# 型號表示方式 Ordering Code

**GMD14 - L5 - 100 - M - M20B - C 4 - 0001**

本體型號
Model

行程 Stroke
100–1050mm
(間隔50 mm pitch)

螺桿導程
Ball Screw Lead

| | |
|---|---|
| 05 | 5mm |
| 10 | 10mm |
| 20 | 20mm |
| 32 | 32mm |

馬達位置
Motor Position

| | |
|---|---|
| BC | 馬達外露 Motor Exposed |
| BM | 馬達下折 Motor On Lower Side |
| BR | 馬達右折 Motor On Right Side |
| BL | 馬達左折 Motor On Left Side |
| M | 馬達直結 Motor built–in |

馬達廠牌、功率
Motor Brand,Power Output

| | | | | |
|---|---|---|---|---|
| P | 松下(標準) Panasonic | 10 | – | |
| M | 三菱(標準) Mitsubishi | 20 | 200W | B |
| Y | 安川(標準) Yaskawa | 40 | – | |
| T | 台達 Delta | 75 | – | |

※若無煞車則不表示
NO brake, no description.

原點感應器
Home Sensor

| | |
|---|---|
| 內置型 In Side | |
| A | 馬達側 Motor Side |
| B | 反馬達側 Opposite Motor Side |
| 外掛型 Out Side | |
| C | 馬達側 Motor Side |
| D | 反馬達側 Opposite Motor Side |
| 無 NO SENSOR | |
| E | 無 NO SENSOR |

端點極限感應器
Limit Sensor

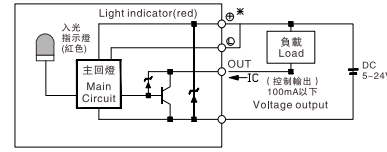
| | |
|---|---|
| 內置型 In Side | |
| 1 | 1只 1pc |
| 2 | 2只 2pcs |
| 外掛型 Out Side | |
| 3 | 1只 1pc |
| 4 | 2只 2pcs |
| 無 NO SENSOR | |
| 5 | 無 No SENSOR |

特注式樣
Special Order No.

## 基本仕樣 Specification

| | | | | | | |
|---|---|---|---|---|---|---|
| 性能 | 位置重復精度 Repeatability (mm) | | ±0.01 | | | |
| | 螺桿導程 Screw Lead (mm) | | 5 | 10 | 20 | 32 |
| | 最高速度 Maximum Speed (mm/s) | | 250 | 500 | 1000 | 1600 |
| | 最大可搬重量 Maximum Payload | 水平使用 kg Horizontal (kg) | 95 | 75 | 35 | 15 |
| | | 垂直使用 kg Vertical (kg) | 27 | 18 | 7 | – |
| | 定格推力 Rated Thrust (N) | | 683 | 341 | 174 | 107 |
| | 標準行程 Stroke Pitch (mm) | | 100~1050mm/50间隔 | | | |
| 部品 | AC伺服馬達容量 AC Servo Motor Output (W) | | 200 | | | |
| | 滚珠螺桿外徑 Ball Screw ø (mm) | | C7 ø16 | | | |
| | 高剛性直線滑軌 High Rigidity Linear Guide (mm) | | W15XH12.5 | | | |
| | 聯軸器 Couping (mm) | | 10X14 | | | |
| | 原點感應器 Home Sensor | 外掛 Outside | EE-SX672(NPN) | | | |
| | | 內置 Built-In | EE-SX674(NPN) | | | |

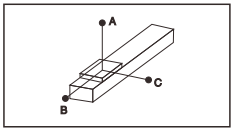
## 感應器接綫圖 <原點及端點> Sensor Layout




*行程超過750時，會產生螺杆偏擺，
此時請將速度調降。
*When the stroke is over 750mm, the ball screw will deflect.
We recommend to low down the working speed under this circumstance.

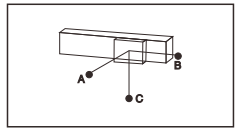
*馬達加減速設定0.2秒。
*Acceleration and deacceleration value is set 0.2 second.

