

FS-LM-400

Single-axis robot / Slim belt type / Actuator width: 75mm / 400W
High payload specification



Model Specification Items	FS	□	□	400	□	□	□	□
	Series	Type	Encoder type	Motor type	Stroke	Applicable controller	Cable length	Options
	11LM: Single slider specification 12LM: Double slider specification	A: Absolute specification I: Incremental specification	400: 400W	1000: 1000mm 3000: 3000mm (in 100mm increments)	T1: XSEL-J/K T2: SCON SSEL XSEL-P/Q	N: None S: 3m M: 5m X□□: Specified length	Refer to the options table below.	

Model Number/Specification

Model number	Encoder type	Motor output (W)	Slider	Stroke in 100mm increments (mm)	Speed (mm/s)	Payload (Note 1)		Rated thrust (N)
						Horizontal (kg)	Vertical (kg)	
FS-11LM-①-400-②-③-④-⑤	Absolute	400	Single	1000~3000	1~1250	15	Designed exclusively for horizontal use	196
FS-12LM-①-400-②-③-④-⑤	Incremental		Double			60 (Note 2)		

* In the above model numbers, ① indicates the encoder type, ② indicates the stroke, ③ indicates the applicable controller, ④ indicates the cable length, and ⑤ indicates the option(s).

Option

Name	Model number	Reference page	Notes
Reversed-home specification	NM	—	Available for 11LM only
No motor (cover only)	NQ	—	
Motor positioned on the opposite side	R	—	
Motor positioned at the bottom	U	—	Custom-order

Common Specifications

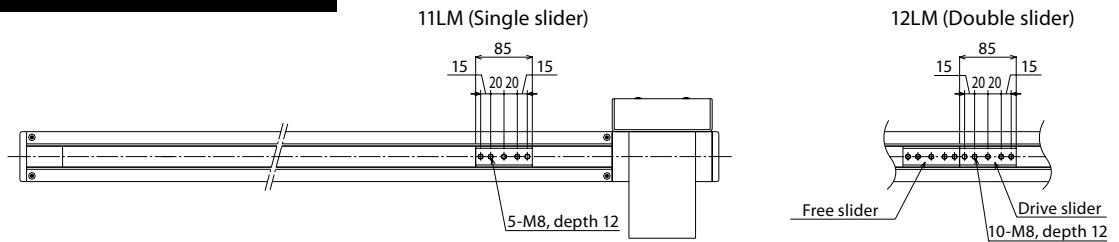
Positioning repeatability	±0.08mm
Drive method	Timing belt
Lost Motion	0.1mm max.
Allowable static load moment	Refer to P. FS-4 (Technical Reference)
Allowable dynamic load moment	Refer to P. FS-5 (Technical Reference)
Overhang load length	Refer to P. FS-5 (Technical Reference)
Base	Material: Aluminum, with white alumite treatment
Applicable controller	T1: XSEL-J/K T2: XSEL-P/Q, SSEL, SCON
Cable length (Note 3)	N: None, S: 3m, M: 5m, X□□: Specified length
Ambient operating temperature/humidity	0 to 40°C, 85%RH max. (non-condensing)

Diagram

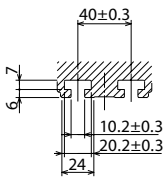
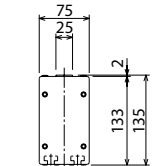
CAD drawings are available for download from our website.

2D CAD

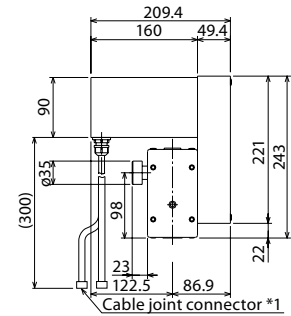
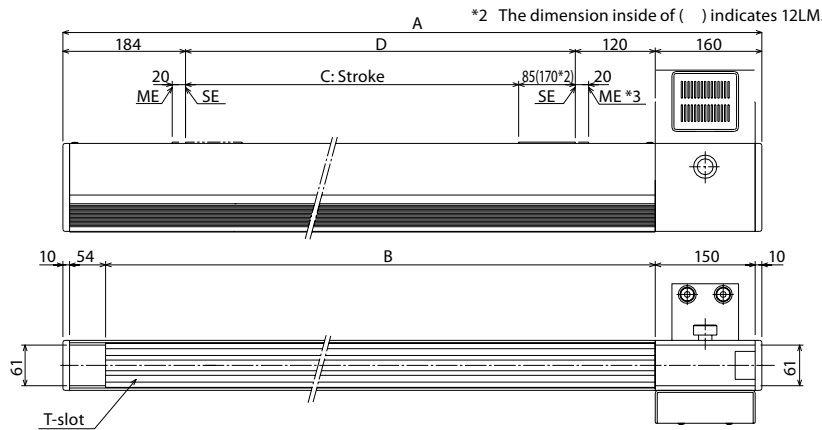
RoHS



SE: Stroke End
ME: Mechanical End



T-slot dimension



*1 Connect the motor cable and encoder cable. Refer to P. FS-7 & FS-8 for the cables.

*3 During the home return, the slider moves to the ME, so pay attention not to let the slider hit surrounding parts.

FS-11LM-400

Stroke	1000	1500	2000	2500	3000
A	1549	2049	2549	3049	3549
B	1325	1825	2325	2825	3325
C	1000	1500	2000	2500	3000
D	1085	1585	2085	2585	3085
Mass (kg)	28	34	40	47	53
Payload (kg)	15				

FS-12LM-400

Stroke	1000	1500	2000	2500	3000
A	1649	2149	2649	3149	3649
B	1425	1925	2425	2925	3425
C	1015	1515	2015	2515	3015
D	1185	1685	2185	2685	3185
Mass (kg)	31	37	43	49	56
Payload (kg)	60				

* 1000~3000mm strokes are available in 100mm increments.
Dimensions A~D increase by 100mm for every 100mm stroke increment.

Applicable Controller Specifications

Applicable Controller	Maximum number of controlled axes	Connectable encoder type	Operating method	Power-supply voltage	Reference page
X-SEL-P/Q	6 axes	Absolute/incremental	Program	Single/three-phase 200 VAC	—
X-SEL-J/K	4 axes			Single-phase 100/200 VAC	—
SSEL	2 axes			Single-phase 200 VAC	—
SCON	1 axis			Positioner pulse train control	Single-phase 200 VAC



- (Note 1) The payload is the value when operated at 0.3 G acceleration.
- (Note 2) Note that when the stroke increases, the payload will drop. (Refer to the tables above for payload by stroke.)
- (Note 3) The maximum cable length is 30 m. Specify a desired length in meters. (Example. X08 = 8 m)