

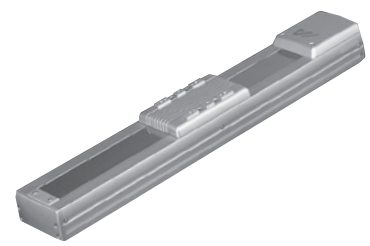
# ISDA-M-100

Single-Axis Robot: Medium Dust-proof Type, Actuator Width 125mm, 100W, Straight Shape

# ISPDA-M-100

Single-Axis Robot: Medium Dust-proof Type, Actuator Width 125mm, 100W, Straight Shape, High-Precision Specification

Type / Medium dust-proof (125 mm wide)    Stroke / 100-1000mm    Load capacity / 80kg (horizontal)/19kg (vertical)



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

(Example) ISDA - M - A - 100 - 20 - 1000 - 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 (Note 2)				Rated thrust (N)	Positioning repeatability (mm) (Note 3)
						Horizontal (kg)		Vertical (kg)			
						Rated acceleration	Maximum acceleration	Rated acceleration	Maximum acceleration		
ISDA [ISPDA]-M-[1]-100-20-[2]-[3]-[4]-[5]	Absolute Incremental	100	20	100 ~ 1000	1 ~ 1000	20	6	3.5	2	84.3	±0.02 [±0.01]
ISDA [ISPDA]-M-[1]-100-10-[2]-[3]-[4]-[5]			10		1 ~ 500	40	20	9	7	169.5	
ISDA [ISPDA]-M-[1]-100-5-[2]-[3]-[4]-[5]			5		1 ~ 250	80	45	19	15	340.1	

\*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

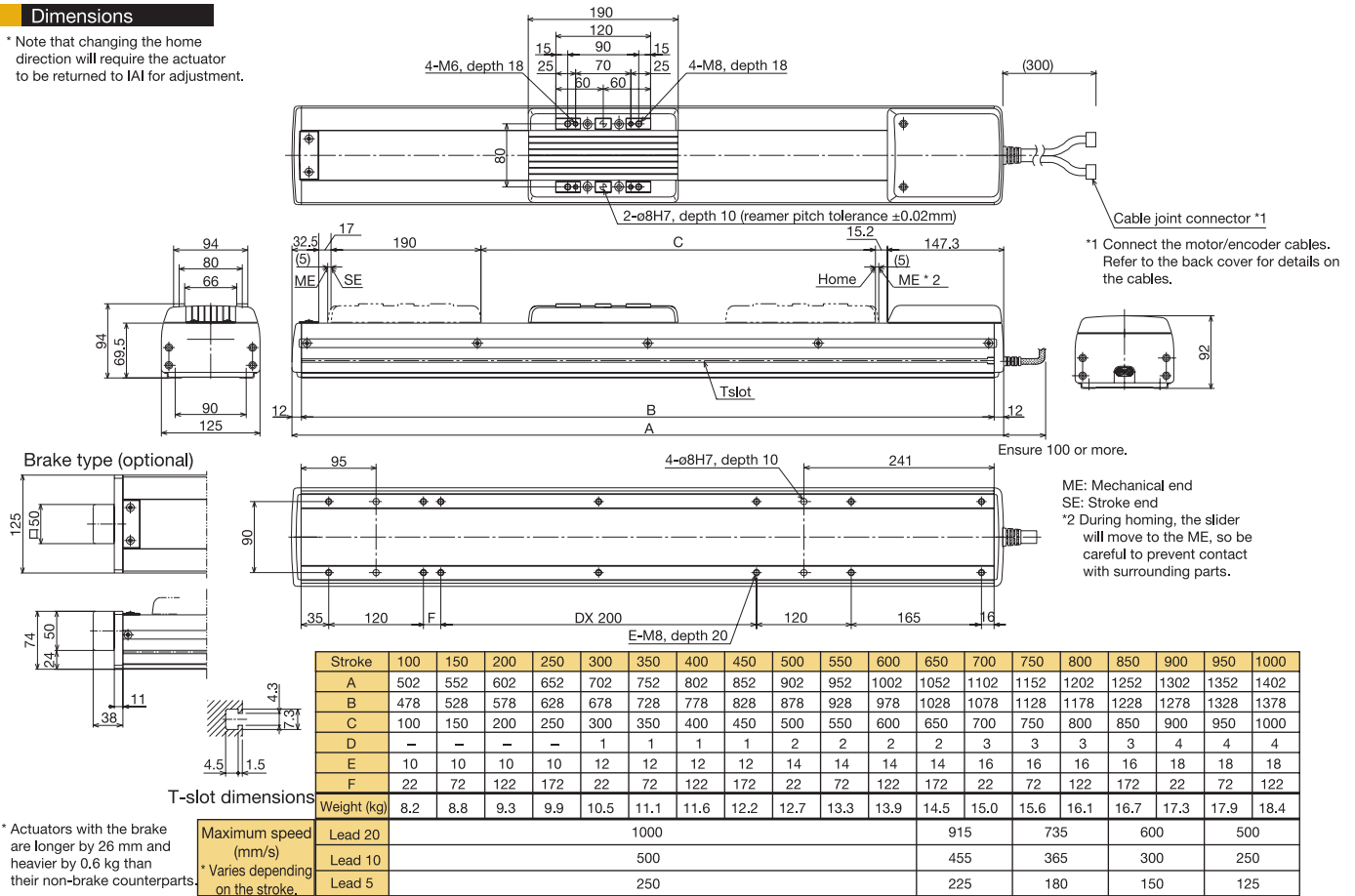
Name	Code	Page	Remarks
AQ seal	AQ	·P18	
Brake	B	·P18	
Reversed home specification	NM	·P18	
Guide with ball-retaining mechanism	RT	·P18	

## Common Specifications

Drive system (Note 4)	Ball screw ø16mm, 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: 69.6N · m, Mb: 99.0N · m, Mc: 161.7N · m
Overhang load length	Ma/Mb/Mc directions: 600mm or less
Base	Material: 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.



\* Actuators with the brake are longer by 26 mm and heavier by 0.6 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)