

S MJ MML020 类型... MML020△-KP□□、MML020-MP□□□

(MML020 Type...MML020△-KP□□、MML020-MP□□□)



可在需要精密定位、高速度、高加速度的小型半导体制造设备等有限的小空间内使用。是适合制造设备小型化的直线电机。

This Series of Linear Motor is well suited for applications that require Precision Positioning, High Speed, Quick Acceleration such as Semiconductor manufacturing equipment. It is also able to be utilized in limited work spaces. It is the most appropriate Linear Motor design for the reduction of manufacturing equipment size.

标准规格 / Standard Specifications

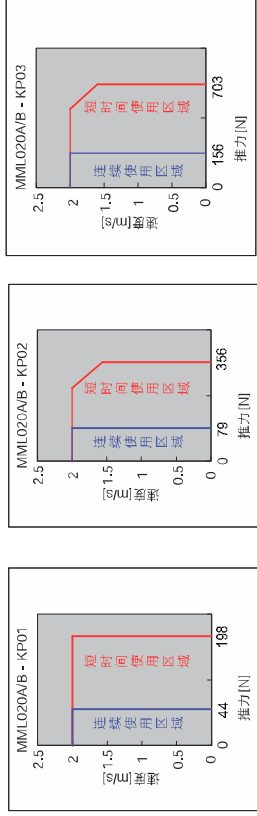
绝缘耐压 / Insulation Capacity : AC1500V 1分钟 (1min)
 额定速度 / Operating Range : 0 ~ 40°C
 冷却方式 / Cooling method : 自冷 (Self-cool)
 绝缘电阻 / Insulation Resistance : DC500V 100MΩ以上 / DC500V 100MW or more
 启动转矩 / Starting torque (in controlled environment) : 20 ~ 80% (无负载) (No load condition)
 最大温度 / Maximum temperature : 120°C

详细规格 / Specification

| 项目 / Item | MML020△-KP01 | | MML020△-KP02 | | MML020△-KP03 | |
|--|----------------|----------------|----------------|----------------|----------------|----------------|
| | A ¹ | B ¹ | A ¹ | B ¹ | A ¹ | B ¹ |
| 额定推力 ¹⁾ / Continuous Force | 44.0 | 79.2 | 79.2 | 156.3 | 156.3 | 156.3 |
| 额定电流 ²⁾ / Continuous Current | 1.92 | 0.96 | 1.74 | 0.89 | 3.48 | 1.73 |
| 最大推力 ³⁾ / Peak Force | 198 | 386 | 386 | 703 | 703 | 703 |
| 最大电流 ³⁾ / Peak Current | 8.6 | 4.3 | 7.8 | 4.0 | 15.7 | 7.5 |
| 动子重量 / Mover weight | 0.22 | 0.43 | 0.43 | 0.80 | 0.80 | 0.80 |
| 推力常数 / Force Constant | 22.9 | 44.5 | 45.5 | 90.8 | 44.9 | 89.7 |
| DC马达常数 / All Three Phases | 7.7 | 7.7 | 10.9 | 10.9 | 15.2 | 15.2 |
| 马达常数 / Motor Constant | 13.2 | 25.7 | 26.3 | 52.4 | 25.9 | 51.8 |
| 线圈感应电压常数 / Back EMF (line to line) | 5.8 | 22.4 | 11.7 | 45.9 | 5.8 | 23.4 |
| 线圈电阻 / Coil Resistance (line to line) | 1.85 | 7.09 | 3.66 | 14.60 | 1.83 | 7.44 |
| 线圈电感 / Inductance (line to line) | 4.90 | 2.95 | 2.95 | 1.50 | 1.50 | 1.50 |
| 热阻 (散热器 / 散热器热阻) / Thermal Resistance (not included heat sink) | 5.80 | 3.50 | 3.50 | 1.80 | 1.80 | 1.80 |

- *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着散热片(铝版)为条件的。
- *3 : 电枢线圈温度为100°C时的数值。

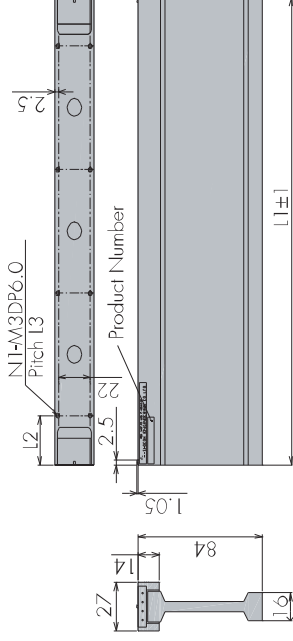
推力-速度特性 / Force/Speed Characteristics



本特性使用伺服控制器供给至直线电机的输入电压而变化。上述特性以A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.

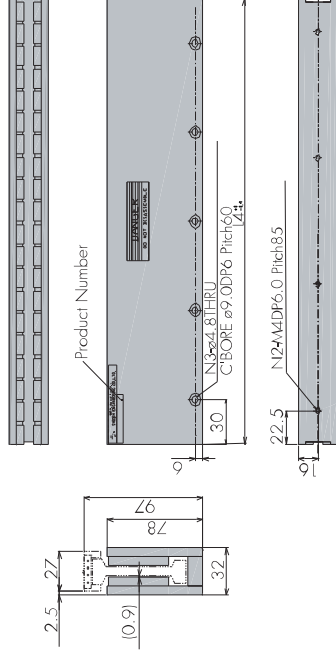
外形尺寸 / Dimensions (单位 / unit : mm)

● 动子 (Coil Plate)



| Type | Size [mm] | | | Qty [pcs] |
|------|-----------|----|----|-----------|
| | L1 | L2 | L3 | |
| 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 | 2 |
| MP300 | 300 | 4 | 4 | 5 |