SMJ MML010类型…MML010△-KP□□、MML010-MP□□□

（MML010 Type…MML010△-KP□□、MML010-MP□□□）

MML系列中最轻巧的直线电机。可在有限的小空间内实现高效驱动。是最适合各种领域设备小型化的直线电机。

The MML010 is the smallest of the MML 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 miniturization of equipment in various fields.

标准规格／Standard Specifications

绝缘耐压／Insulation Capacity ： AC1500V 1分钟（1min）
周围温度／Operating Range ： 0 ~ 40℃
冷却方式／Cooling method ： 自冷 (Self-cool)
绝缘电阻／Insulation Resistance：DC500V 100MΩ以上/DC500V 100MW or more
周围湿度／Operating range (in controlled environment) ： 20 ~ 80%（无结露）(No condensation)
最大温度／Maximum temperature ： 120℃

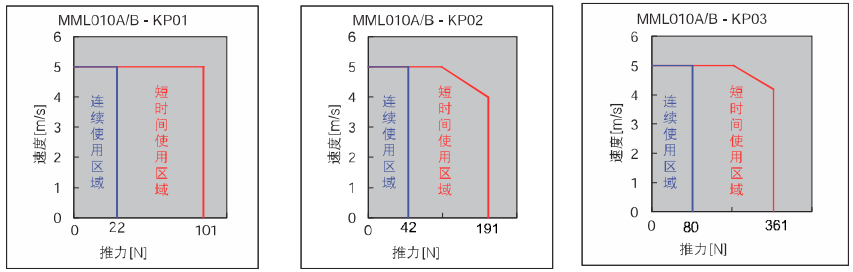
详细规格／Specification

项目 / Item	单位 / Unit	MML010△-KP01		MML010△-KP02		MML010△-KP03	
		A*1	B*1	A*1	B*1	A*1	B*1
额定推力*3／Continuous Force	N	22.4		42.3		80.3	
额定电流*3／Continuous Current	Arms	1.98	0.99	1.89	0.95	3.62	1.8
最大推力*2*3／Peak Force	N	100.7		190.5		361.1	
最大电流*2*3／Peak Current	Arms	8.9	4.5	8.5	4.3	16.3	8.1
动子重量／Mover weight	kg	0.17		0.31		0.61	
推力常数／Force Constant DC马达换算／All Three Phases	N / Arms	11.3	22.4	22.4	45.2	22.2	44.7
马达常数／Motor Constant DC马达换算／All Three Phases	N / $\sqrt{W}$	4.6	4.5	6.4	6.5	9.0	9.1
线间感应电压常数／Back EMF (line to line)	Vrms / (m/s)	6.5	13.0	12.9	26.1	12.8	25.8
线间电阻／Coil Resistance (line to line)	Ω	4.1	16.3	8.1	32.7	4.0	16.2
线间电感／Inductance (line to line)	mH	1.21	4.79	2.43	9.57	1.21	4.92
放热常数（有散热片） Thermal Resistance (included heat sink)	K / W	6.60		3.60		2.00	
放热常数（无散热片） Thermal Resistance (not included heat sink)	K / W	9.20		4.90		2.75	

*1 ： A为低电压输入型，B为高电压输入型。表中的△填入A或B。
*2 ： 最大推力、最大电流会根据使用的伺服控制器最大电流而变化。本数值是以转子上安装有散热片（铝板）为条件的。
（散热片尺寸：200×200×15mm）
*3 ： 电枢卷线温度为100℃时的数值。

*1: A =Low Voltage Model, B = High Voltage Model. The△mark in the chart signifies that either A or B models could be suitable.
*2: The value given for the Peak Force and Peak Current may differ depending on the Peak Current of the Servo Controller utilized. Given Values are for heat sink (Aluminum) equiped Coil Plates. (Heat Sink size: 200×200×15mm)
*3: Given value is after the electrical wiring temperature has reached 100°C.

推力ー速度特性／Force/Speed Characteristics

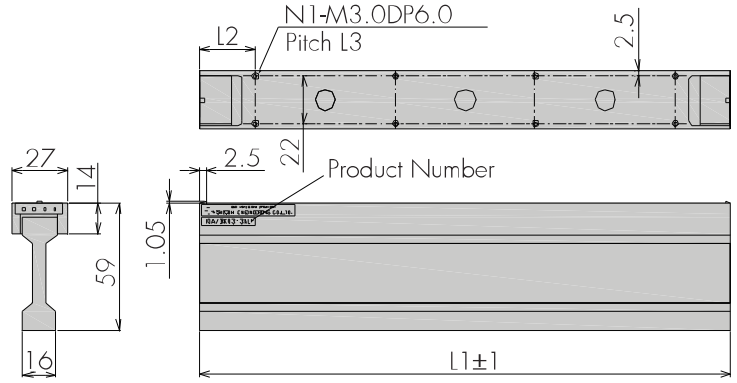


本特性根据伺服控制器供给至直线电机的输入电压而变化。
上述特性是以A型AC型AC85V、B型AC170V作为供给至直线电机的输入电压算出的。

The above characteristics may vary depending on the Voltage supply from the Servo Controller to the motor.
Listed characteristics for the Linear Motor's Input Voltage is calculated at AC85V for Type A, AC170V for Type B.
For further details, please contact our Sales Department.

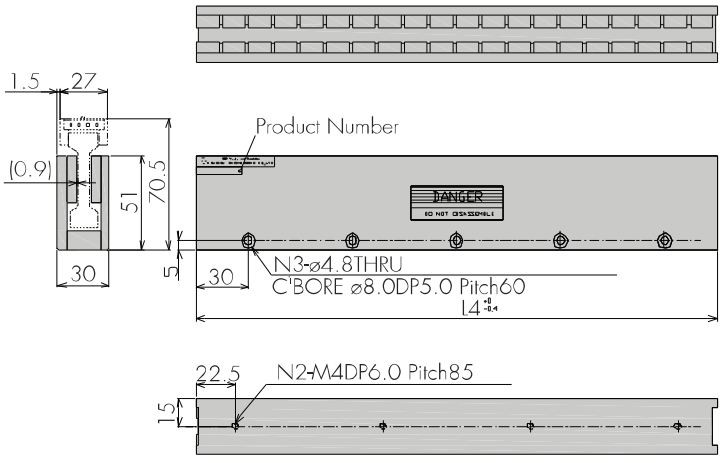
外形尺寸／Dimensions（单位／unit : mm）

●动子（Coil Plate）



Type	Size[mm]			Qty[pcs]
	L1	L2	L3	N1
KP01	78	24	30	4
KP02	138	32	37	6
KP03	258	27	68	8

●定子（Magnet Plate）



Type	Size[mm]	Qty[pcs]	
	L4	N2	N3
MP150	150	2	2
MP300	300	4	5