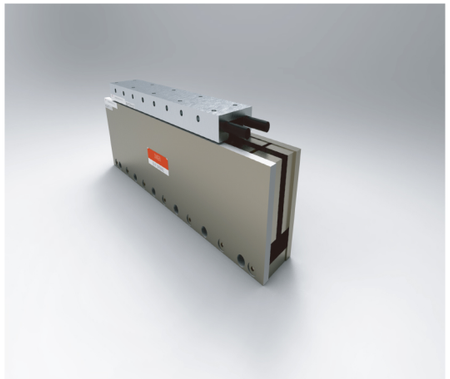
LINEAR MOTOR LMU030



标准规格/Standard Specifications

绝缘耐压/Insulation Capacity	: AC1500V 1min
周围温度/Operating Range	: 0~25°C
冷却方式/Cooling Method	: Self-cool
绝缘电阻/Insulation Resistance	: DC500V 100MΩ or more
周围湿度/Operating range (in controlled environment)	: 20~80%(No condensation)
最大温度/Maximum temperature	: 125°C

详细规格/Specification

参数 Parameter	单位 Unit	LMU030-CP143 A	LMU030-CP143 B	LMU030-CP204 A	LMU030-CP204 B	LMU030-CP265 A	LMU030-CP265 B	LMU030-CP387 A	LMU030-CP387 B
性能指标 Performance Specifications									
额定推力 Continuous Force	N	110.5		153.3		197.2		257.3	
峰值推力 Peak Force	N	692.7		1006.4		1206.6		1590.4	
电气性能 Electrical Specifications									
线间感应电压常数 BEMF Constant(line-line,peak)	V/(m/s)	40.97	20.49	66.50	33.25	88.93	44.46	134.46	67.23
额定电流 Continuous Current	Arms	2.19	4.38	1.87	3.75	1.80	3.61	1.56	3.11
峰值电流 Peak Current,Stall	Arms	13.75	27.49	12.30	24.61	11.03	22.06	9.62	19.23
推力常数 Force Constant	N/Arms	50.39	25.2	81.8	40.9	109.39	54.69	165.38	82.69
马达常数 Motor Constant	N/√W	10.53		14.11		16.39		20.17	
线间电阻，25°C Resistance,25°C (line-line)	Ω	10.9	2.7	16	4	21.2	5.3	32	8
线间电感 Inductance,(line-line)	mH	8.7	2.18	12.8	3.2	16.8	4.2	24.8	6.2
放热常数 Thermal Resistance	°C/W	0.91		0.85		0.69		0.61	
最大电压 Maximum Bus Voltage	V_{DC}	340		340		340		340	
机械性能 Machanical Specifications									
动子重量 Coil Weight	kg	0.6		0.9		1.1		1.7	
动子长度 Coil Length	mm	143.8		204.7		265.7		387.6	
磁轨重量 Magnet Track Weight	kg/m	10.12							
磁极间距（NN) Magnetic Pole Pitch (NN)	mm	60.96							

注/Notes:

1.Performance is dependent upon heat sink configuration, system cooling conditions,and ambient temperature.

1.性能取决于散热器配置、系统冷却条件和环境温度。

2.Values shown @ 100°C rise above a 25°C ambient temperature,with motor mounted to the specified aluminum heat sink.

2.在高于25℃至100℃的环境温度时，电机需安装在指定的铝制散热器上。

3.Peak force assumes correct rms current;consult SMJ.

3.峰值扭矩下设置正确的电流值，请咨询SMJ。

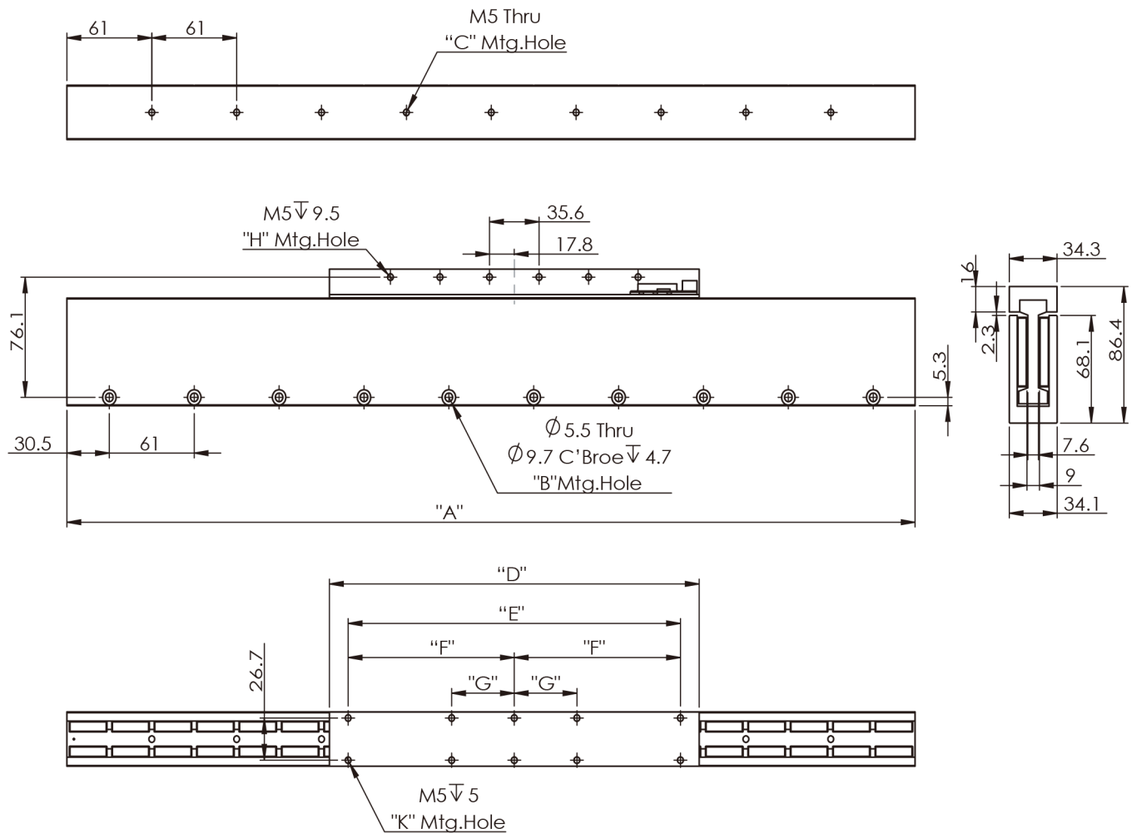
4.Force constant and motor constant specified at stall.

4.失速时规定的力常数和电机常数

5.All performance and electrical specifications±10%.

5.所有性能和电气规格偏差±10%

Dimensions(mm)



Magnet Plate

Model No.	A	B	C
LMU030-MP240	243.8	4	3
LMU030-MP300	304.8	5	4

Coil Plate

Model No.	D	E	F	G	H	K
LMU030-CP143	143.8	116.8	58.4	NA	8	6
LMU030-CP204	204.7	177.8	88.9	NA	8	6
LMU030-CP265	265.7	238.8	119.4	NA	12	6
LMU030-CP387	387.6	360.6	180.3	96.5	19	10