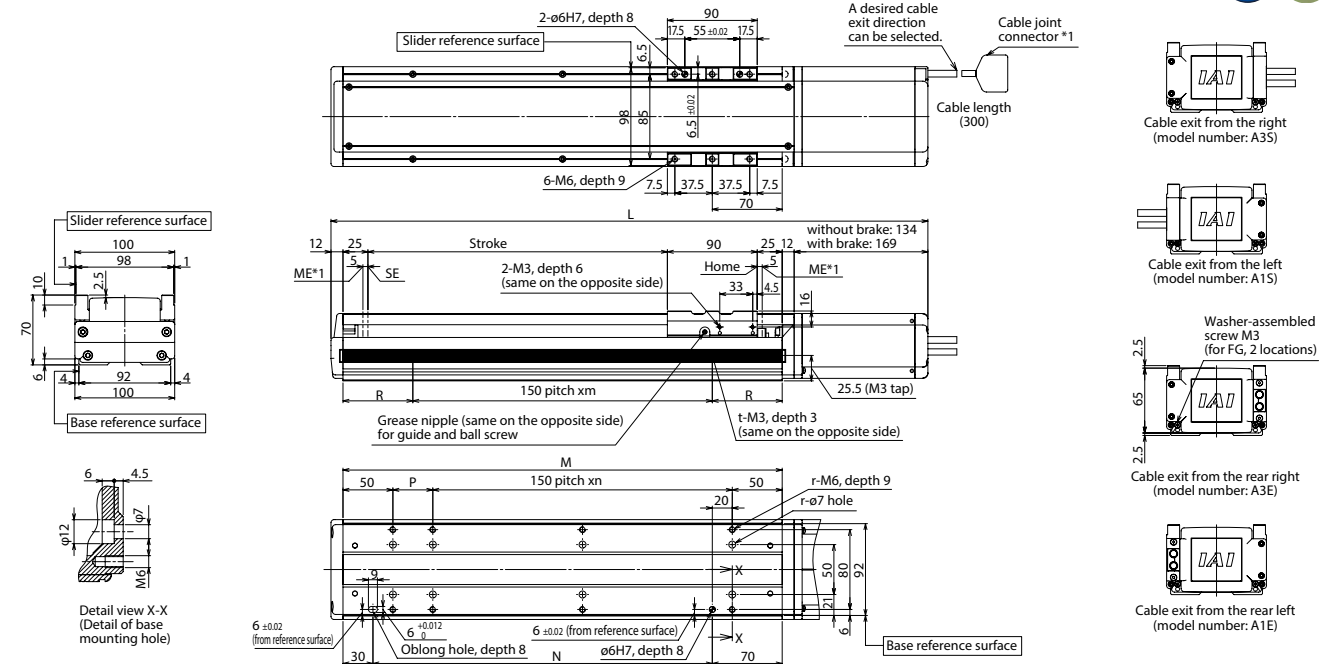
Positioning repeatability	±0.005mm
Drive method	Ball screw φ16mm, equivalent to rolled C5
Lost motion	0.02mm max.
Dynamic allowable load moment (*)	Ma: 43.4N·m Mb: 43.4N·m Mc: 116N·m
Overhang load length	Ma direction: 450mm max. Mb, Mc directions: 450mm max
Dynamic straightness (Note 2)	0.015mm/m max.
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

2D CAD 3D CAD



Dimensions and Mass by Stroke

L	Stroke	Lead																				
		100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100
without brake	398	448	498	548	598	648	698	748	798	848	898	948	998	1048	1098	1148	1198	1248	1298	1348	1398	
	433	483	533	583	633	683	733	783	833	883	933	983	1033	1083	1133	1183	1233	1283	1333	1383	1433	
M	240	290	340	390	440	490	540	590	640	690	740	790	840	890	940	990	1040	1090	1140	1190	1240	
N	140	190	240	290	340	390	440	490	540	590	640	690	740	790	840	890	940	990	1040	1090	1140	
P	140	40	90	140	40	90	140	40	90	140	40	90	140	40	90	140	40	90	140	40	90	
R	45	70	20	45	70	20	45	70	20	45	70	20	45	70	20	45	70	20	45	70	20	
m	1	1	2	2	2	3	3	3	4	4	4	5	5	5	6	6	6	7	7	7	8	
n	0	1	1	1	2	2	2	3	3	3	4	4	4	5	5	5	6	6	6	7	7	
r	4	6	6	6	8	8	8	10	10	10	12	12	12	14	14	14	16	16	16	18	18	
t	2	2	3	3	3	4	4	4	5	5	5	6	6	7	7	7	8	8	8	9	9	
Mass (kg)	6.8	7.4	8.1	8.7	9.3	10.0	10.6	11.2	11.9	12.5	13.1	13.8	14.4	15.0	15.6	16.3	16.9	17.5	18.2	18.8	19.4	
Maximum speed (mm/s)	Lead 30	1800																				
	Lead 20	1120																				
	Lead 10	600																				

*1 When the slide is returning to its home position, please be careful of interference from surfing objects, as it will travel until it reaches the ME.

ME: Mechanical End SE: Stroke End

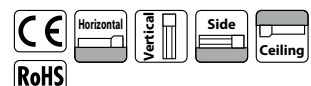
* Please return the actuator to its home direction change is necessary after purchase.

* The allowable moment offset reference position is 45mm 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 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.