



LINEAR MOTOR LMUS020



The LMUS020 series linear motor 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

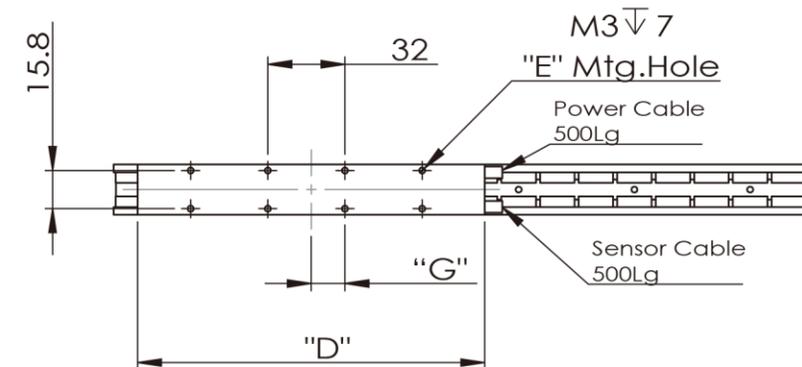
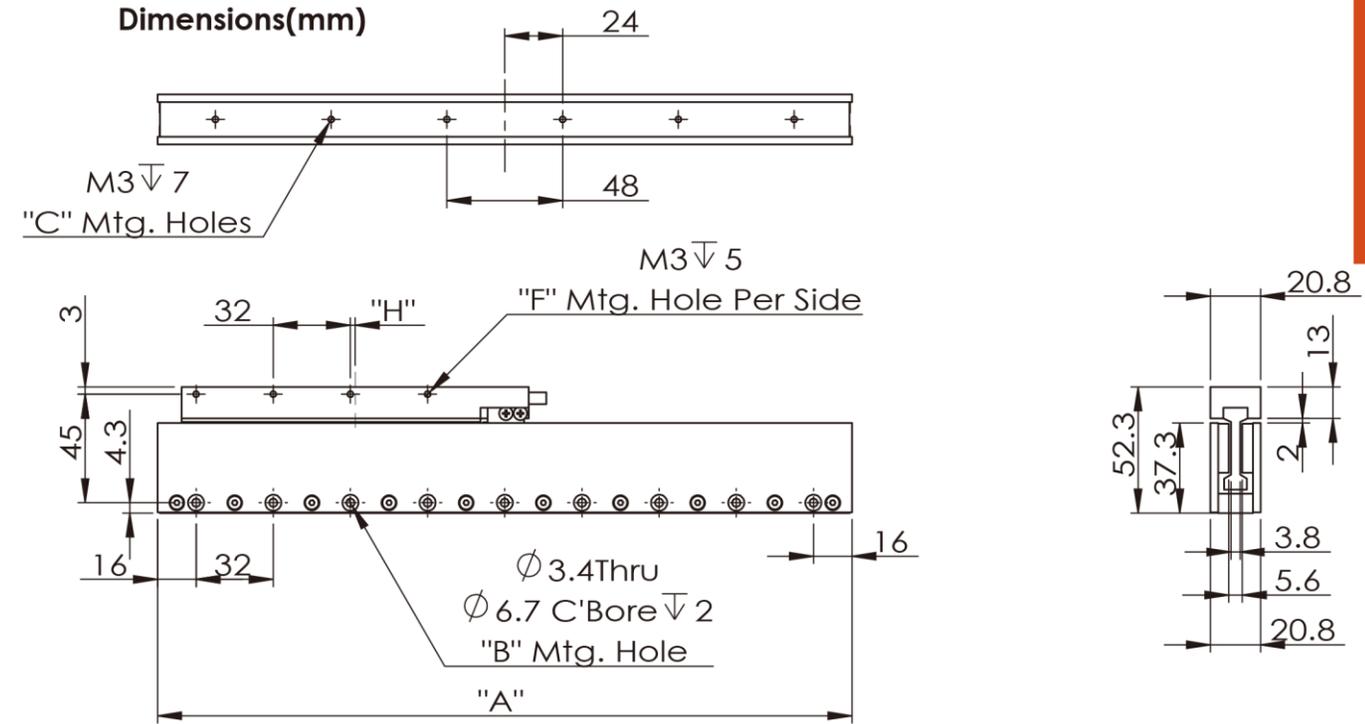
Insulation Capacity	: AC1500V 1min
Operating Range	: 0~25°C
Cooling Method	: Self-cool
Insulation Resistance	: DC500V 100MΩ or more
Operating range (in controlled environment)	: 20~80%(No condensation)
Maximum temperature	: 125°C

Specification

Parameter	Unit	LMUS020-CP96	LMUS020-CP144
Performance Specifications			
Continuous Force	N	23	39.8
Peak Force	N	161.9	231.8
Electrical Specifications			
BEMF Constant(line-line,peak)	V/(m/s)	9.00	15.90
Continuous Current	Arms	2.08	2.03
Peak Current,Stall	Arms	14.63	11.85
Force Constant	N/Arms	11.07	19.56
Motor Constant	N/√W	3.35	4.53
Resistance,25°C (line-line)	Ω	5.4	9.2
Inductance,(line-line)	mH	0.70	1.10
Thermal Resistance	°C/W	2.12	1.29
Maximum Bus Voltage	V _{DC}	340	340
Mechanical Specifications			
Coil Weight	kg	0.12	0.2
Coil Length	mm	96	144
Magnet Track Weight	kg/m	3.33	
Magnetic Pole Pitch (NN)	mm	32	

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%.



Magnet Plate

Model No.	A	B	C
LMUS020-MP128	128	4	2
LMUS020-MP224	224	7	4
LMUS020-MP256	256	8	4
LMUS020-MP288	288	9	4

Coil Plate

Model No.	D	E	F	G	H
LMUS020-CP96	96	6	2	22	26
LMUS020-CP144	144	8	4	14	2