

# SSPDACR-S-200

High Precision Specification  $\pm 5\mu\text{m}$  High precision Clean-room Spec Small High Rigidity Actuator width 100 mm 200 W



Model Specification Items: SSPDACR — S — [ ] — 200 — [ ] — [ ] — T2 — [ ] — [ ]

Series — Type — Encoder type — Motor type — Lead — Stroke — Applicable controller — Cable length — Options\*

A: Absolute specification 200: 200W 30: 30mm 100: 100mm T2: SCON M5CON SSEL XSEL-P/Q XSEL-RA/SA  
 I: Incremental specification 20: 20mm 10: 10mm 1100: 1100mm (Every 50mm) 20: 20mm 100: 100mm  
 N : None Refer to the options table below.  
 S : 3m  
 M : 5m  
 X [ ] : Specified length

- 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) Horizontal (kg) Vertical (kg)	Rated thrust (N)	Suction flow rate (Nl/min)	Stroke (mm)
SSPDACR-S-①-200-30-②-T2-③-④	200	30	30 4	113.9	150	100~1100 (Every 50mm)
SSPDACR-S-①-200-20-②-T2-③-④		20	45 6	170.9	100	
SSPDACR-S-①-200-10-②-T2-③-④		10	90 12	341.8	50	

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

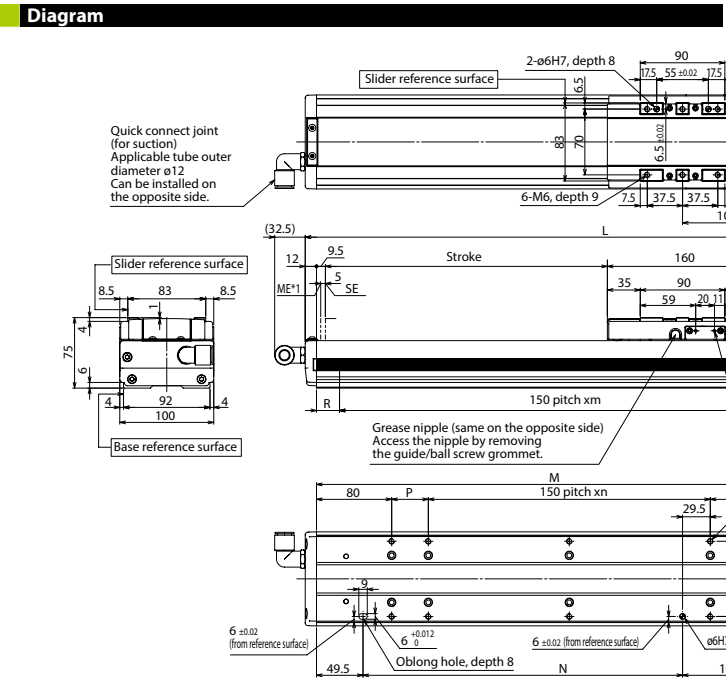
Name	Model number	Reference page	Name	Model number	Reference page
Cable exit from the left	A1S	→P10	Master axis specification	LM	→P11
Cable exit from the rear left	A1E	→P10	Master axis specification (sensor on the opposite side)	LLM	→P11
Cable exit from the right	A3S	→P11	Non-motor end specification	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 650~1100)	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 20 or 30, can not select Guide with ball retention mechanism (RT).

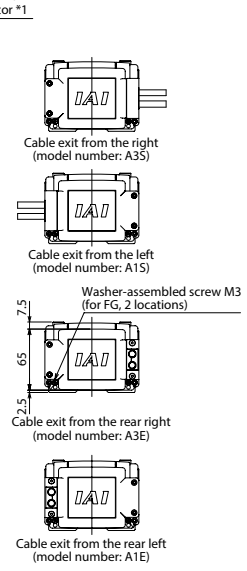
### Actuator Specifications

Drive method	Ball screw $\phi 16\text{mm}$ , equivalent to rolled C5
Positioning repeatability	$\pm 0.005\text{mm}$
Base	Material: Cast iron with coating
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.
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.



CAD drawings can be downloaded from our website. [www.intelligentactuator.com](http://www.intelligentactuator.com)



### Dimensions and Mass by Stroke

Stroke (mm)	Lead (mm)										
	100	150	200	250	300	350	400	450	500	550	600
L	without brake	457	507	557	607	657	707	757	807	857	907
	with brake	492	542	592	642	692	742	792	842	892	942
M	299	349	399	449	499	549	599	649	699	749	799
N	140	190	240	290	340	390	440	490	540	590	640
P	139	39	89	139	39	89	139	39	89	139	39
R	74.5	24.5	49.5	74.5	24.5	49.5	74.5	24.5	49.5	74.5	24.5
m	1	2	2	3	3	4	4	4	5	5	6
n	0	1	1	2	2	3	3	3	4	4	5
r	4	6	6	8	8	10	10	10	12	12	14
t	2	3	3	4	4	5	5	5	6	6	7
Mass (kg)	7.5	8.1	8.7	9.3	10.0	10.6	11.2	11.8	12.4	13.0	13.7
Maximum speed (mm/s)	Lead 30	1600									
	Lead 20	1100									
	Lead 10	600									
Maximum speed (mm/s)	Lead 30	1600	1450	1290	1160	1040	940	860	780	720	660
	Lead 20	1090	970	860	770	690	630	570	520	480	440
	Lead 10	540	480	430	380	340	310	280	260	240	220

- \*1 When the slide is returning to its home position, please be careful of interference from surging objects, as it will travel until it races 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 50mm 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.)	
M5CON-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 mounting depending on the model. Please contact IAI for more information.