

SSPDACR-M-400

High Precision Specification

±5µm High precision

Clean-room Spec

Medium High Rigidity

Actuator width 130 mm

400 w



Model Specification Items	SSPDACR— M	—	—	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 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)	Horizontal Payload (kg)	Vertical Payload (kg)	Rated thrust (N)	Suction flow rate (Nl/min)	Stroke (mm)
SSPDACR-M-①-400-40-②-T2-③-④	400	40	45	6	169.6	160	100~1300 (Every 50mm)
SSPDACR-M-①-400-20-②-T2-③-④		20	90	12	339.1	110	
SSPDACR-M-①-400-10-②-T2-③-④		10	120	25	678.3	60	

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	LM	→P11
Cable exit from the rear left	A1E	→P10	Master axis specification (sensor on the opposite side)	LLM	→P11
Cable exit from the right	A3S	→P11	Non-motor end specification	NM	→P11
Cable exit from the rear right	A3E	→P11	Guide with ball retention mechanism	RT	→P11
AQ seal (standard feature)	AQ	→P10	Slave axis specification	S	→P11
Brake	B	→P10	High straightness, precision specification (stroke 100~600)	ST	→P12
Creep sensor	C	→P10	High straightness, precision specification (stroke 650~1300)	ST	→P12
Creep sensor on the opposite side	CL	→P10	Suction tube joint on the opposite side	VR	→P11
Home limit switch	L	→P10			
Home limit switch on the opposite side	LL	→P10			

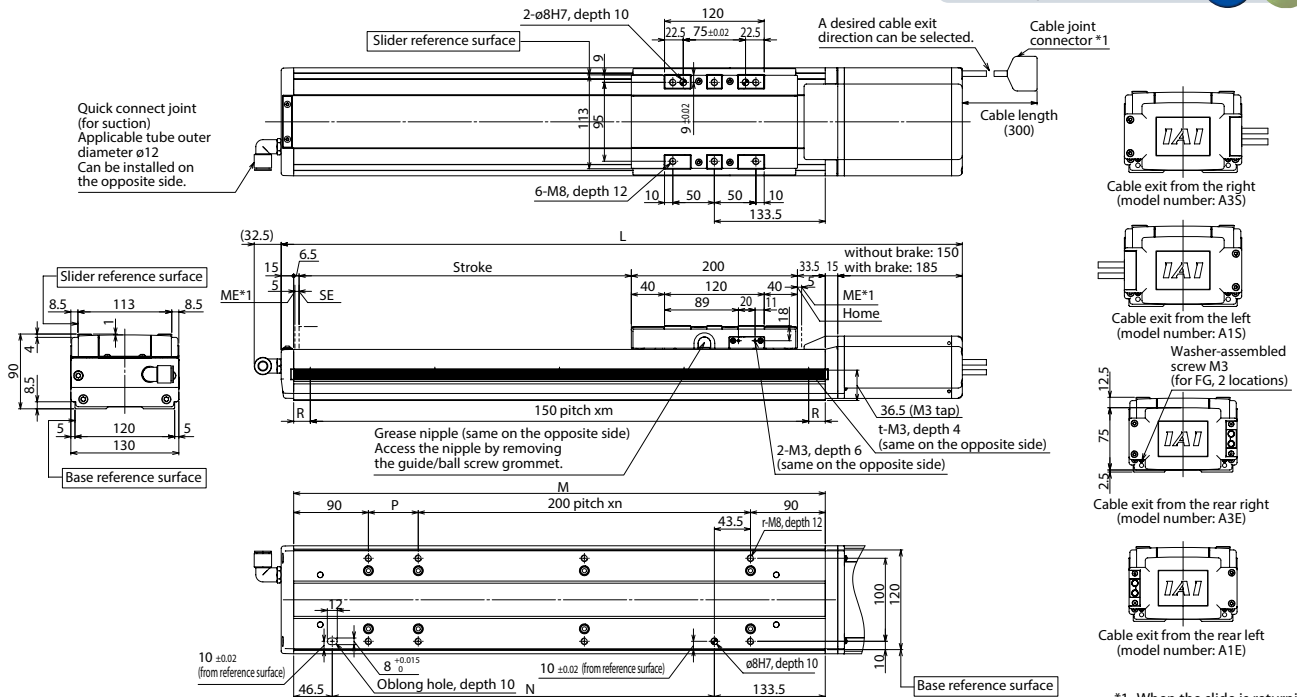
* If it is Lead 40, can not select Guide with ball retention mechanism (RT).

Actuator Specifications

Drive method	Ball screw φ20mm, equivalent to rolled C5
Positioning repeatability	±0.005mm
Base	Material: Cast iron with coating
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.
Cleanroom rating	Class 10 (Fed.Std.209D), Class, equivalent to 2.5 (ISO 14644-1)
Dynamic straightness (Note 2)	0.015mm/m max.
Grease	Low dust-raising grease(for ball screw and guide)

* 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



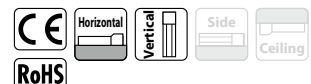
Dimensions and Mass by Stroke

Stroke	L													M													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															
without brake	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															
with brake	555	605	655	705	755	805	855	905	955	1005	1055	1105	1155	1205	1255	1305	1355	1405	1455	1505	1555	1605	1655	1705	1755															
M	340	390	440	490	540	590	640	690	740	790	840	890	940	990	1040	1090	1140	1190	1240	1290	1340	1390	1440	1490	1540															
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	160	210	60	110	160	210	60	110	160	210	60	110	160	210	60	110	160	210	60	110	160	210	60	110	160															
R	20	45	70	20	45	70	20	45	70	20	45	70	20	45	70	20	45	70	20	45	70	20	45	70	20															
m	2	2	2	3	3	3	4	4	4	5	5	5	6	6	6	7	7	7	8	8	8	9	9	9	10															
n	0	0	1	1	1	1	2	2	2	3	3	3	3	4	4	4	4	5	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	14	14	14	14	14	16	16	16															
t	3	3	3	4	4	4	5	5	5	6	6	6	7	7	7	8	8	8	9	9	9	10	10	10	11															
Mass (kg)	13.9	15.0	16.0	17.1	18.1	19.2	20.2	21.3	22.3	23.4	24.4	25.5	26.5	27.6	28.7	29.7	30.8	31.8	32.9	33.9	35.0	36.0	37.1	38.1	39.2															
Maximum speed (mm/s)	Lead 40	1600													1600													1600												
	Lead 20	1100													1100													1100												
	Lead 10	600													600													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 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 58.5mm 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 mounting depending on the model. Please contact IAI for more information.

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