

Iron Core Linear Motor

- Iron Core Technology
- Ultra-low Cogging Force
- High Thrust
- High Rigidity



• Mover Model Number Designation System

WKM	100	-	A
Series	Mover Width		Mover Length
WKM	121mm		1 : 112mm 2: 196mm 3 : 364mm

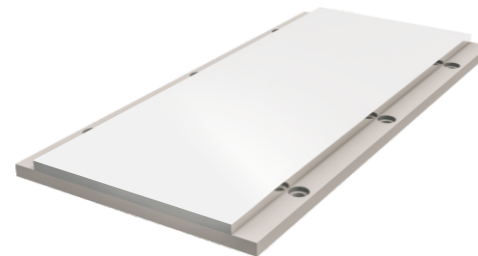
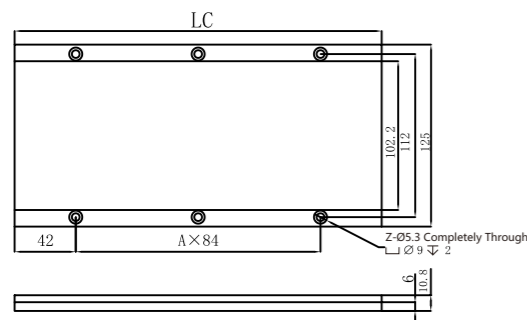
• Stator Model Number Designation System

DKM	100	-	L168
Series	Stator Width		Stator Length
DKM	100: 125mm		L168: 168mm L252: 252mm L420: 420mm

Stator Model	Length LC	Width	Height	A	Z	Pole Pitch	Weight
Unit	mm	mm	mm	PCS	PCS	mm	Kg/m
WKM100-168	168	125	10.8	1	4	42	8.9
WKM100-252	252	125	10.8	2	6	42	8.9
WKM100-420	420	125	10.8	4	10	42	8.9

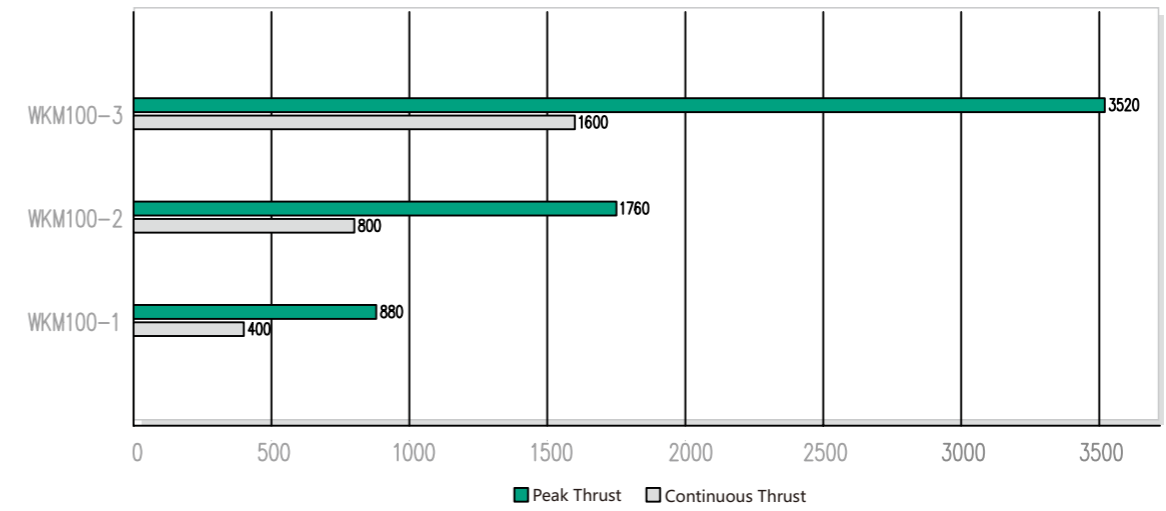
* The movers of the WKM100 series can be freely paired with WKM10-L168, WKM100-252, or WKM 100-420.

• Stator Size



* For special length requirements, please consult our sales team.

