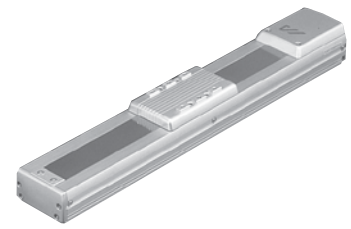


ISDA-S Single-Axis Robot: Compact Dust-proof Type, Actuator Width 94mm, 60W Straight Shape

ISPDA-S Single-Axis Robot: Compact Dust-proof Type, Actuator Width 94mm, 60W Straight Shape, High-Precision Specification

Type/Compact dust-proof (94 mm wide) Stroke/100~600mm Load capacity/50kg (horizontal)/14kg (vertical)



Model specification items Series Type Encoder type Motor output Lead Stroke Applicable controller Cable length Options

(Example) ISDA - S - A - 60 - 16 - 600 - T1 - S - B

* Refer to page 1 for the details of model specification items.

Model/Specifications

Model	Encoder Type	Motor output (W)	Lead (mm)	Stroke 50mm increments (mm)	Speed (mm/s) (Note 1)	Load capacity (Note2)				Rated thrust (N)	Positioning repeatability (mm) (Note 3)
						Horizontal (kg)		Vertical (kg)			
						Rated acceleration	Maximum acceleration	Rated acceleration	Maximum acceleration		
ISDA [ISPDA]-S-[1]-60-16-[2]-[3]-[4]-[5]	Absolute Incremental	60	16	100 ~ 600	1 ~ 800	12	3.5	3	2	63.7	±0.02 [±0.01]
ISDA [ISPDA]-S-[1]-60-8-[2]-[3]-[4]-[5]			8		1 ~ 400	25	12	6	5	127.4	
ISDA [ISPDA]-S-[1]-60-4-[2]-[3]-[4]-[5]			4		1 ~ 200	50	30	14	12	254.8	

*In the above model names, [1] indicates the encoder type, [2] the stroke, [3] the applicable controller, [4] the cable length, and [5] the applicable options.

Options

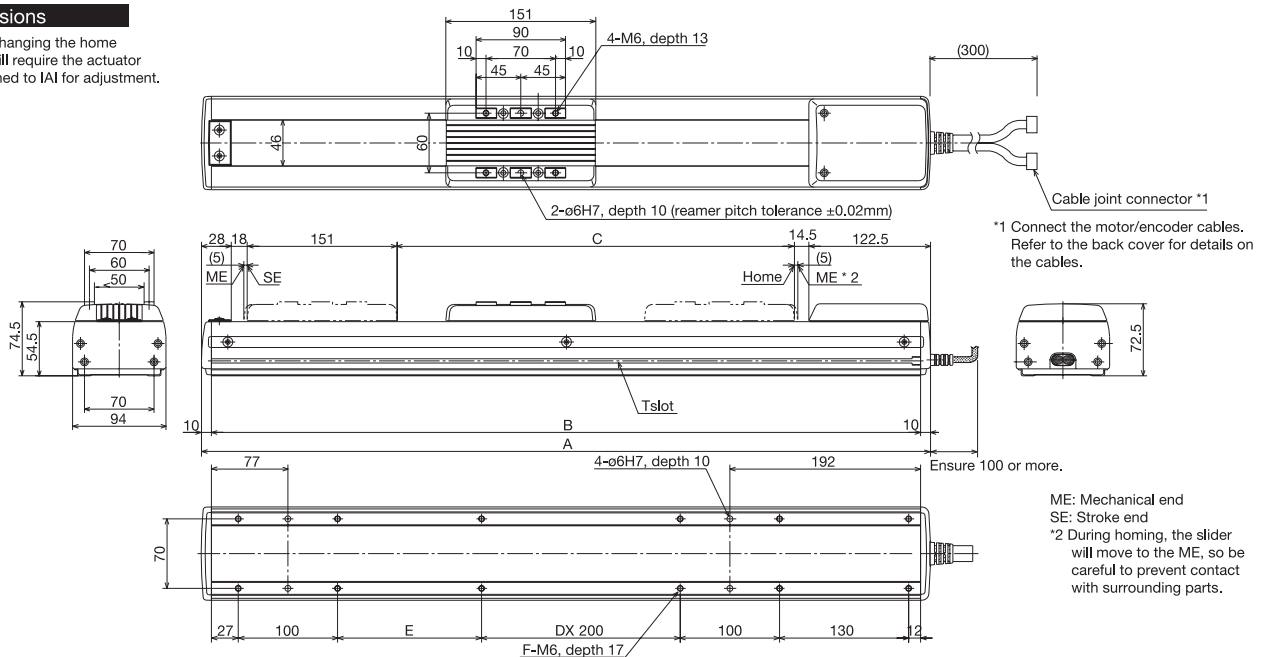
Name	Code	Page	Remarks
AQ seal	AQ	·P18	
Brake	B	·P18	
Reversed home specification	NM	·P18	
Guide with ball-retaining mechanism	RT	·P18	

