

ISDACR-L-200

Single-Axis Robot: Large Cleanroom Type
Actuator Width 155mm, 200W, Straight Shape

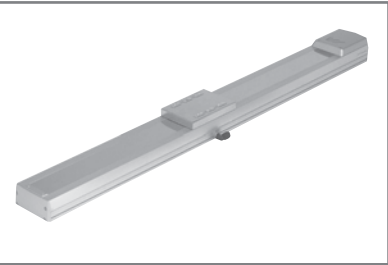
ISPDACR-L-200

Single-Axis Robot: Large Cleanroom Type
Actuator Width 155mm, 200W, Straight Shape, High-Precision Specification

Type / Large (155 mm wide)

Stroke / 100-1200mm

Load capacity / 80kg (horizontal)/19kg (vertical)



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

(Example) ISDACR - L - A - 200 - 20 - 1200 - 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]-L-[1]-200-20-[2]-[3]-[4]-[5]	Absolute	200	20	100 ~ 1200	1 ~ 1000	40	12	9	4	169.5	±0.02	90
ISDACR [ISPDACR]-L-[1]-200-10-[2]-[3]-[4]-[5]	Incremental		10		1 ~ 500	80	40	19	14	340.1	[±0.01]	30

* 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

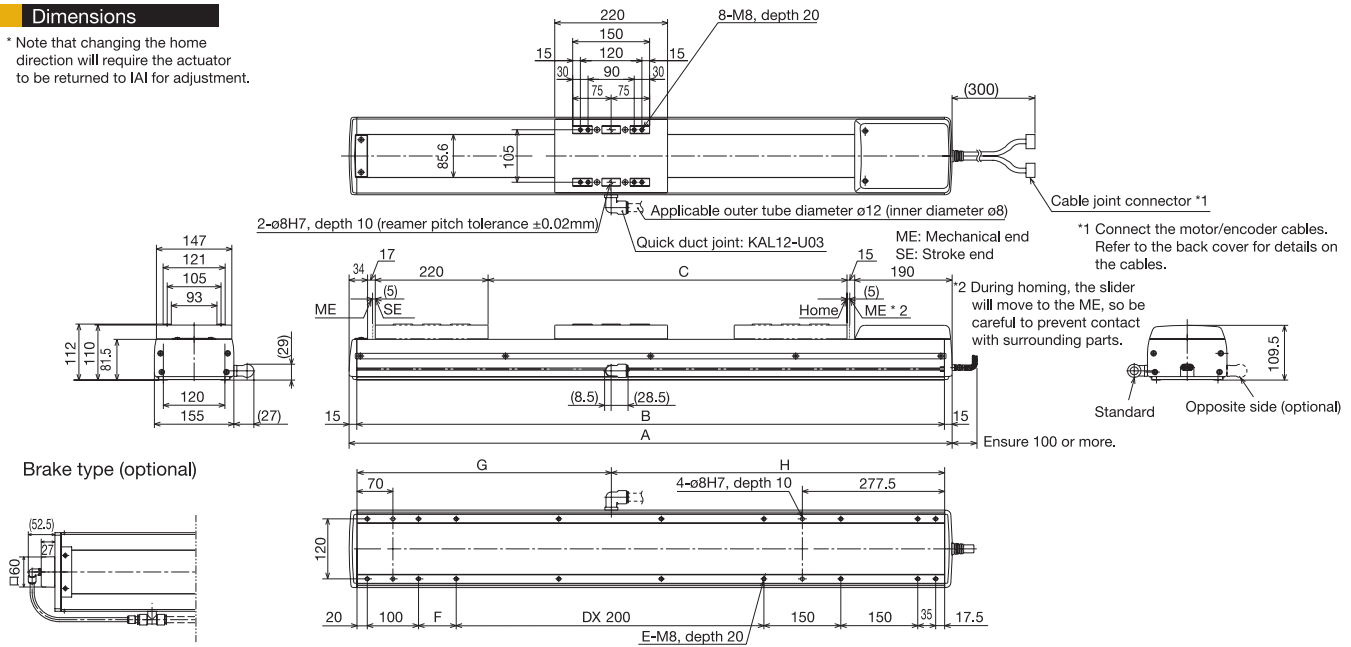
Name	Code	Page	Remarks
AQ seal	AQ	·P18	
Brake	B	·P18	
Anti-electrostatic specification	ESD	·P18	The maximum supported stroke is 1000 mm.
Reversed home specification	NM	·P18	
Guide with ball-retaining mechanism	RT	·P18	
Suction duct joint on opposite side	VR	·P18	

Common Specifications

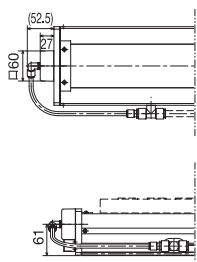
Drive system (Note 4)	Ball screw ø20mm, rolled C10 [equivalent to rolled C5]
Backlash (Note 5)	0.05mm or less [0.02mm or less]
Guide	Integrated with base
Grease	Low dust raising grease (for both ball screw and guide)
Allowable load moment	Ma: 104.9N · m, Mb: 149.9N · m, Mc: 248.9N · m
Overhang load length	Ma/Mb/Mc directions: 750mm 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.



Brake type (optional)



Stroke	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
A	576	626	676	726	776	826	876	926	976	1026	1076	1126	1176	1226	1276	1326	1376	1426	1476	1526	1576	1626	1676
B	546	596	646	696	746	796	846	896	946	996	1046	1096	1146	1196	1246	1296	1346	1396	1446	1496	1546	1596	1646
C	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050	1100	1150	1200
D	-	-	-	1	1	1	1	1	2	2	2	3	3	3	3	4	4	4	4	5	5	5	5
E	12	12	12	14	14	14	14	16	16	16	18	18	18	18	18	20	20	20	20	22	22	22	22
F	73.5	123.5	173.5	23.5	73.5	123.5	173.5	23.5	73.5	123.5	173.5	23.5	73.5	123.5	173.5	23.5	73.5	123.5	173.5	23.5	73.5	123.5	173.5
G	179.5	221.0	246.0	271.0	296.0	321.0	346.0	371.0	379.5	421.0	446.0	471.0	496.0	521.0	546.0	571.0	579.5	621.0	646.0	671.0	696.0	721.0	746.0
H	366.5	375	400.0	425.0	450.0	475.0	500.0	525.0	566.5	575.0	600.0	625.0	650.0	675.0	700.0	725.0	766.5	775.0	800.0	825.0	850.0	875.0	900.0
Weight (kg)	13.2	14.0	14.8	15.6	16.4	17.2	18.0	18.8	19.6	20.4	21.2	22.0	22.8	23.6	24.4	25.2	26.0	26.8	27.6	28.4	29.2	30.0	30.8
Maximum speed (mm/s) *Varies depending on the stroke.	Lead 20												930	765	640	545	465						
	Lead 10												465	380	320	270	230						

* Actuators with the brake are heavier by 1.1 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)