Thrust Graph



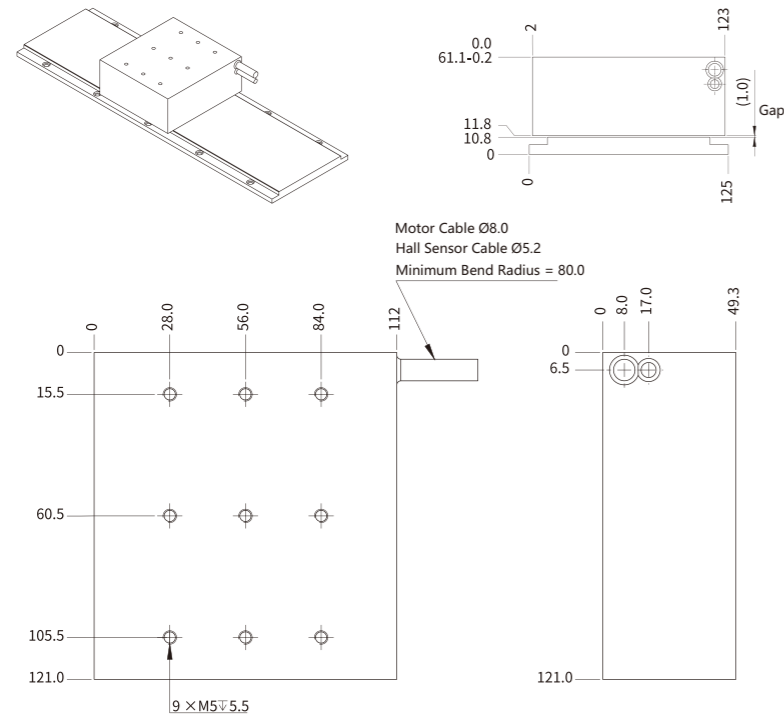
Specification Parameters

	Symbol	Unit	WKM100-1	WKM100-2	WKM100-3
Continuous Thrust	F_c	N	400	800	1600
Continuous Current	I_c	A_{rms}	4.5	4.5	9
Peak Thrust [1s]	F_p	N	880	1760	3520
Limiting Current [1s]	I_u	A_{rms}	13.5	13.5	27
Thrust Constant	K_f	N/A_{rms}	89	178	178
Attractive Force Between Mover & Stator	F_a	N	1.3	2.7	5.4
Max. Coil Temperature	T_{max}	$^{\circ}C$	100	100	100
Electrical Time Constant	K_e	ms	23	23	23
Resistance [Phase-to-Phase, 25 $^{\circ}C$]	R_{25}	Ω	2.8	5.6	2.8
Inductance [Phase-to-Phase, 25 $^{\circ}C$]	L	mH	65	130	65
Pole Pitch	2τ	mm	42	42	42
Back EMF Constant	K_v	$V_{rms}/[m/s]$	72.6	72.6	72.6
Continuous Thermal Power (Natural Cooling) @ 100 $^{\circ}C$	P_{CN}	W	113	226	453
Motor Constant [25 $^{\circ}C$]	K_m	N/\sqrt{W}	43.4	61.3	86.7
Thermal Dissipation Constant (Natural Cooling)	R_{TH}	$W/^{\circ}C$	1.5	2.9	5.8
Thermal Sensor Switch	-	-	PT100	PT100	PT100
Max. Operating Voltage	-	V_{bc}	600	600	600
Mover Mass	M_f	kg	4.1	7.1	13.6
Stator Unit Mass	M_s	kg/m	8.9	8.9	8.9

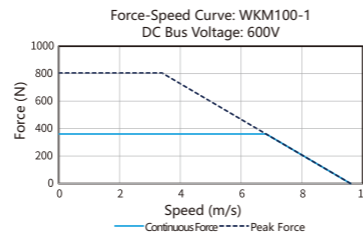
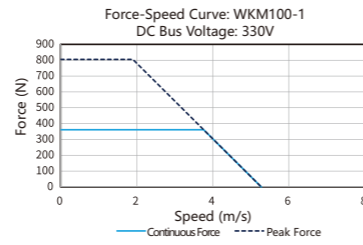
Note: All data in this table is measured at an ambient temperature of 25 $^{\circ}C$ and represents values obtained without forced cooling. Except for dimensional specifications, all other specifications have a tolerance of $\pm 10\%$. Our company reserves the right to make changes, and relevant parameters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

WKM100-1 Series: Dimensions

Made-to-Order Please contact our sales team for lead time. The lead time is subject to change during special periods. Please consult our sales team.

