

# SSPA-LXM-750

High Precision Specification

±5µm High precision

Large X-axis

High Rigidity

Actuator width 155 mm

750 w



Model Specification Items	SSPA	LXM		750				T2		
	Series	Type	Encoder type	Motor type	Lead	Stroke	Applicable controller	Cable length	Options*	
	A: Absolute specification I: Incremental specification	750: 750W	50: 50mm 25: 25mm	100: 100mm 1500: 1500mm (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-LXM-①-750-50-②-T2-③-④	750	50	60	12	255	100~1500 (Every 50mm)
SSPA-LXM-①-750-25-②-T2-③-④		25	120	25	510	

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 950~1200)	MD	→P11
Brake	B	→P10	Electrolytic black coating (stroke 1250~1500)	MD	→P11
Creep sensor	C	→P10	Non-motor end specification	NM	→P11
Creep sensor on the opposite side	CL	→P10	Guide with ball retention mechanism	RT	→P11
Home limit switch	L	→P10	Slave axis specification	S	→P11
Home limit switch on the opposite side	LL	→P10	High straightness, precision specification (stroke 100~600)	ST	→P12
Master axis specification	LM	→P11	High straightness, precision specification (stroke 650~1300)	ST	→P12
			High straightness, precision specification (stroke 1350~1500)	ST	→P12

## Actuator Specifications

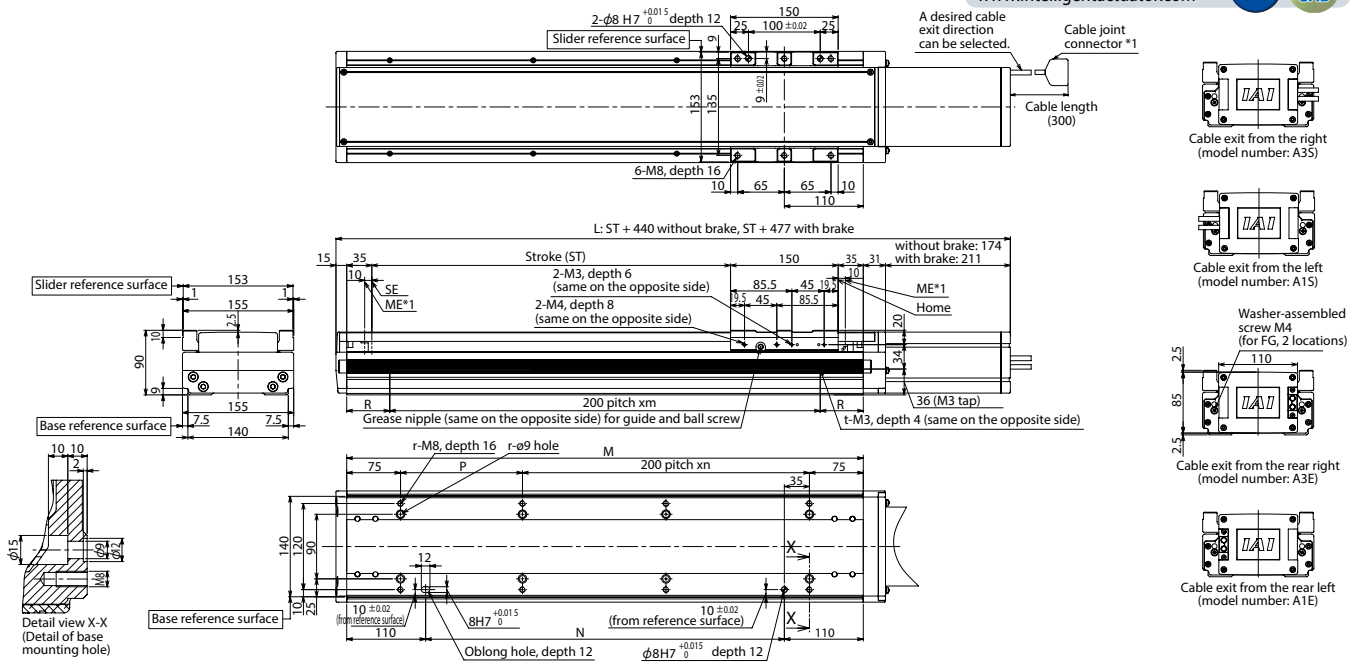
Positioning repeatability	±0.005mm
Drive method	Ball screw φ25mm, equivalent to rolled C5
Lost motion	0.02mm max.
Dynamic allowable load moment (*)	Ma: 162N·m Mb: 162N·m Mc: 391N·m
Overhang load length	Ma direction: 750mm max. Mb, Mc directions: 750mm max
Dynamic straightness (Note 2)	0.015mm/m max.
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



\*1 When the slide is returning to its home position, please be careful of interference from surfing objects, as it will travel until it races 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 50.5mm from the slider work mounting position.

## Dimensions and Mass by Stroke

Stroke	L																												
	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	1350	1400	1450	1500
without brake	540	590	640	690	740	790	840	890	940	990	1040	1090	1140	1190	1240	1290	1340	1390	1440	1490	1540	1590	1640	1690	1740	1790	1840	1890	1940
with brake	577	627	677	727	777	827	877	927	977	1027	1077	1127	1177	1227	1277	1327	1377	1427	1477	1527	1577	1627	1677	1727	1777	1827	1877	1927	1977
M	320	370	420	470	520	570	620	670	720	770	820	870	920	970	1020	1070	1120	1170	1220	1270	1320	1370	1420	1470	1520	1570	1620	1670	1720
N	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	1350	1400	1450	1500
P	170	220	270	320	370	420	470	520	570	620	670	720	770	820	870	920	970	1020	1070	1120	1170	1220	1270	1320	1370	1420	1470	1520	1570
R	60	85	10	35	60	85	10	35	60	85	10	35	60	85	10	35	60	85	10	35	60	85	10	35	60	85	10	35	60
m	1	1	2	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8
n	0	0	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4	4	4	5	5	5	5	6	6	6	6	7	7
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	16	18	18	18
t	2	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	7	7	7	7	8	8	8	8	9	9	9
Mass (kg)	21.0	23.0	25.0	26.5	28.0	29.5	31.0	33.0	35.0	36.5	38.0	39.5	41.0	43.0	45.0	46.5	48.0	49.5	51.0	52.5	54.0	56.0	58.0	59.5	61.0	62.5	64.0	66.0	68.0
Maximum speed (mm/s)	2500																	2320	2320	1950	1950	1660	1660	1440	1440	1250	1250	1100	1100
	Lead 50	1250																	1160	1160	970	970	830	830	720	720	620	620	550
Lead 25	1250																	1160	1160	970	970	830	830	720	720	620	620	550	550

## 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	-	-	●		512 (768 for network spec.)	
SSEL-CS	2 axes	-	-	●	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.



RoHS

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