Common Specifications

Drive system (Note 4)	Ball screw ø12mm, rolled C10 [equivalent to rolled C5]
Backlash (Note 5)	0.05mm or less [0.02mm or less]
Guide	Integrated with base
Allowable load moment	Ma: 28.4N · m, Mb: 40.2N · m, Mc: 65.7N · m
Overhang load length	Ma/Mb/Mc directions: 450mm or less
Base	Material: Special aluminum with white alumite treatment
Applicable controller	T1: XSEL-J/K, E-Con, P-Driver; T2: XSEL-P/Q
Cable length (Note 6)	S: 3m, M: 5m, X□□: Length specification
Ambient operating temperature/humidity	0~40°C, 85%RH (non-condensing)

Dimensions

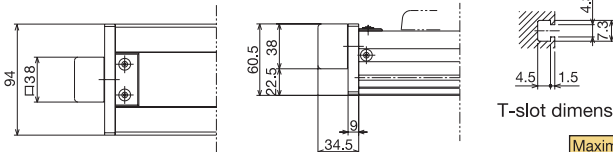
* Note that changing the home direction will require the actuator to be returned to IAI for adjustment.



*1 Connect the motor/encoder cables. Refer to the back cover for details on the cables.

ME: Mechanical end
SE: Stroke end
*2 During homing, the slider will move to the ME, so be careful to prevent contact with surrounding parts.

Brake type (optional)



T-slot dimensions

Stroke	100	150	200	250	300	350	400	450	500	550	600
A	434	484	534	584	634	684	734	784	834	884	934
B	414	464	514	564	614	664	714	764	814	864	914
C	100	150	200	250	300	350	400	450	500	550	600
D	-	-	-	-	1	1	1	1	2	2	2
E	45	95	145	195	45	95	145	195	45	95	145
F	10	10	10	10	12	12	12	12	14	14	14
Weight (kg)	3.8	4.1	4.4	4.7	5.1	5.4	5.7	6.0	6.3	6.6	7.0

Maximum speed (mm/s)	Lead 16	800	760
* Varies depending on the stroke.	Lead 8	400	380
	Lead 4	200	190

* Actuators with the brake are longer by 24.5 mm and heavier by 0.3 kg than their non-brake counterparts.

Applicable Controller Specifications

Applicable controller	Maximum number of controlled axes	Compatible encoder type	Operating method	Supply voltage	Page
X-SEL-P/Q	6 axes	Absolute /incremental	Program	3-phase 200VAC	Back cover
X-SEL-J/K	4 axes			Single-phase 100/200VAC	
E-Con	1 axis	Absolute /incremental	Positioner	AC100/AC200V	Back cover
P-Driver	1 axis	Incremental	Pulse train	AC100/AC200V	Back cover



(Note 1) When the stroke increases, the maximum speed drops in order to prevent the ball screw from reaching a dangerous speed. (Refer to the above table for the maximum speed at each stroke.)
(Note 2) Refer to page 18 for the relationship of acceleration and load capacity.
(Notes 3, 4, 5) The figures in [] apply to the ISPDA Series.
(Note 6) The maximum cable length is 30 m. Specify a desired length in meters. (Example: X08 = 8 m)