

ISDACR-W-600

Single-Axis Robot: Super Large Cleanroom Type,
Actuator Width 198mm, 600W, Straight Shape

ISPDACR-W-600

Single-Axis Robot: Super Large Cleanroom Type,
Actuator Width 198mm, 600W, Straight Shape, High-Precision Specification



Type Super large (198-mm wide) Stroke 100~1300mm Load capacity 150kg (horizontal)/60kg (vertical)

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

(Example) ISDACR -W- A - 600 - 40 -1300- T1 - S -L-NM

* Refer to page 3 for the details of model specification items.

Models/Specifications

Model	Encoder Type	Motor output (W)	Lead (mm)	Stroke 100mm increments (mm)	Speed (Note 1) (mm/s)	Acceleration (Note 2)				Load capacity (Note2)				Rated thrust (N)	Suction rate (Nℓ/min)
						Horizontal (G)		Vertical (G)		Horizontal (kg)		Vertical (kg)			
						Rated	Maximum	Rated	Maximum	Rated acceleration	Maximum acceleration	Rated acceleration	Maximum acceleration		
ISDACR [ISPDACR]-W-[1]-600-40-[2]-[3]-[4]-L-[5]	Absolute Incremental	600	40	100 - 1300	1 ~ 2000	0.3	1.0	0.3	1.0	60	18	14	5	255	120
ISDACR [ISPDACR]-W-[1]-600-20-[2]-[3]-[4]-L-[5]			20		1 ~ 1000	0.3	1.0	0.3	0.8	120	36	29	15	510	60
ISDACR [ISPDACR]-W-[1]-600-10-[2]-[3]-[4]-L-[5]			10		1 ~ 500	0.3	0.6	0.3	0.5	150	75	60	40	1020	40

* 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	Name	Code	Page
AQ seal	AQ	P13	Master-axis designation	LM	P13
Brake	B	P13	Reversed home specification	NM	P13
Creep sensor	C	P13	Slave-axis designation	S	P13
Home limit switch	L	P13	Suction duct joint on opposite side	VR	P13

* The W type comes standard with home limit switch (code: L).

Common Specifications

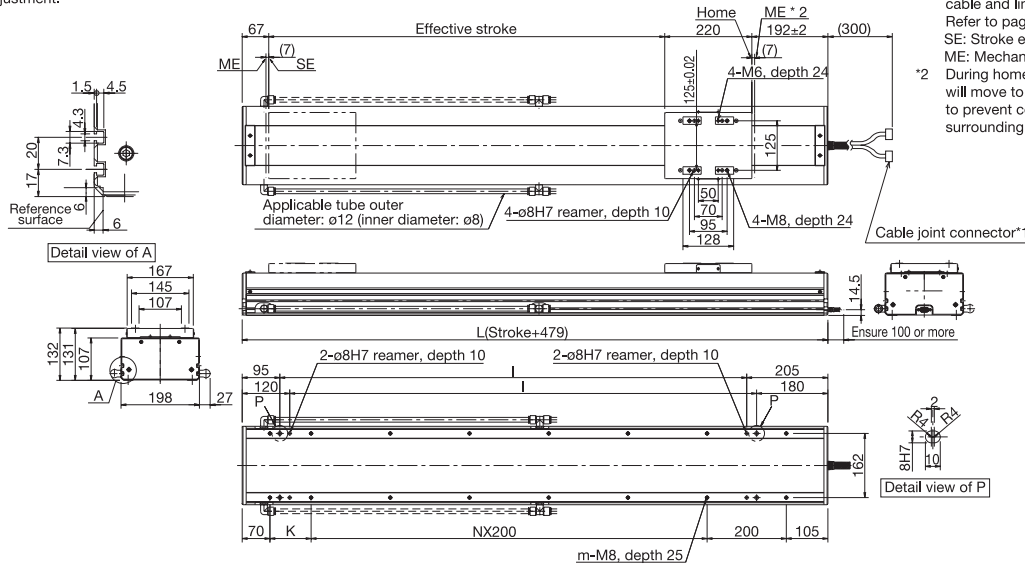
* The specifications of the ISPDACR are shown in [].

Positioning repeatability (Note 3)	±0.02mm [±0.01mm]
Drive system (Note 4)	Ball screw ø20mm, equivalent to rolled C10 [equivalent to 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: 112.7N • m, Mb: 161.7N • m, Mc: 356.7N • m
Overhand load moment (Note 6)	Ma/Mb/Mc directions: 800mm or less
Base	Material: Aluminum with white alumite treatment
Applicable controller	T1: XSEL-J/K T2: XSEL-P/Q, SSEL, SCON
Cable length	N: No cable, S: 3m, M: 5m, X[] []: Length specification
Cleanliness class	Conforming to class 10 (0.1µm)
Suction duct joint	Quick duct joint with applicable tube outer diameter of ø12

Dimensions

* Those equipped with an optional brake have the same external dimensions, but the weight increases by 0.5 kg.

* To change the home direction, the actuator must be returned to |A| for adjustment.



- *1 Connect the motor cable, encoder cable and limit switch cables here. Refer to page 14 for the details of each cable. SE: Stroke end ME: Mechanical end
- *2 During home return, the slider will move to the ME, so be careful to prevent contact with surrounding parts.

Dimensions, Weight and Maximum Speed by Stroke

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300							
L	579	679	779	879	979	1079	1179	1279	1379	1479	1579	1679	1779							
I	279	379	479	579	679	779	879	979	1079	1179	1279	1379	1479							
K	204	104	204	104	204	104	204	104	204	104	204	104	204							
N	0	1	1	2	2	3	3	4	4	5	5	6	6							
m	6	8	8	10	10	12	12	14	14	16	16	18	18							
Weight (kg)	19.4	21.5	23.5	25.5	27.6	29.6	31.6	33.7	35.7	37.7	39.8	41.8	43.8							
Maximum speed (mm/s)	Lead 40						2000		1965		1605		1335		1130		970		840	
	Lead 20						1000		980		800		665		565		485		420	
	Lead 10						500		490		400		330		280		240		210	

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	Three-Phase AC200V	P14
X-SEL-K	4 axes			AC100/200V	P14
X-SEL-J (Note 8)	4 axes				P14
SSEL	2 axes				P14
SCON	1 axis			Positioner Pulse train	P14

* The W type comes standard with home limit switch, so use it with a controller of the limit switch specification.

Caution

(Note 1) When the stroke increases, the maximum speed drops in order to prevent the ball screw from reaching a critical speed. (Refer to the above table for the maximum speed at each stroke.)

(Note 2) Refer to page 4 for the relationship of acceleration and load capacity. (Note 3, 4, 5) Specs within the [] are for the ISPA series.

(Note 6) For 10,000km actuator life.

(Note 7) The maximum cable length is 30 m. Specify a desired length in meters. (Example: X08 = 8 m)

(Note 8) When using the WXM type actuator for vertical applications, please use the XSEL-J type controller.