

ISWA-L-400

Single-Axis Robot, Large Splash-Proof Type,
Actuator Width 155 mm, 400 W, Straight Shape

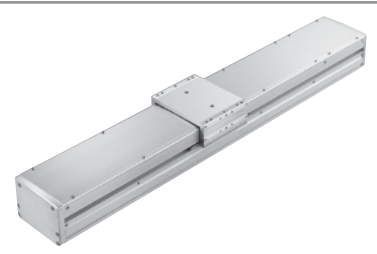
ISPWA-L-400

Single-Axis Robot, Large Splash-Proof Type,
Actuator Width 155 mm, 400 W, Straight Shape High-precision specification

Type Large splash-proof Stroke 100~1200mm Load capacity 70 kg (horizontal)

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

(Example) ISWA - L - A - 400 - 20 - 1200 - T1 - S - RT



Model/ Specifications

Model	Encoder type	Motor output (W)	Lead (mm)	Stroke (in increments of 50-mm)	Speed (Note 1) (mm/ s)	Load capacity (kg) (Note 2)		Rated thrust (N)
						Horizontal (kg)	Vertical (kg)	
ISWA [ISPWA]-L- [1] -200-20-[2]- [3]- [4]- [5]	A: Absolute I: Incremental	400	20	100~1200	1000	70	—	340.1

[1], [2], [3], [4] and [5] in the model numbers shown above respectively indicate the encoder type, stroke, applicable controller, cable length and applicable options.

Options

Name	Type	Page	Remarks
Reverse Home Specification	NM	—	
Guide with ball-retaining mechanism	RT	—	

