

# WM Series Standard Specifications and Mechanical Drawing

## FS-11WM-200•100

Stroke (mm)	300	400	600	800	1000	1500	2000	2500
Weight (kg)	9.8	10.4	11.6	12.8	14.0	17.0	20.0	23.0

(For 100W, reduce by 1.1kg)

## FS-12WM-200•100

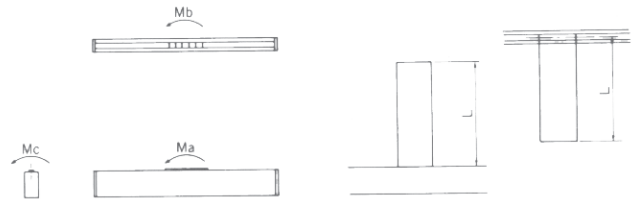
Stroke (mm)	300	400	600	800	1000	1500	2000	2500
Weight (kg)	11.0	11.6	12.8	14.0	15.2	18.2	21.2	24.2

(For 100W, reduce by 1.1kg)

Model		FS-11WM-200•100	FS-12WM-200•100
Rated motor power	W	200 (100)	
Rated speed	mm/sec	1250	
Rated thrust	N[kgf]	98 (49) [10 (5)]	
Repeatability	mm	±0.08	
Motor		AC/DC servo motor	
Encoder		Attached to motor	
Actuating medium		Timing belt 5M: Width 20mm, Backlash 0.1mm or less	
Linear guide		Linear motion guide: SR-20W Linear motion block (1 for 11WM, 2 for 12WM)	
Motor/belt connection		Reduction ratio by timing belt: 1/3.2	
Base		Extruded aluminum (A6063S-T5) White alumite treatment	
Maximum speed	mm/sec	1500 (1250 when ISAC motor is used)	
Maximum thrust (*1)	N[kgf]	196(98) [20(10)]	
Horizontal payload (*2,3)	kg	6 (3)	30 (15) [22(11) if stroke is 1600~2000 18(9) if stroke is 2100~2500]
Static load (*2,4)	N[kgf]	1176 [120]	1960 [200]
Load moment (*5)	N•m[kgf•m]	Ma: 4.4[0.45] Mb: 3.9[0.4] Mc: 5.8[0.6]	Slides together: Ma: 27.4[2.8] Mb: 25.4[2.6] Mc: 11.7[1.2] Slides 60mm apart: Ma: 107[11] Mb: 98[10] Mc: 11.7[1.2]
Overhang load length L (*5)	mm	240	600 (slides together) 950 (slides 70mm apart)

\*( ) = 100W

- \*1 Allowable value for 10 seconds at a speed of 10 mm/sec.
- \*2 Load uniformly distributed on slider. Base affixed to a flat, strong frame.
- \*3 When accelerating to 1250mm/sec at 1G (9800mm/sec<sup>2</sup>) (FS-11NM-100-60)  
When accelerating to 1250mm/sec at 0.3G (2940mm/sec<sup>2</sup>) (FS-12NM-100-60)
- \*4 Value when load moment is not added. Static load is the maximum value when load is added and differs from the payload.
- \*5 See figures at right. Moment caused by static load not to exceed allowable load moment. If there is moment in the Mc direction, we recommend using a guide rail (FS-11NO or 12NO) with the actuator.



SE = Stroke End  
ME = Mechanical End  
\*70mm for 11WM

**FS-11WM-200•100**

Stroke	300	400	600	800	1000	1500	2000	2500
A	661	761	961	1911	1361	1861	2361	2861
B	490	590	790	990	1190	1690	2190	2690
C	300	400	600	800	1000	1500	2000	2500
D	370	470	670	870	1070	1570	2070	2570

Stroke Increment is 100mm

**FS-12WM-200•100**

Stroke	300	400	600	800	1000	1500	2000	2500
A	761	861	1061	1261	1461	1961	2461	2961
B	590	690	890	1090	1290	1790	2290	2790
C	330	430	630	830	1030	1530	2030	2530
D	470	570	770	970	1170	1670	2170	2670

Stroke Increment is 100mm

T slot cross section