## 容許負載力距表 N.m Allowable Moment of Inertia



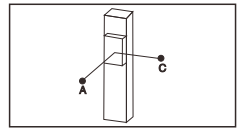

(單位：mm)

| 水平安裝 Horizontal Installation | | A | B | C |
|---|---|---|---|---|
| 導程 5 Lead | 60kg | 2512 | 242 | 232 |
| | 80kg | 1811 | 172 | 164 |
| | 95kg | 1537 | 138 | 133 |
| 導程 10 Lead | 30kg | 2727 | 470 | 430 |
| | 50kg | 1577 | 266 | 242 |
| | 75kg | 1004 | 164 | 150 |
| 導程 16 Lead | 10kg | 2304 | 1222 | 1028 |
| | 20kg | 1443 | 540 | 451 |
| | 44kg | 1005 | 324 | 271 |
| 導程 20 Lead | 10kg | 1555 | 840 | 623 |
| | 20kg | 1033 | 545 | 405 |
| | 35kg | – | – | – |




(單位：mm)

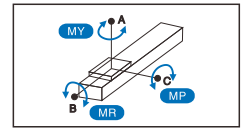
| 墻面安裝 Wall Installation | | A | B | C |
|---|---|---|---|---|
| 導程 5 Lead | 55kg | 257 | 269 | 2883 |
| | 75kg | 178 | 186 | 2000 |
| | 95kg | 133 | 138 | 1537 |
| 導程 10 Lead | 35kg | 363 | 395 | 2368 |
| | 55kg | 218 | 238 | 1445 |
| | 75kg | 150 | 164 | 1004 |
| 導程 16 Lead | 12kg | 854 | 1019 | 2552 |
| | 20kg | 500 | 596 | 1588 |
| | 35kg | 271 | 324 | 1005 |
| 導程 20 Lead | 8kg | 787 | 1060 | 1980 |
| | 15kg | 405 | 545 | 1033 |
| | – | – | – | – |




(單位：mm)

| 垂直安裝 Vertical Installation | | A | C |
|---|---|---|---|
| 導程 5 Lead | 15kg | 1118 | 1118 |
| | 22kg | 770 | 770 |
| | 27kg | 626 | 626 |
| 導程 10 Lead | 10kg | 1500 | 1500 |
| | 14kg | 1072 | 1072 |
| | 18kg | 833 | 833 |
| 導程 16 Lead | 4kg | 2980 | 2980 |
| | 7kg | 1700 | 1700 |
| | – | – | – |

## 靜態容許負載慣量 N.m
Static Loading Moment of Inertia




水平使用時 (單位：N.m)
Static Loading Moment

| | |
|---|---|
| MY | 551(N.m) |
| MP | 552(N.m) |
| MR | 485(N.m) |

*力矩表所表示的數據，代表重心。
*The torque value in the chart indicate the center of gravity.

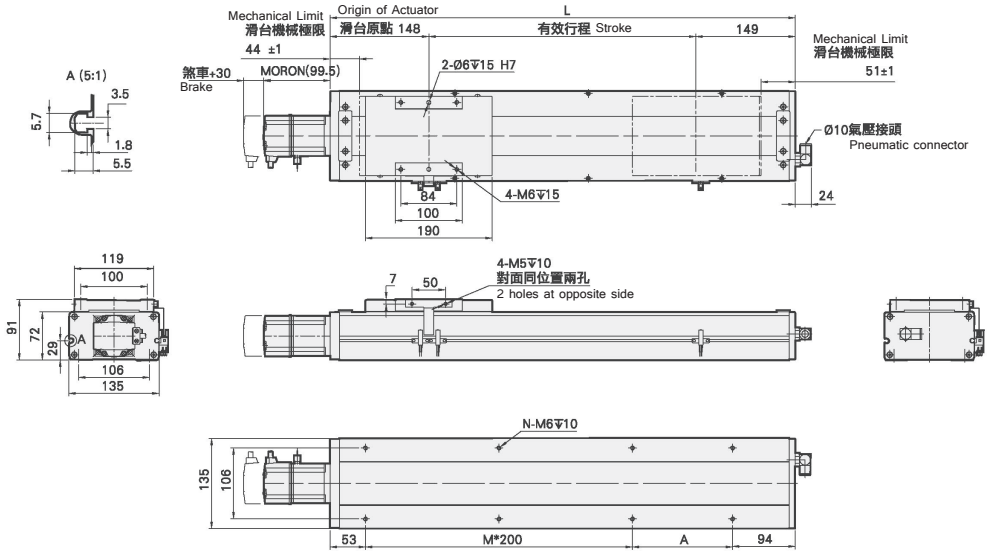
*符合型錄規範的正常使用下，保證壽命爲
10000公里。
*The lifespan is 10000km when the products are operating under specified conditions.

