



LINEAR MOTOR LMU050



With in the LMU series, this model has the most force.
 This model is suitable for applications where high amount of force, high speed, and quick acceleration are required for operation, such as large scale production equipment and precision positioning equipment.

Standard Specifications

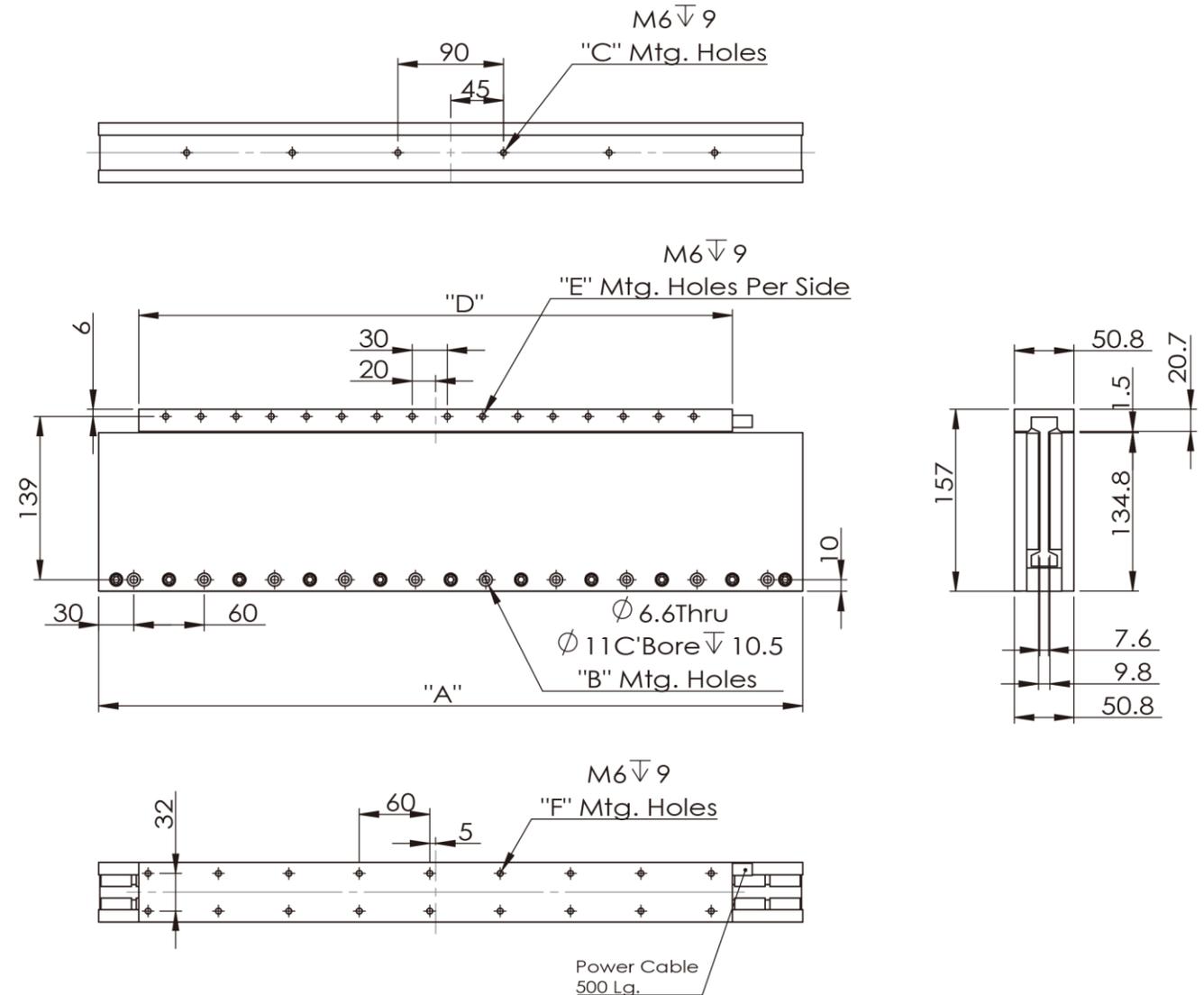
- Insulation Capacity : AC1500V 1min
- Operating Range : 0~25°C
- Cooling Method : Self-cool
- Insulation Resistance : DC500V 100MΩ or more
- Operating range (in controlled environment) : 20~80%(No condensation)
- Maximum temperature : 125°C

Specification

Parameter	Unit	LMU050-CP384		LMU050-CP504	
		A	B	B	C
Performance Specifications					
Continuous Force	N	550		700	
Peak Force	N	3850		4900	
Electrical Specifications					
BEMF Constant(line-line,peak)	V/(m/s)	203.02	101.51	135.91	67.95
Continuous Current	Arms	2.20	4.40	4.20	8.41
Peak Current,Stall	Arms	15.42	30.83	29.40	58.87
Force Constant	N/Arms	249.71	124.86	166.47	83.23
Motor Constant	N/√W	37.06		48.30	
Resistance,25°C (line-line)	Ω	20.39	5.1	6.8	1.7
Inductance,(line-line)	mH	12	3	4	1
Thermal Resistance	°C/W	0.4		0.39	
Maximum Bus Voltage	V _{DC}	340		340	
Machanical Specifications					
Coil Weight	kg	3.4		4.45	
Coil Length	mm	384		504	
Magnet Track Weight	kg/m	38.1			
Magnetic Pole Pitch (NN)	mm	60			

- 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
LMU050-MP240	240	4	2
LMU050-MP300	300	5	4

Coil Plate

Model No.	D	E	F
LMU050-CP384	384	12	14
LMU050-CP504	504	16	18