IF-MA-200 Single-Axis Robot, Medium Belt Type, Actuator Width 120mm, 200W

Model Designation IF — [Type] — [Encoder Model] — 200 — [Motor Type] — [Stroke] — [Applicable Controller] — [Cable Length] — [Option]

Series	Type	Encoder Model	Motor Type	Stroke	Applicable Controller	Cable Length	Option
IF	MA1L: Standard MA2L: Motor on Side MA3L: Motor on Bottom MA1R: Motor, Reversed MA2R: Horizontal Motor, Reversed MA3R: Motor on Bottom, Reversed	A: Absolute I: Incremental	200:200W	200:200mm ⟆ 2500:2500mm (In 100mm steps)	T1:XSEL-J/K T2: SCON SSEL XSEL-P/Q	N: No Cable S: 3m M: 5m X□□: Specified Length	Refer to the options table below

Models/Specifications

Model	Encoder Type	Motor Output (W)	Motor Mounting Position (Note 1)	Stroke 100mm Unit (mm)	Speed (mm/s)	Load Capacity (Note 2)		Rated Thrust (N)
						Horizontal (kg)	Vertical (kg)	
IF-MA1 ①-②-200-③-④-⑤-⑥	Absolute Incremental	200	Standard	200~2500	1~1750	20	Horizontal Only	85.7
IF-MA2 ①-②-200-③-④-⑤-⑥			Motor on Side					
IF-MA3 ①-②-200-③-④-⑤-⑥			Motor on Bottom					

* ①: Motor mounting direction (L: Standard, R: Reversed), ②: Encoder Type, ③: Stroke, ④: Applicable Controller, ⑤: Cable Length, and ⑥: Option.

Options

Name	Model	Remarks
AQ Seal	AQ	
Creep Sensor (Note 3)	C	(CL: Reversed Mounting Side)
Home Limit Switch (Note 3)	L	(LL: Reversed Mounting Side)
Reversed Home Specification	NM	
Guide with Ball Retention Mechanism	RT	
Double Slider	W	

Common Specifications

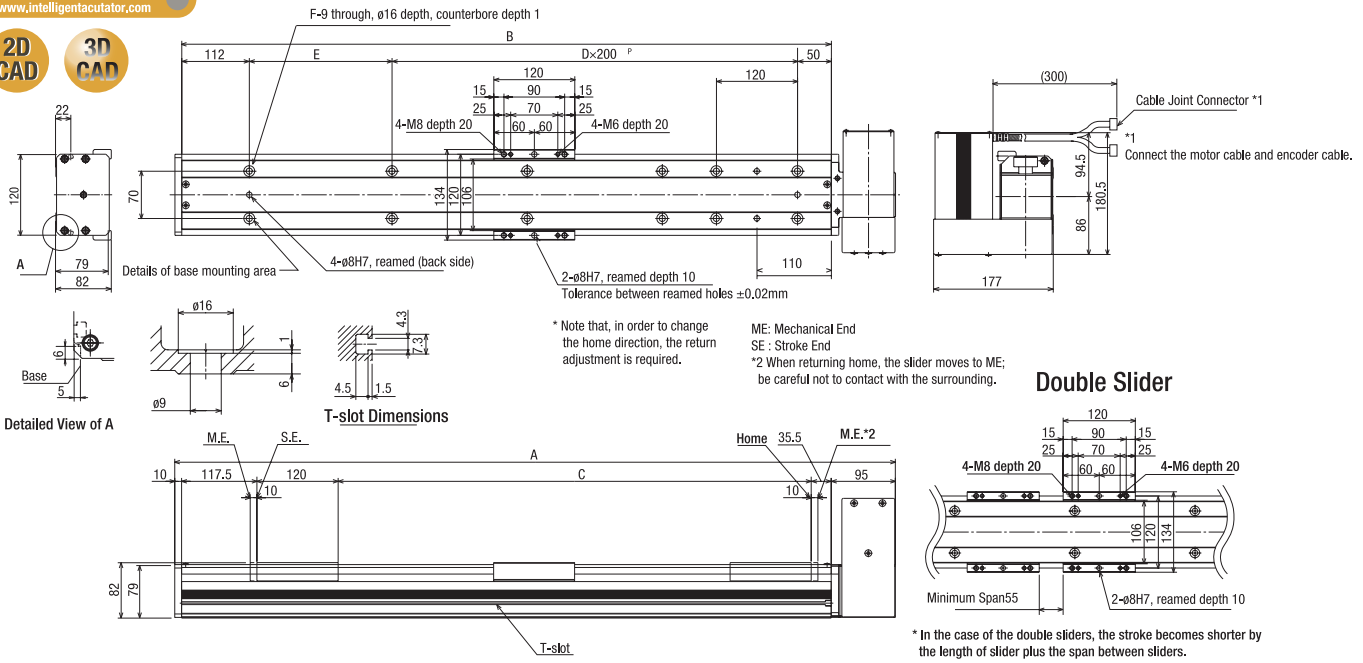
Positioning Repeatabilty	±0.08mm
Drive Method	Timing Belt
Lost Motion	0.1mm max.
Static Allowable Moment	Please refer to page 1
Dynamic Allowable Moment (Note 4)	Please refer to page 1
Overhang Length	Please refer to page 1
Base	Material: Aluminum with white alumite treatment
Applicable Controller	T1: XSEL-J/K T2: XSEL-P/Q, SSEL, SCON
Cable Length (Note 5)	N: No Cable, S: 3m, M: 5m, X□□: Specified Length
Surrounding Air Temp/Humidity	0 to 40°C, 85% RH (non-condensing)