*倒吊使用無法套用標準規範，如有需求請洽詢
我司業務。
*The data is not for ceiling inverse mounting. Contact us for more details if you apply ceiling inverse mounting.

## 搭配伺服馬達一覽表 Suitable Motor Brand

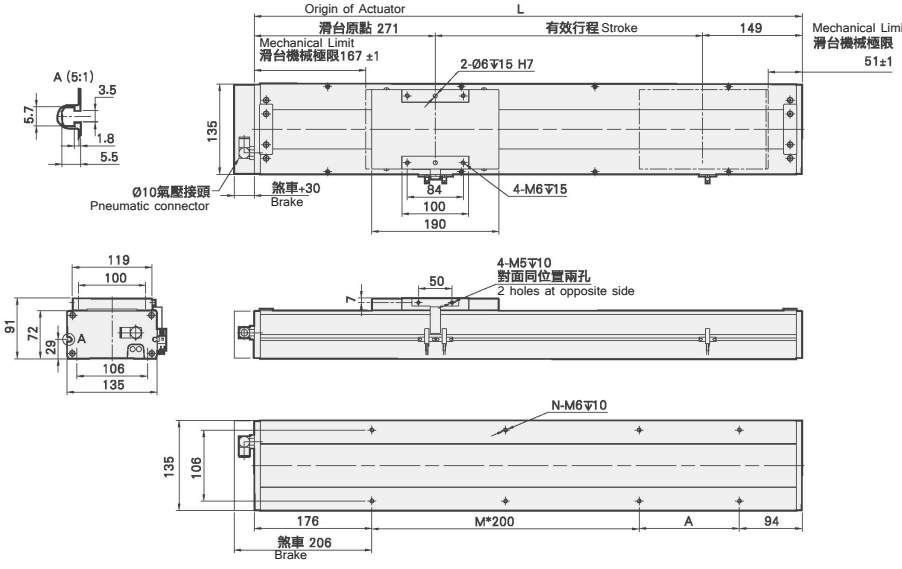
| 廠牌 Brand | 馬達記號 Mark | 煞車有無 Brake | 馬達容量 Watt | 電源電壓 (AC-Voltage) | 伺服馬達型號 Motor Model | 驅動器型號 Driver Model |
|---|---|---|---|---|---|---|
| 三菱 Mitsubishi | M | 無煞車(水平仕樣) No Brake (Horizontal Type) | 200 | 220 | HG-KR23 | MR-J4-20A |
| | | 有煞車(垂直仕樣) With Brake (Vertical Type) | 200 | 220 | HG-KR23B | MR-J4-20A |
| 松下 Panasonic | P | 無煞車(水平仕樣) No Brake (Horizontal Type) | 200 | 220 | MHMD022G1U | MADHT1507 |
| | | 有煞車(垂直仕樣) With Brake (Vertical Type) | 200 | 220 | MHMD022G1V | MADHT1507 |
| 台達 Delta | T | 無煞車(水平仕樣) No Brake (Horizontal Type) | 200 | 220 | ECMA-C20602ES | ASD-B20221-B |
| | | 有煞車(垂直仕樣) With Brake (Vertical Type) | 200 | 220 | ECMA-C20602FS | ASD-B20221-B |

