



LINEAR MOTOR LMU010



The LMU010 is the smallest of LMU series linear motor. It is a very efficient drive system that was developed to fit in the smallest possible space. This is most appropriate linear motor for the mimiturization of equipment in various fields.

Standard Specifications

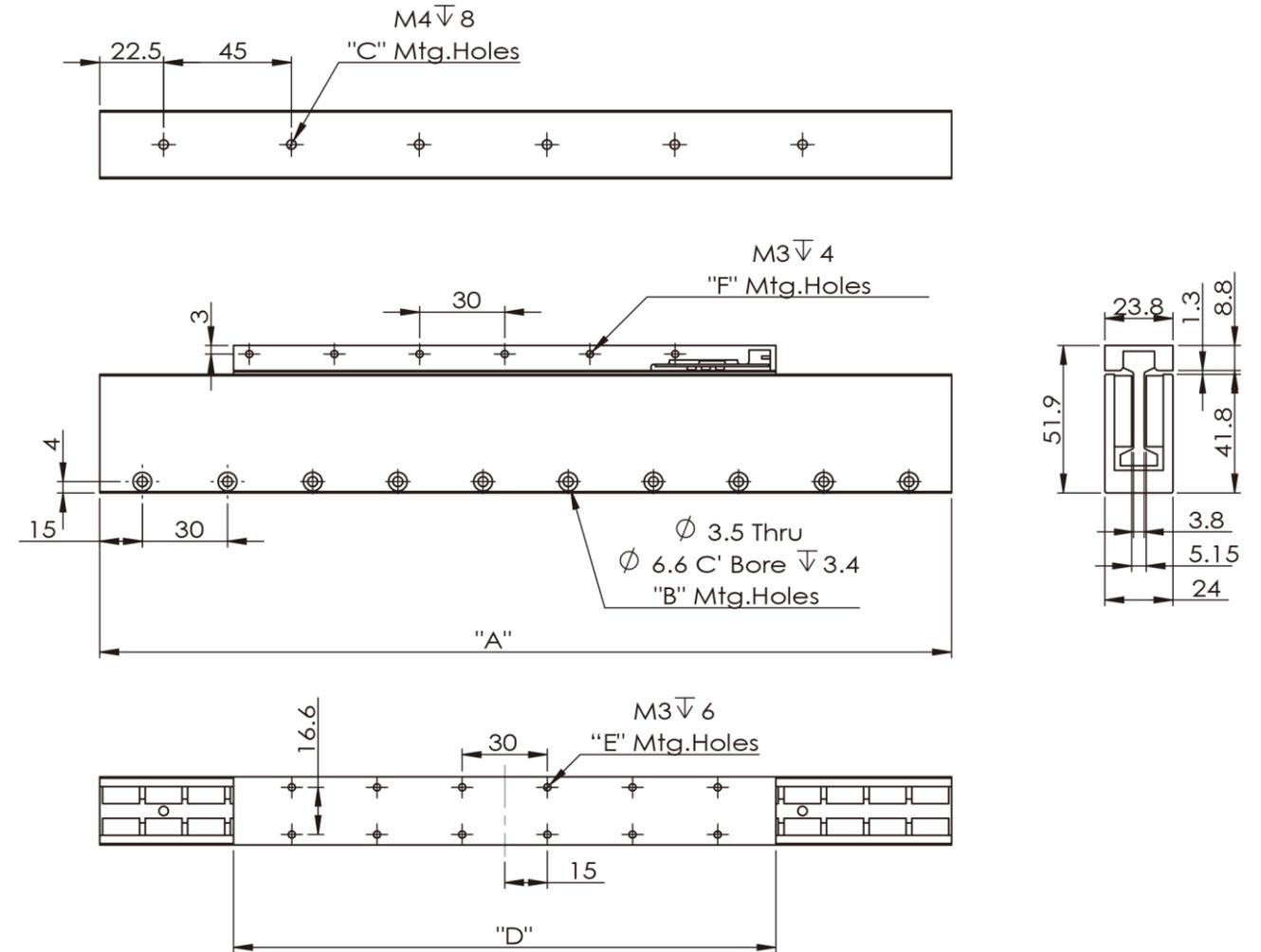
Insulation Capacity	: AC1500V 1min
Operating Range	: 0~25°C
Cooling Method	: Self-cool
Insulation Resistance	: DC500V 100MΩ or more
Operating range (in controlled environment)	: 20~80%(No condensation)
Maximum temperature	: 125°C

Specification

Parameter	Unit	LMU010-CP71	LMU010-CP131	LMU010-CP191	LMU010-CP252
Performance Specifications					
Continuous Force	N	30	58	80	105
Peak Force	N	210	406	560	735
Electrical Specifications					
BEMF Constant(line-line,peak)	V/(m/s)	12.28	24.57	36.85	49.14
Continuous Current	Arms	1.99	1.92	1.76	1.74
Peak Current,Stall	Arms	13.90	13.43	12.35	12.16
Force Constant	N/Arms	15.11	30.22	45.33	60.44
Motor Constant	N/√W	4.30	7.29	9.04	11.08
Resistance,25°C (line-line)	Ω	6.06	12.13	18.19	24.26
Inductance,(line-line)	mH	0.85	1.70	2.55	3.40
Thermal Resistance	°C/W	2.21	1.38	1.1	0.9
Maximum Bus Voltage	V _{DC}	340	340	340	340
Machanical Specifications					
Coil Weight	kg	0.1	0.18	0.27	0.38
Coil Length	mm	71	131	191	252
Magnet Track Weight	kg/m	4.28			
Magnetic Pole Pitch (NN)	mm	30			

- 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
LMU010-MP90	90	3	2
LMU010-MP150	150	5	3
LMU010-MP300	300	10	6

Coil Plate

Model No.	D	E	F
LMU010-CP71	71	4	4
LMU010-CP131	131	8	8
LMU010-CP191	191	12	12
LMU010-CP252	252	16	16