



LINEAR MOTOR LMU040



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

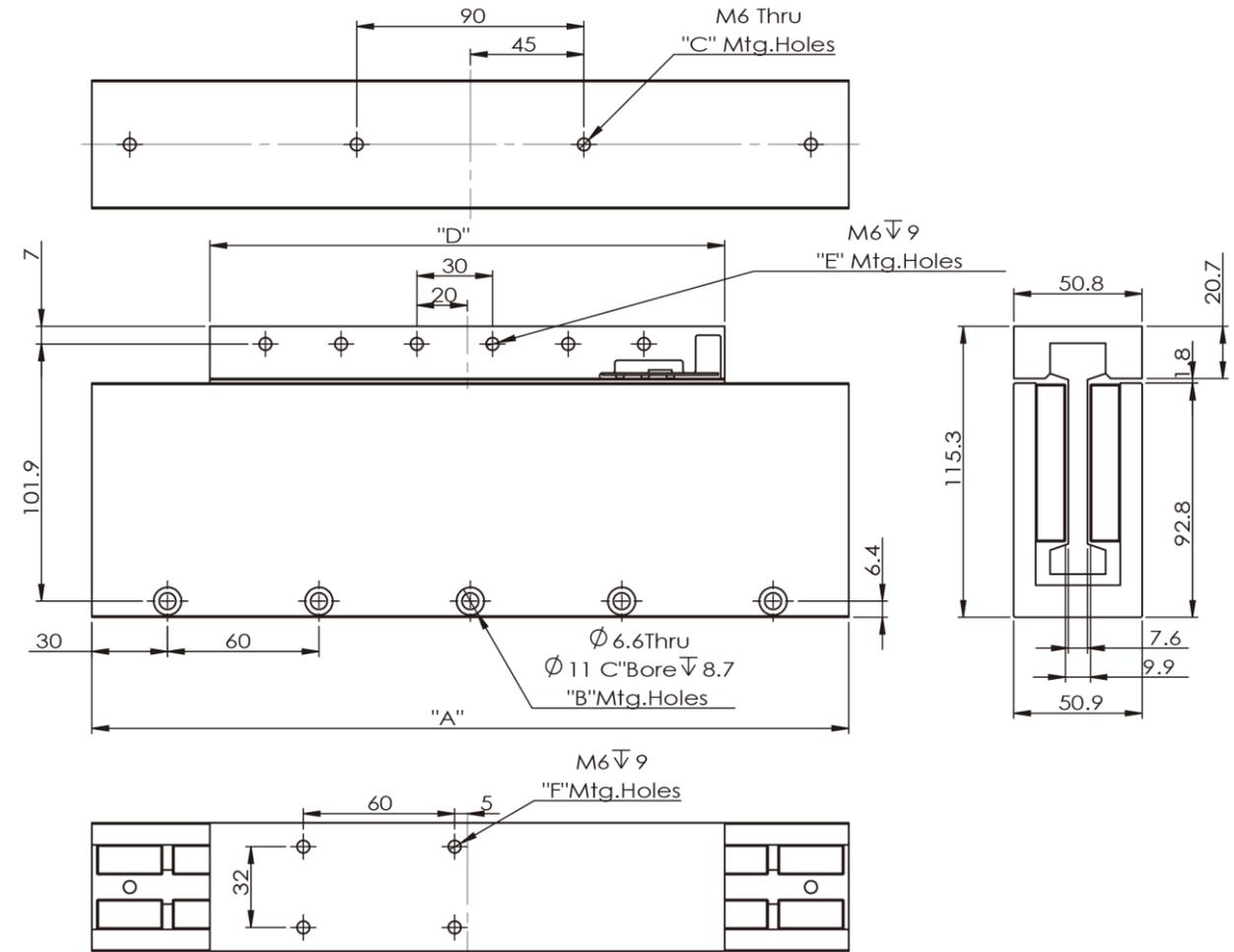
- Insulation Capacity : AC1500V 1min
- Operating Range : 0~25°C
- Cooling Method : Self-cool
- Insulation Resistance : DC500V 100MΩ or more
- Operating range (in controlled environment) : 20~80%(No condensation)
- Maximum temperature : 125°C

Specification

Parameter	Unit	LMU040-CP144		LMU040-CP204		LMU040-CP264		LMU040-CP384		LMU040-CP504		
		A	B	A	B	A	B	A	B	A	B	
Performance Specifications												
Continuous Force	N	200	250	335	440	600						
Peak Force	N	1400	1750	2345	3080	4200						
Electrical Specifications												
BEMF Constant(line-line,peak)	V/(m/s)	75.45	37.72	113.18	56.60	150.90	75.45	128.05	64.02	170.72	85.37	
Continuous Current	Arms	2.16	4.31	1.80	3.59	1.80	3.61	2.79	5.59	2.86	5.71	
Peak Current,Stall	Arms	15.09	30.17	12.57	25.14	12.63	25.27	19.56	39.11	20.00	40.00	
Force Constant	N/Arms	92.8	46.4	139.21	69.62	185.61	92.8	157.5	78.75	209.99	105	
Motor Constant	N/√W	21.47	24.01	27.76	28.34	32.57						
Resistance,25°C (line-line)	Ω	14.6	3.54	21.24	5.31	28.32	7.08	12.72	3.2	16.96	4.24	
Inductance,(line-line)	mH	9.6	2.4	15.2	3.8	18.4	4.6	7.2	1.8	10.8	2.7	
Thermal Resistance	°C/W	0.89	0.78	0.58	0.42	0.3						
Maximum Bus Voltage	V _{DC}	340	340	340	340	340						
Machanical Specifications												
Coil Weight	kg	1.1	1.6	2.1	3.1	4.2						
Coil Length	mm	144	204	264	384	504						
Magnet Track Weight	kg/m	21.8										
Magnetic Pole Pitch (NN)	mm	60										

- Notes:
- Performance is dependent upon heat sink configuration, system cooling conditions, and ambient temperature.
 - Values shown @ 100°C rise above a 25°C ambient temperature, with motor mounted to the specified aluminum heat sink.
 - Peak force assumes correct rms current; consult SMJ.
 - Force constant and motor constant specified at stall.
 - All performance and electrical specifications ±10%.

Dimensions(mm)



Magnet Plate

Model No.	A	B	C
LMU040-MP240	240	4	2
LMU040-MP300	300	5	4

Coil Plate

Model No.	D	E	F
LMU040-CP144	144	8	4
LMU040-CP204	204	12	4
LMU040-CP264	264	14	8
LMU040-CP384	384	22	12
LMU040-CP504	504	30	16