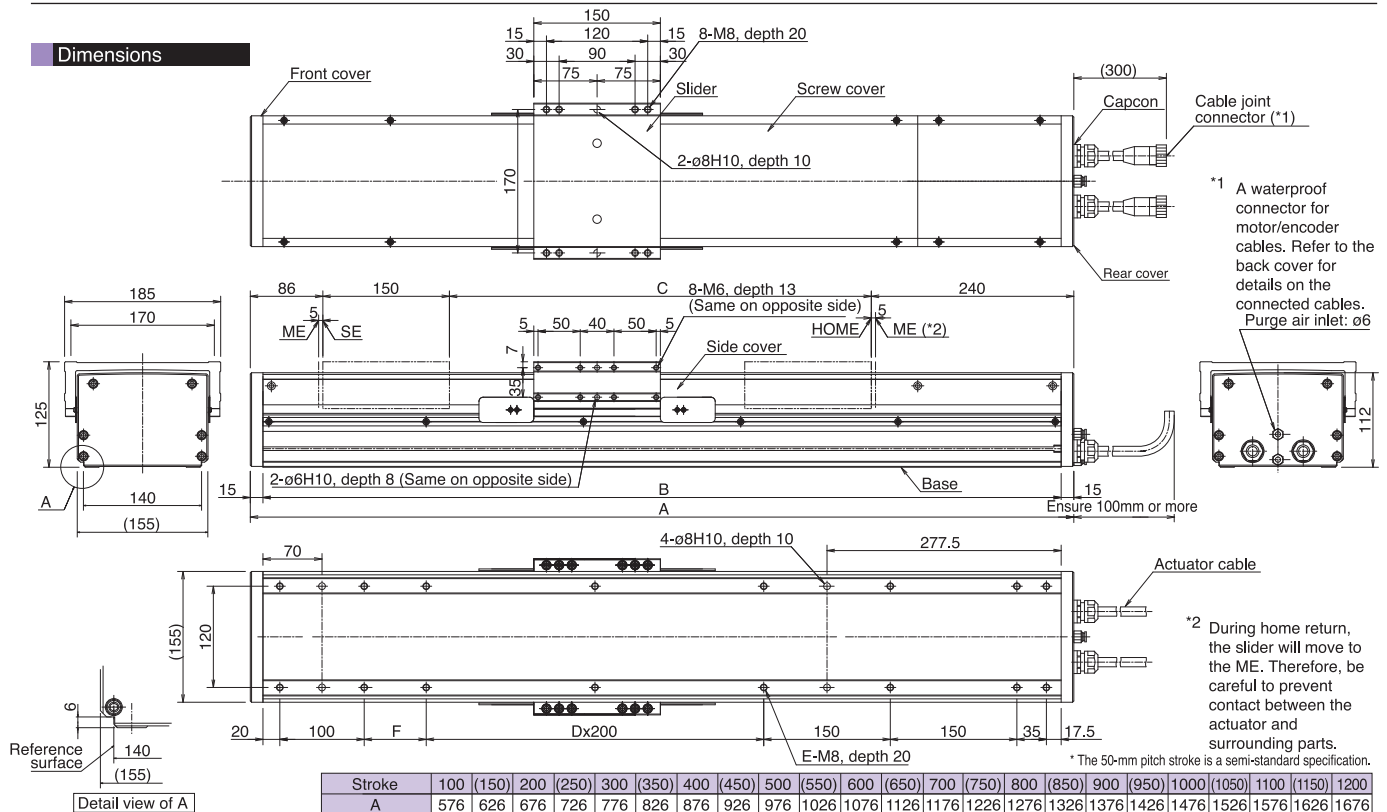
Materials of Key Components

Name	Materials
Base, slider	Aluminum (A6063S-T5 or equivalent) with white alumite treatment
Side cover, screw cover	Aluminum (A6063S-T5 or equivalent) with white alumite treatment
Front cover, rear cover	A5052 with white alumite treatment
Actuator cable	PVC
Capcon	Nylon 66

Common Specifications

Drive System (Note 3)	Ball screw, rolled C10 [rolled C5 or equivalent]
Positioning repeatability (Note 3)	±0.02mm [±0.01mm]
Backlash (Note 3)	0.05 mm or less [0.02 mm or less]
Guide	Integrated with the base
Allowable load moment	Ma: 52.5 N · m, Mb: 75.0 N · m, Mc: 124.5 N · m
Overhang load length	750 mm or less in Ma, Mb or Mc direction
Grease	Food grease (Medallion FM Grease No. 1)
Cable length (Note 4)	N: No cable, S: 3 m, M: 5 m, X□□: Specified length
Protection class (Note 5)	IP65
Operating temperature/humidity	0 ~ 40°C, 85%RH or below (non-condensing)

Dimensions



*1 A waterproof connector for motor/encoder cables. Refer to the back cover for details on the connected cables. Purge air inlet: ø6

*2 During home return, the slider will move to the ME. Therefore, be careful to prevent contact between the actuator and surrounding parts.

* The 50-mm pitch stroke is a semi-standard specification.

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	2	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	16	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
Weight (kg)	20.1	20.6	22.0	22.5	23.9	24.4	25.8	26.3	27.7	28.2	29.6	30.1	31.5	32.0	33.4	33.9	35.3	35.8	37.2	37.7	39.1	39.6	41.0
Maximum speed (mm/s) * Varies depending on the stroke.	Lead 20																						
	1000											930		765		640		545		465			

Applicable Controller Specifications

Applicable controller	Maximum number of controlled axes	Connectable encoder type	Operating method	Power-supply voltage
X-SEL - P/Q	6 axes	Absolute/incremental	Programming	3-Phase AC200V
XSEL - J/K	4 axes	Absolute/incremental	Programming	AC100V AC200V
SSEL	1 axis	Absolute/incremental	Programming	
SCON	1 axis	Absolute/incremental	Positioner/Pulse-train	



(Note 1) A longer stroke will result in a lower maximum speed to prevent the ball screw from reaching a dangerous speed. (Refer to the above table for the maximum speed at a given stroke.)
(Note 2) Based on an acceleration of 0.3 G.
(Note 3) The figures in square brackets apply to the ISPWA series.
(Note 4) The maximum cable length is 30 m. Specify the desired length in meters (e.g., X08 = 8 m).
(Note 5) IP65 applies when air purge is performed. Without air purge, the protection class is IP54.