## BC 馬達外露
Motor Exposed



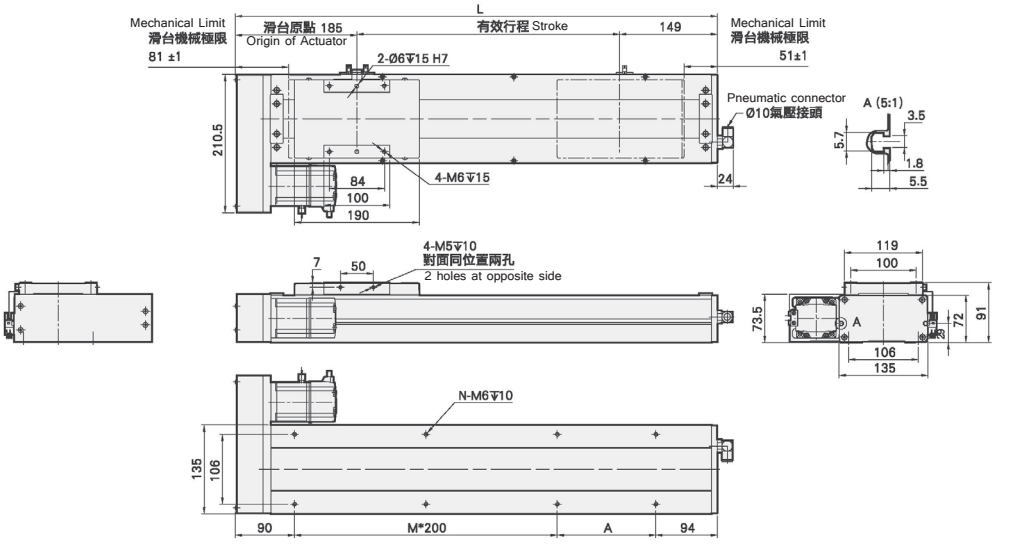

| 有效行程 stroke | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | 397 | 447 | 497 | 547 | 597 | 647 | 697 | 747 | 797 | 847 | 897 | 947 | 997 | 1047 | 1097 | 1147 | 1197 | 1247 | 1297 | 1347 |
| A | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 |
| M | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 |
| N | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 | 14 | 14 | 14 | 14 |
| KG | 10.6 | 11 | 11.5 | 12 | 12.5 | 13 | 13.4 | 14 | 14.4 | 15 | 15.4 | 15.9 | 16.4 | 16.9 | 17.4 | 17.9 | 18.4 | 18.9 | 19.3 | 19.9 |

## M 馬達直結
Motor built-in



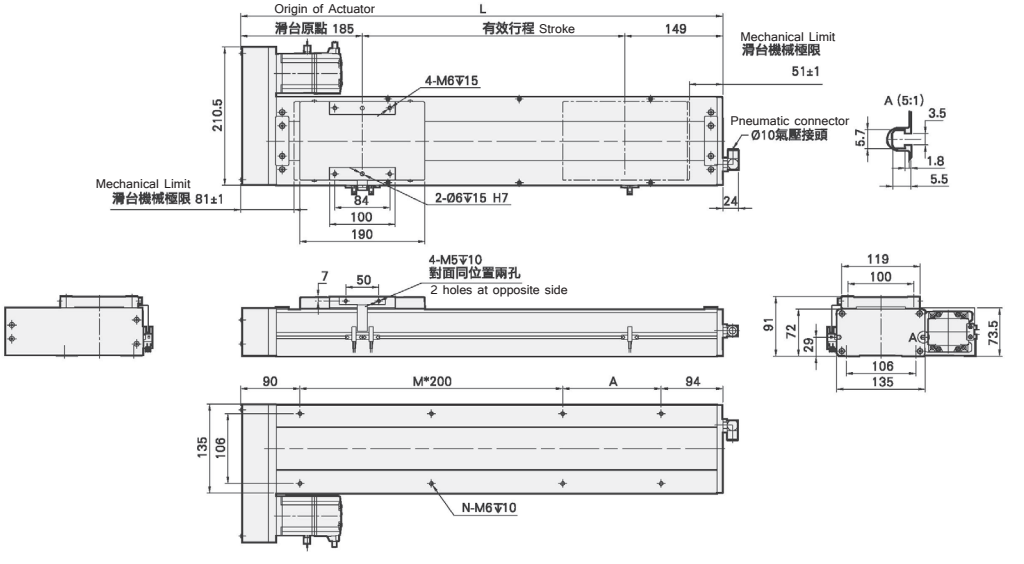

| 有效行程 stroke | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | 520 | 570 | 620 | 670 | 720 | 770 | 820 | 870 | 920 | 970 | 1020 | 1070 | 1120 | 1170 | 1220 | 1270 | 1320 | 1370 | 1420 | 1470 |
| A | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 |
| M | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 |
| N | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 | 14 | 14 | 14 | 14 |
| KG | 10.6 | 11 | 11.5 | 12 | 12.5 | 13 | 13.4 | 14 | 14.4 | 15 | 15.4 | 15.9 | 16.4 | 16.9 | 17.4 | 17.9 | 18.4 | 18.9 | 19.3 | 19.9 |

