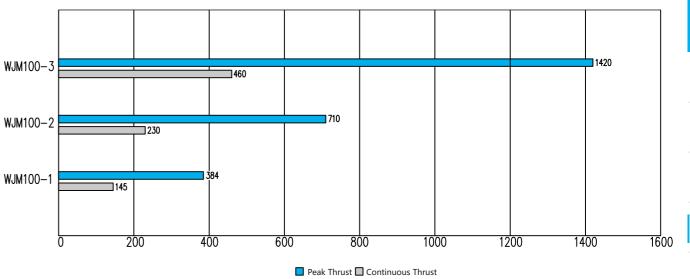


Thrust Graph

Linear Motor Specifications Overview



Specification Parameters

	Symbol	Unit	WJM100-1	WJM100-2	WJM100-3
Continuous Thrust	Fc	N	145	230	460
Continuous Current	lc	Arms	3	2.3	4.6
Peak Thrust [1s]	Fp	N	384	710	1420
Limiting Current [1s]	lu	Arms	12	9	18
Thrust Constant	$K_{\rm f}$	N/A _{rms}	48.6	100	100
Attractive Force Between Mover & Stator	Fa	N	620	1250	2500
Max. Coil Temperature	Tmax	℃	100	100	100
Electrical Time Constant	Ke	ms	4.5	4.5	4.5
Resistance [Phase-to-Phase, 25°C]	R ₂₅	Ω	5.3	11	5.5
Inductance [Phase-to-Phase, 25°C]	L	mH	23.6	50	25
Pole Pitch	2τ	mm	20	20	20
Back EMF Constant	K _v	V _{rms} /[m/s]	39.7	81.6	81.6
Continuous Thermal Power (Natural Cooling) @ 100°C	Pcn	W	90.7	116.4	232.8
Motor Constant [25°C]	Km	N/√W	17.3	24.8	35
Thermal Dissipation Constant (Natural Cooling)	Rтн	W/°C	1.2	1.5	3.1
Thermal Sensor Switch	-	-	PT100	PT100	PT100
Max. Operating Voltage	-	V _{DC}	600	600	600
Mover Mass	Mf	kg	0.8	1.5	2.9
Stator Unit Mass	Ms	kg/m	8.13	8.13	8.13

Note: All data in this table is measured at an ambient temperature of 25°C and represents values obtained without forced cooling. Except for dimensional specifications, all other specifications have a tolerance of $\pm 10\%$. Our company reserves the right to make changes, and relevant parameters are subject to change without prior notice.

Linear Motor Specifications Overview

• WJM100-1 Series: Dimensions R In Stock Lead Ti

10×M3⊽3.5₀

Motor Magnetic Track

Motor Cable Ø7.4

Minimum Bend Radius = 74.0

Hall Sensor Cable Ø3.8

0.0 – 5.0 –

94.0 -

125.0 -

0 0

125.0

62.5

82.5

102.5

125.0

23.2-

MAXWELL

Force-Speed Curve

Force-Speed Curve: WJM100-1 DC Bus Voltage: 330V

Speed (m/s)

Force-Speed Curve: WJM100-1 DC Bus Voltage: 600V

Speed (m/s) nuous Force ----- Peak Force

