

FS-HM-400

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



Model Specification Items

FS	—	—	400	—	—	—	—
Series	Type	Encoder type	Motor type	Stroke	Applicable controller	Cable length	Options
11HM: Single slider specification 12HM: 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-11HM-①-400-②-③-④-⑤	Absolute Incremental	400	Single	1000~3000	1~2000	10	Designed exclusively for horizontal use	127
FS-12HM-①-400-②-③-④-⑤			Double			40 (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 11HM only
No motor (cover only)	NQ	—	
Motor positioned on the opposite side	R	—	
Motor positioned at the bottom	U	—	Custom-order

Common Specifications

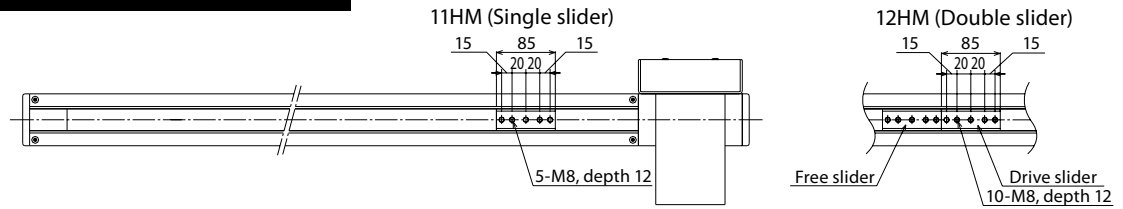
Positioning repeatability	±0.08mm
Drive method	Timing belt
Lost Motion	0.1mm max.
Allowable static load moment	Refer to P.FS-4 (Technical Reference)
Allowable dynamic load moment	Refer to P.FS-5 (Technical Reference)
Overhang load length	Refer to P.FS-5 (Technical Reference)
Base	Material: Aluminum, 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

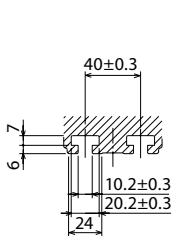
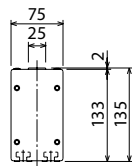
CAD drawings are available for download from our website.

2D CAD

RoHS



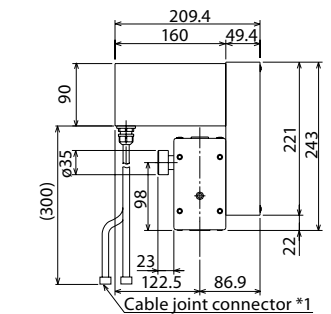
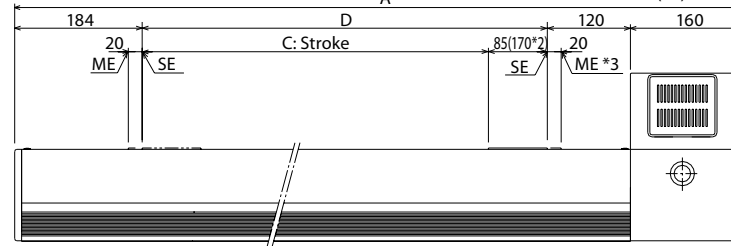
SE: Stroke End
ME: Mechanical End



T-slot dimension

* Refer to P.FS-6 for the actuator installation method.

*2 The dimension inside of () indicates 12HM.



*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-11HM-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)	10				

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

FS-12HM-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)	40				

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		Positioner pulse train control	Single-phase 200 VAC	—
SCON	1 axis				—



- (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)