

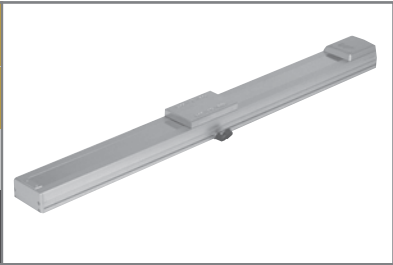
ISDACR-M-100

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

ISPDACR-M-100

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

Type / Medium (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) ISDACR - 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)	Suction rate (Nl/min)
						Horizontal (kg)		Vertical (kg)				
						Rated acceleration	Maximum acceleration	Rated acceleration	Maximum acceleration			
ISDACR [ISPDACR]-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]	70
ISDACR [ISPDACR]-M-[1]-100-10-[2]-[3]-[4]-[5]			10		1 ~ 500	40	20	9	7	169.5		30
ISDACR [ISPDACR]-M-[1]-100-5-[2]-[3]-[4]-[5]			5		1 ~ 250	80	45	19	15	340.1		15

* 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.

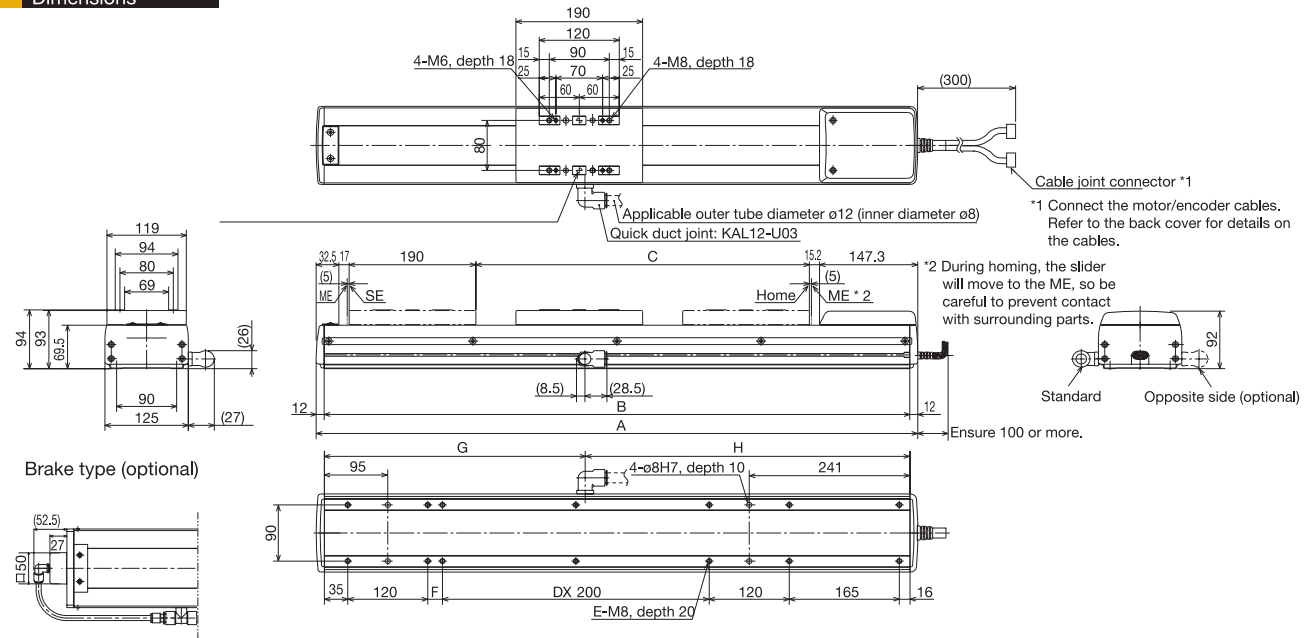
Options

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	

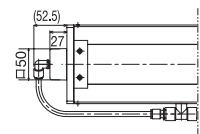
Common Specifications

Drive system (Note 4)	Ball screw ϕ 16mm, 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: 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
Cleanliness level	Conforming to Class 10 (0.1 μ m)
Suction duct joint	Quick duct joint with applicable outer tube diameter of ϕ 12

Dimensions



Brake type (optional)



Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
A	502	552	602	652	702	752	802	852	902	952	1002	1052	1102	1152	1202	1252	1302	1352	1402
B	478	528	578	628	678	728	778	828	878	928	978	1028	1078	1128	1178	1228	1278	1328	1378
C	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000
D	-	-	-	-	1	1	1	1	2	2	2	2	3	3	3	3	4	4	4
E	10	10	10	10	12	12	12	12	14	14	14	14	16	16	16	16	18	18	18
F	22	72	122	172	22	72	122	172	22	72	122	172	22	72	122	172	12	72	122
G	191	213	240	265	290	315	340	365	391	413	440	465	490	515	540	565	591	613	640
H	287	315	338	363	388	413	438	463	487	515	538	563	588	613	638	663	687	715	738
Weight (kg)	8.2	8.8	9.3	9.9	10.5	11.1	11.6	12.2	12.7	13.3	13.9	14.5	15.0	15.6	16.1	16.7	17.3	17.9	18.4
Maximum speed (mm/s) * Varies depending on the stroke.	Lead 20	1000										915		735		600		500	
	Lead 10	500										455		365		300		250	
	Lead 5	250										225		180		150		125	

* Actuators with the brake are heavier by 0.7 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 ISPDACR Series.
(Note 6) The maximum cable length is 30 m. Specify a desired length in meters. (Example: X08 = 8 m)