



LINEAR MOTOR LMU030



This model is suitable for a wide range of field such as Semiconductor production equipment and assembly robots.

Standard Specifications

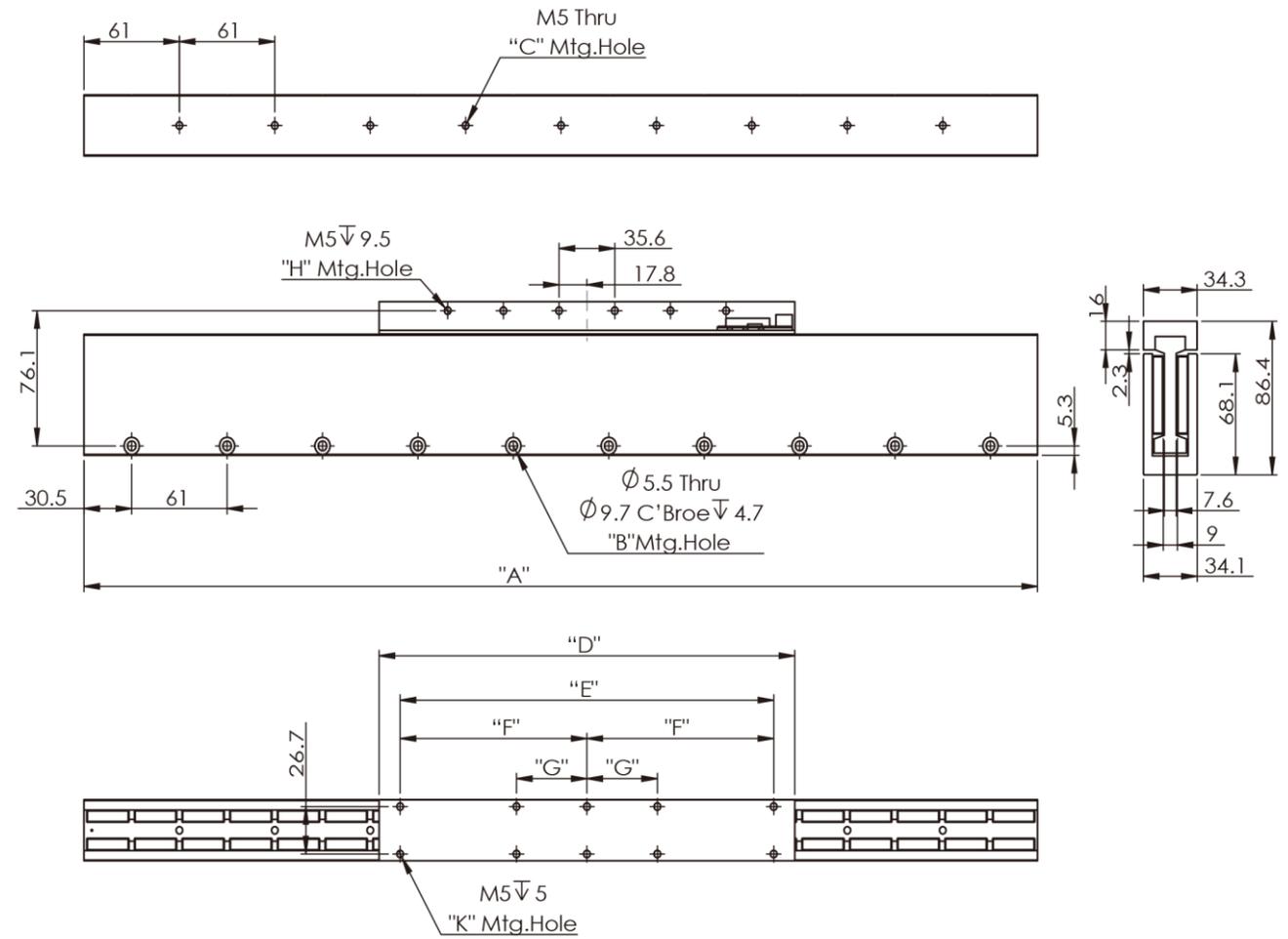
Insulation Capacity	: AC1500V 1min
Operating Range	: 0~25°C
Cooling Method	: Self-cool
Insulation Resistance	: DC500V 100MΩ or more
Operating range (in controlled environment)	: 20~80%(No condensation)
Maximum temperature	: 125°C

Specification

Parameter	Unit	LMU030-CP143		LMU030-CP204		LMU030-CP265		LMU030-CP387	
		A	B	A	B	A	B	A	B
Performance Specifications									
Continuous Force	N	110.5	153.3	197.2	257.3				
Peak Force	N	692.7	1006.4	1206.6	1590.4				
Electrical Specifications									
BEMF Constant(line-line,peak)	V/(m/s)	40.97	20.49	66.50	33.25	88.93	44.46	134.46	67.23
Continuous Current	Arms	2.19	4.38	1.87	3.75	1.80	3.61	1.56	3.11
Peak Current,Stall	Arms	13.75	27.49	12.30	24.61	11.03	22.06	9.62	19.23
Force Constant	N/Arms	50.39	25.2	81.8	40.9	109.39	54.69	165.38	82.69
Motor Constant	N/√W	10.53		14.11		16.39		20.17	
Resistance,25°C (line-line)	Ω	10.9	2.7	16	4	21.2	5.3	32	8
Inductance,(line-line)	mH	8.7	2.18	12.8	3.2	16.8	4.2	24.8	6.2
Thermal Resistance	°C/W	0.91		0.85		0.69		0.61	
Maximum Bus Voltage	V _{DC}	340		340		340		340	
Machanical Specifications									
Coil Weight	kg	0.6		0.9		1.1		1.7	
Coil Length	mm	143.8		204.7		265.7		387.6	
Magnet Track Weight	kg/m	10.12							
Magnetic Pole Pitch (NN)	mm	60.96							

- Notes:
1. Performance is dependent upon heat sink configuration, system cooling conditions, and ambient temperature.
 2. Values shown @ 100°C rise above a 25°C ambient temperature, with motor mounted to the specified aluminum heat sink.
 3. Peak force assumes correct rms current; consult SMJ.
 4. Force constant and motor constant specified at stall.
 5. All performance and electrical specifications ±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