Dimensions

Download CAD drawings
www.intelligentacutator.com

2D CAD 3D CAD

Single Slider



Double Slider

* In the case of the double sliders, the stroke becomes shorter by the length of slider plus the span between sliders.

Stroke	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
A	578	678	778	878	978	1078	1178	1278	1378	1478	1578	1678	1778	1878	1978	2078	2178	2278	2378	2478	2578	2678	2778	2878
B	473	573	673	773	873	973	1073	1173	1273	1373	1473	1573	1673	1773	1873	1973	2073	2173	2273	2373	2473	2573	2673	2773
C	200	300	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	2400	2500
D	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12
E	111	211	111	211	111	211	111	211	111	211	111	211	111	211	111	211	111	211	111	211	111	211	111	211
F	8	8	10	10	12	12	14	14	16	16	18	18	20	20	22	22	24	24	26	26	28	28	30	30
Mass (kg)	7.7	8.5	9.3	10.0	10.8	11.6	12.4	13.2	14.0	14.8	15.6	16.4	17.2	17.9	18.7	19.5	20.3	21.1	21.9	22.7	23.5	24.3	25.1	25.8
Max Speed (mm/s)	1750																							

Applicable Controller Specifications

Applicable Controller	Max number of controlled axes	Connectable Encoder Type	Operating Method	Power Supply Voltage
X-SEL-P/Q	6 axes	Absolute Incremental	Program	Single-Phase 3-phase 200 VAC
X-SEL-J/K	4 axes			Single-Phase 100/200 VAC
SSEL	2 axes			
SCON	1 axis		Positioner Pulse Train	

Caution

(Note 1) Refer to page 2 for the detailed explanation on the motor mounting positions.
(Note 2) The load capacity is the value obtained when the robot is operated at the acceleration of 0.3G.
(Note 3) Note that if creep sensor and home limit switch are to be added, the sensor mounting side is determined by the motor mounting direction due to its configuration (See page 2 for details)
(Note 4) In case the traveling life is 10,000km.
(Note 5) The maximum cable length is 30m. Specify the length in the unit of m. (Example: X08 = 8m)