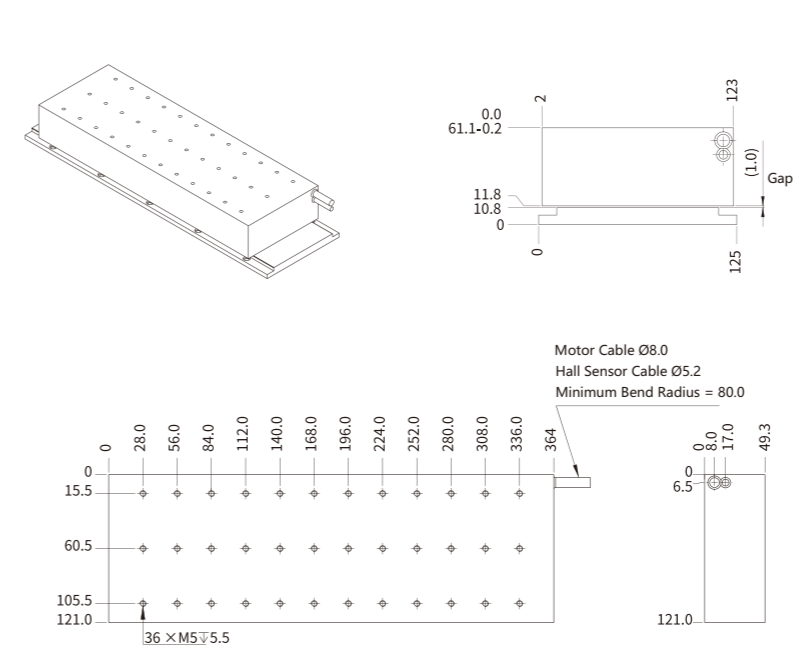


Force-Speed Curve

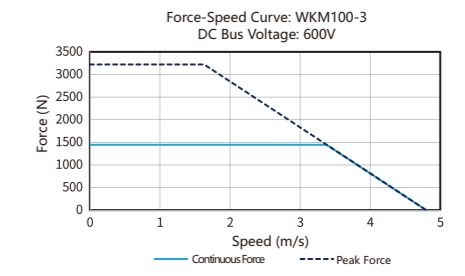
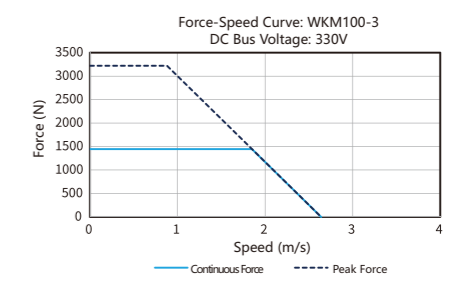


WKM100-3 Series: Dimensions

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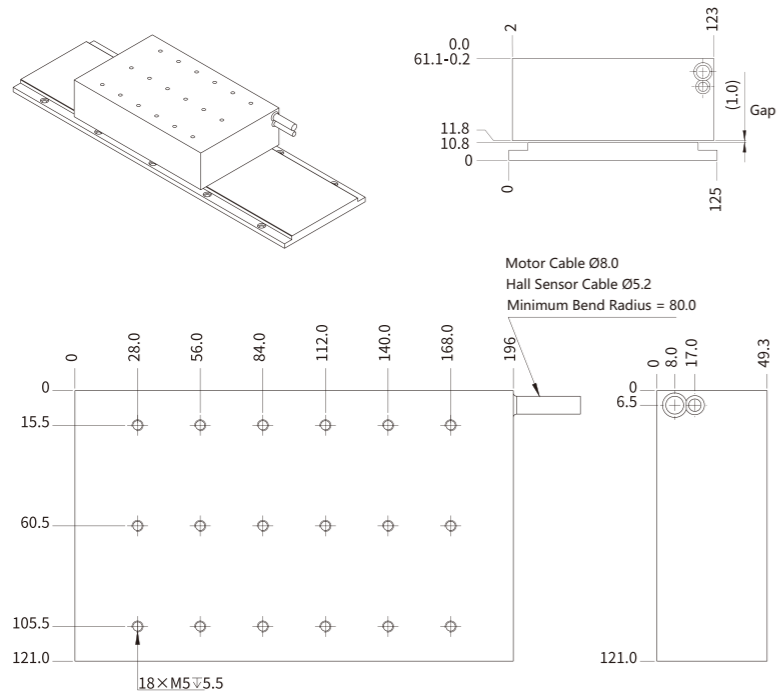


Force-Speed Curve

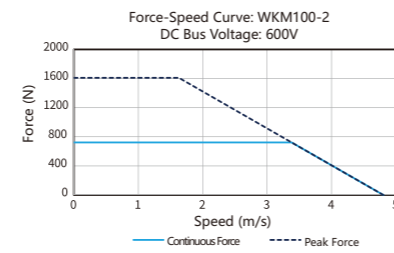
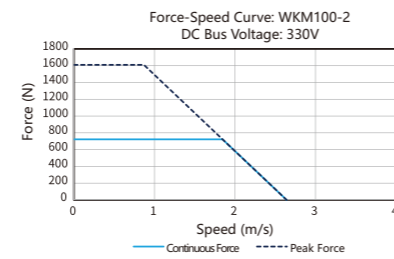


WKM100-2 Series: Dimensions

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Force-Speed Curve



MEMO