## BL 馬達左折
Motor On Left Side



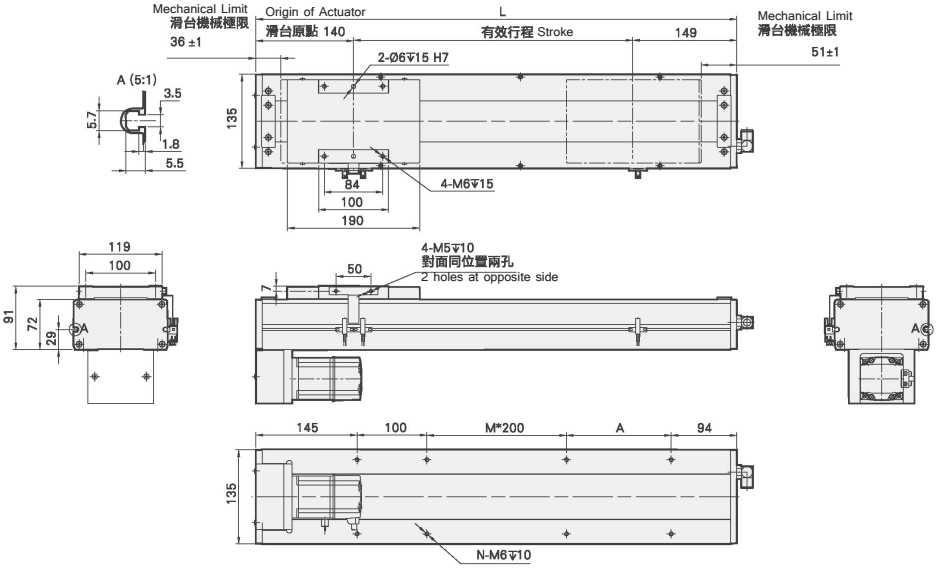

| 有效行程 stroke | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | 434 | 484 | 534 | 584 | 634 | 684 | 734 | 784 | 834 | 884 | 934 | 984 | 1034 | 1084 | 1134 | 1184 | 1234 | 1284 | 1334 | 1384 |
| A | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 |
| M | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 |
| N | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 | 14 | 14 | 14 | 14 |
| KG | 10.6 | 11 | 11.5 | 12 | 12.5 | 13 | 13.4 | 14 | 14.4 | 15 | 15.4 | 15.9 | 16.4 | 16.9 | 17.4 | 17.9 | 18.4 | 18.9 | 19.3 | 19.9 |

## BR 馬達右折
Motor On Right Side




| 有效行程 stroke | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | 434 | 484 | 534 | 584 | 634 | 684 | 734 | 784 | 834 | 884 | 934 | 984 | 1034 | 1084 | 1134 | 1184 | 1234 | 1284 | 1334 | 1384 |
| A | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 |
| M | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 |
| N | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 | 14 | 14 | 14 | 14 |
| KG | 10.6 | 11 | 11.5 | 12 | 12.5 | 13 | 13.4 | 14 | 14.4 | 15 | 15.4 | 15.9 | 16.4 | 16.9 | 17.4 | 17.9 | 18.4 | 18.9 | 19.3 | 19.9 |

# 馬達下折
Motor On Lower Side




| 有效行程 stroke | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 | 900 | 950 | 1000 | 1050 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L | 389 | 439 | 489 | 539 | 589 | 639 | 689 | 739 | 789 | 839 | 889 | 939 | 989 | 1039 | 1089 | 1139 | 1189 | 1239 | 1289 | 1339 |
| A | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 200 | 50 | 100 | 150 | 20 |
| M | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 |
| N | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 10 | 10 | 10 | 10 | 12 | 12 | 12 | 12 | 14 | 14 | 14 | 14 |
| KG | 10.6 | 11 | 11.5 | 12 | 12.5 | 13 | 13.4 | 14 | 14.4 | 15 | 15.4 | 15.9 | 16.4 | 16.9 | 17.4 | 17.9 | 18.4 | 18.9 | 19.3 | 19.9 |