

# ISDACR-W-750

Single-Axis Robot: Super Large Cleanroom Type, Actuator Width 198mm, 750W, Straight Shape

# ISPDACR-W-750

Single-Axis Robot: Super Large Cleanroom Type, Actuator Width 198mm, 750W, Straight Shape, High-Precision Specification



Type Super large (198-mm wide) Stroke 100~1300mm Load capacity 120kg (horizontal)/29kg (vertical)

Model specification items Series Type Encoder type Motor output Lead Stroke Applicable controller Cable length Options  
 (Example) ISDACR -W- A - 750 - 50 -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 (N <sub>L</sub> /min)
						Horizontal (G)		Vertical (G)		Horizontal (kg)		Vertical (kg)			
						Rated	Maximum	Rated	Maximum	Rated	Maximum	Rated	Maximum		
ISDACR [ISPDACR]-W-[1]-750-50-[2]-[3]-[4]-L-[5]	Absolute	750	50	100 ~ 1300	1 ~ 2000	0.3	1.0	0.3	1.0	60	18	14	5	255	120
ISDACR [ISPDACR]-W-[1]-750-25-[2]-[3]-[4]-L-[5]	Incremental		25		1 ~ 1250	0.3	1.0	0.3	0.8	120	36	29	15	510	60

\* 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

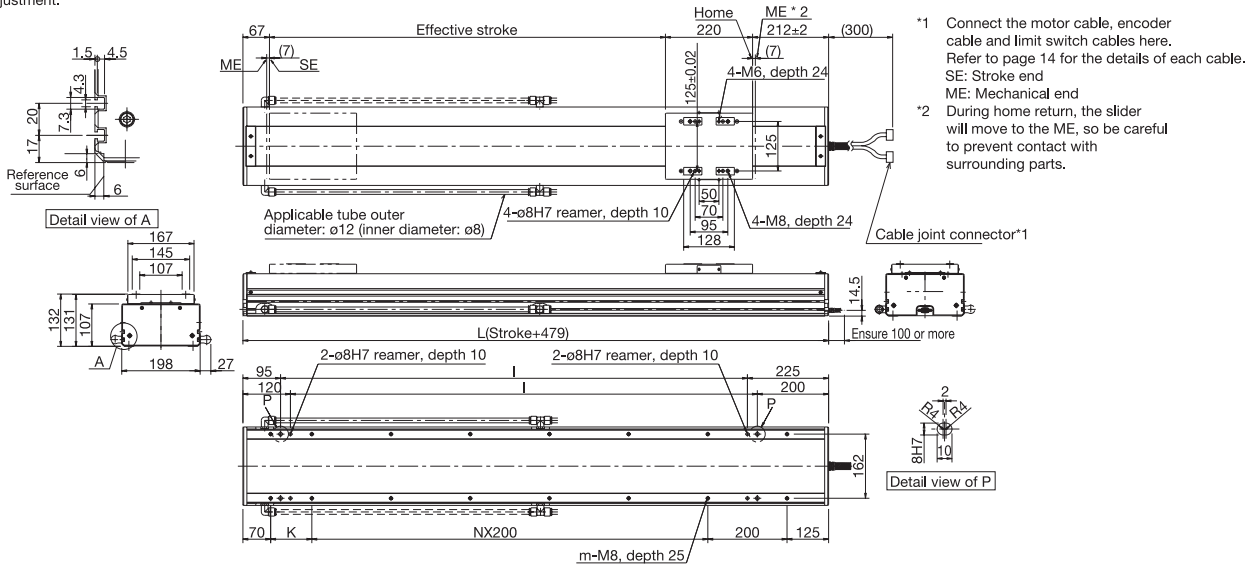
\* The specifications of the ISPDACR are shown in [ ].

Positioning repeatability (Note 3)	±0.02mm [±0.01mm]
Drive system (Note 4)	Ball screw ø25mm, 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.



### Dimensions, Weight and Maximum Speed by Stroke

Stroke	100	200	300	400	500	600	700	800	900	1000	1100	1200	1300	
L	599	699	799	899	999	1099	1199	1299	1399	1499	1599	1699	1799	
l	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)	23.4	25.5	27.5	29.5	31.6	33.6	35.6	37.7	39.7	41.7	43.8	45.8	47.8	
Maximum speed (mm/s) * Varies depending on the stroke.	Lead 50	2000										1780	1525	1320
	Lead 25	1250										1050	890	760

### 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			AC200V	P14
SSEL	2 axes			AC200V	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.



(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.