

ISDACR-S

Single-Axis Robot: Compact Cleanroom Type
Actuator Width 94mm, 60W, Straight Shape

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Single-Axis Robot: Compact Cleanroom Type
Actuator Width 94mm, 60W, Straight Shape, High-Precision Specification

Type/Compact (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) ISDACR - 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)	Suction rate (Nl/min)
						Horizontal (kg)		Vertical (kg)				
						Rated acceleration	Maximum acceleration	Rated acceleration	Maximum acceleration			
ISDACR [ISPDACR]-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]	30
ISDACR [ISPDACR]-S-[1]-60-8-[2]-[3]-[4]-[5]			8		1 ~ 400	25	12	6	5	127.4		20
ISDACR [ISPDACR]-S-[1]-60-4-[2]-[3]-[4]-[5]			4		1 ~ 200	50	30	14	12	254.8		10

* 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

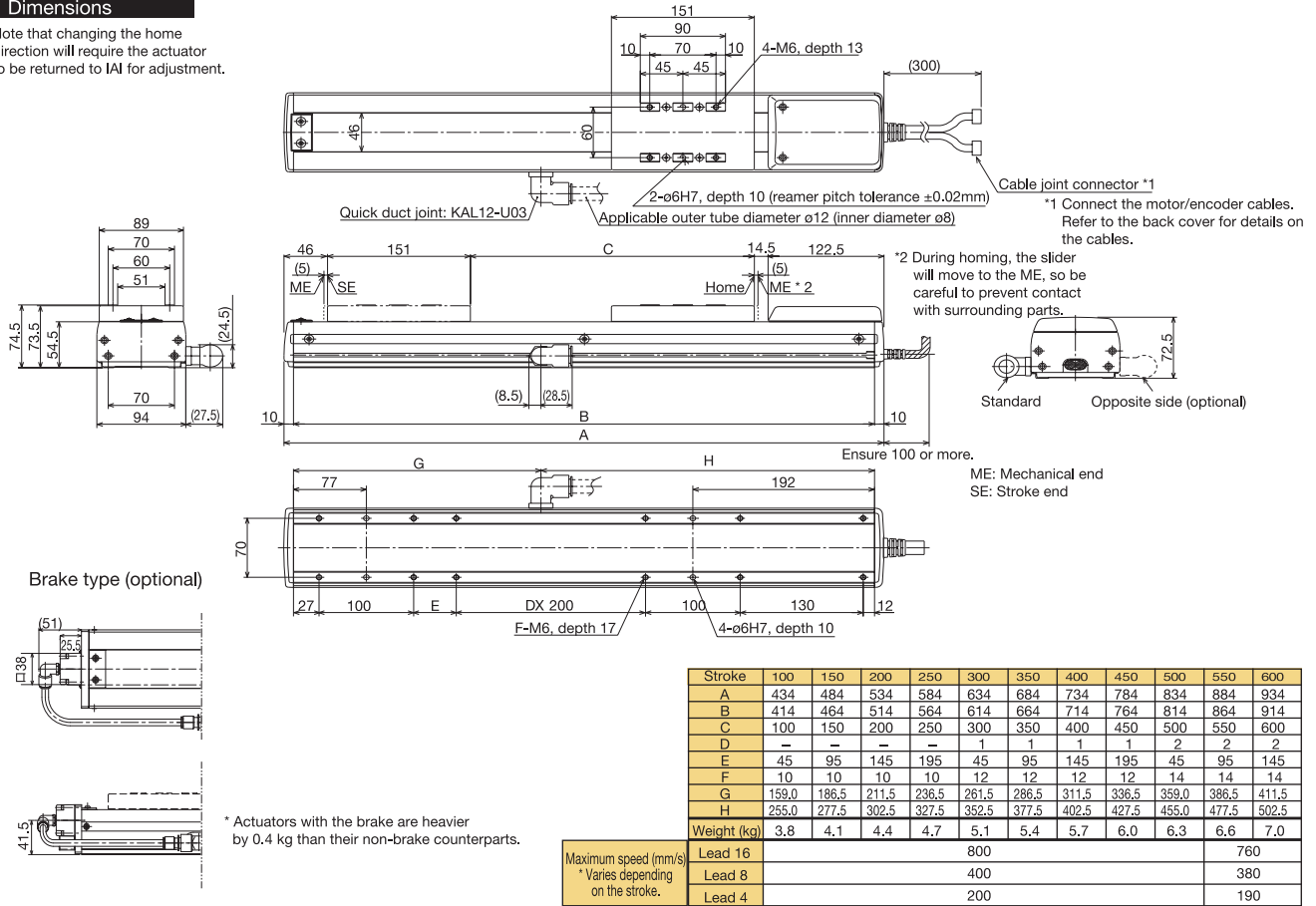
Name	Code	Page	Remarks
AQ seal	AQ	·P18	
Brake	B	·P18	
Anti-electrostatic specification	ESD	·P18	
Reversed home specification	NM	·P18	
Guide with ball-retaining mechanism	RT	·P18	
Suction duct joint on opposite side	VR	·P18	

Common Specifications

Drive system (Note 4)	Ball screw ø2mm, rolled C10 [equivalent to rolled C5]
Backlash (Note 5)	0.05mm or less [0.02mm or less]
Guide	Integrated with base
Grease	Low dust raising grease (for both ball screw and guide)
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: 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
Cleanliness level	Conforming to Class 10 (0.1µm)
Suction duct joint	Quick duct joint with applicable outer tube diameter of ø12

Dimensions

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



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 ISPDACR Series.
(Note 6) The maximum cable length is 30 m. Specify a desired length in meters. (Example: X08 = 8 m)