


CGTY


軌道內嵌式電動滑台

Integrated Linear Bearings Servo Cylinder-Rod Type

Contents

| | | |
|--------------|---|--|
| 小型 | SMALL | |
| CGTY4 |  | 本體寬幅 44mm Width 最大行程 500mm 151 Max. stroke 連續可搬重量 25kg Continuous payload |

| | | |
|--------------|--|--|
| 小型 | SMALL | |
| CGTY5 |  | 本體寬幅 54mm Width 最大行程 600mm 157 Max. stroke 連續可搬重量 30kg Continuous payload |

| | | |
|--------------|---|--|
| 小型 | SMALL | |
| CGTY8 |  | 本體寬幅 82mm Width 最大行程 800mm 163 Max. stroke 連續可搬重量 30kg Continuous payload |

規格索引

Spec Index

CGTY 軌道內嵌式小型電動缸 - 推桿式 CGTY Integrated Linear Bearings Servo Cylinder-Rod Type

| 使用環境 Environment | 傳動方式 Driven Mode | 仕樣 Specification | 馬達尺寸 Motor dimension (mm) | 本體寬幅 Width(mm) | 位置重複精度 Repeatability(mm) | 螺桿規格 (C7 級) Ball Screw Spec(Accuracy C7) | | 最大可搬重量 Maximum Payload(kg) | | 最高速度 ^{*1} Maximum Speed (mm/s) |
|---------------------|---------------------|---------------------|------------------------------|-------------------|-----------------------------|---|----------------|-------------------------------|------------------|--|
| | | | | | | 外徑 Outer Diameter(mm) | 導程 Lead(mm) | 水平使用 Horizontal | 垂直使用 Vertical | |
| 一般環境 Standard | 滾珠螺桿 Ball screw | CGTY4 | 35□ | 44 | ±0.01 | 10 | 2 | 25 | 8 | 100 |
| | | | | | | | 6 | 20 | 8 | 300 |
| | | | | | | | 12 | 12 | 3.5 | 600 |
| | | CGTY5 | 42□ | 54 | ±0.01 | 12 | 2 | 30 | 10 | 100 |
| | | | | | | | 5 | 30 | 10 | 250 |
| | | | | | | | 10 | 15 | 5 | 500 |
| | | | | | | | 20 | 10 | 2.5 | 1000 |
| | | | | | | | 5 | 30 | 10 | 250 |
| | | | | | | | 10 | 15 | 5 | 500 |
| CGTY8 | 42□ | 82 | ±0.01 | 16 | 5 | 30 | 10 | 250 | | |
| | | | | | 10 | 15 | 5 | 500 | | |
| | | | | | 20 | 10 | 2.5 | 1000 | | |

*1: 最高速度的使用條件有限制，請參閱各仕樣內頁的速度 - 荷重曲線圖。

The working condition of max. speed is restricted limited. Please refer to the curve graph of speed and loading in this catalog.

*2: 標準行程內的黑色數字，代表該行程內可使用的最高安全速度。若超過此速度，機械手可能會有嚴重共振產生。

The number written in the column means the highest safe speed within stroke.

If the speed is over the value shown in the chart, the vibration will be caused on the actuator.

※ 此表內的速度為無荷重情況下，螺桿可承受的速度。

The values in this table represent the maximum linear speed under zero-load conditions.

CGTY4



螺桿驅動 Ball Screw Drive



最大行程 500mm
Maximum Stroke

最高速度 600mm/s
Maximum Speed

馬達尺寸 35□mm
Motor Dimension

滾珠螺桿 Ø10mm
Ball Screw

型號表示方式 Ordering Method

CGTY4 - L2 - 100 - M B - TC100 - 03 - N1 - WR - C4 - A001

本體型號 Model

螺桿導程 Ball Screw Lead

| | |
|----|------|
| 2 | 2mm |
| 6 | 6mm |
| 12 | 12mm |

行程 Stroke

| |
|------------------|
| 50-500mm |
| 間隔50 50 mm Pitch |

是否煞車 Brake (Optional)

垂直使用時
追加內藏式煞車器
Built-in brake is added
when vertically used
*若無煞車則不表示。
If No Brake, No Description.

I/O線種類 Kind of I/O Cable

| | |
|---------------------------|------------------------------|
| N1 | 隔離I/O線 Shielded I/O Cable |
| *標配1.5m Standard: 1.5m | |

接頭型式 Connector Type

| | |
|--|--|
| - | 直結型接頭 Straight Connector |
| WR | 90度接頭出線朝右*1 90° Connector outlet (Right Side) |
| WL | 90度接頭出線朝左*1 90° Connector outlet (Left Side) |
| WW | 90度接頭出線朝上*1 90° Connector outlet (Up Side) |
| WM | 90度接頭出線朝下 90° Connector outlet (Down Side) |
| *1 馬達方向BM無法選用WR 馬達方向BL無法選用WL 馬達方向BR無法選用WL 詳見尺寸圖 WR cannot be selected for the motor direction BM WR cannot be selected for the motor direction BL WL cannot be selected for the motor direction BR For details, please refer to the dimension drawing | |

端點極限感應器 Limit Sensor

| | |
|---|--------------------|
| 外掛型 Outside | |
| 3 | 1只 1 Pc |
| 4 | 2只 2 Pcs |
| 無 SENSOR No Sensor | |
| 5 | 無 SENSOR No Sensor |
| *若無SENSOR需求則不表示。 Not indicated if there is no need for a SENSOR. | |

原點感應器 Home Sensor

| | |
|---|--------------------------|
| 外掛型 Outside | |
| C | 馬達側 Motor Side |
| D | 反馬達側 Opposite Motor Side |
| 無 SENSOR No Sensor | |
| E | 無 SENSOR No Sensor |
| *若無SENSOR需求則不表示。 Not indicated if there is no need for a SENSOR. | |

馬達位置 Motor Position

| | |
|----|---------------------------|
| M | 馬達直結 Motor Hidden In |
| BM | 馬達下折 Motor Bottom Side |
| BR | 馬達右折 Motor Right Side |
| BL | 馬達左折 Motor Left Side |

對應控制器 Corresponding Controller

| | |
|--------|-------------------------------------|
| TC100 | 標準版 Standard |
| TC100E | EtherCAT版 With EtherCAT Function |

電纜線長 Cable Length

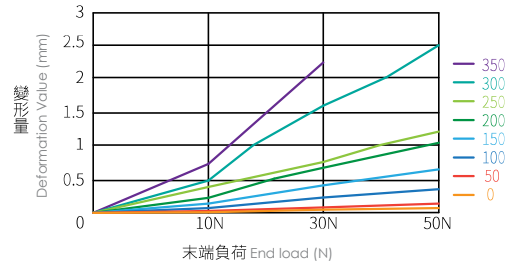
| | |
|-----------------------|-------------------------------|
| 01 | 1m |
| 03 | 3m |
| 05 | 5m |
| 10 | 10m |
| R01 | 1m耐繞曲型 1m Flexible cable |
| R03 | 3m耐繞曲型 3m Flexible cable |
| R05 | 5m耐繞曲型 5m Flexible cable |
| R10 | 10m耐繞曲型 10m Flexible cable |
| *標配3m Standard: 3m | |

基本仕様 Specification

| | | | | | |
|-------------------------------|--------------------------------------|----------------------|--------|--------|-------|
| 規格 Spec | 位置重複精度 Repeatability (mm) | ±0.01 | | | |
| | 螺桿導程 Ball Screw Lead (mm) | 2 | 6 | 12 | |
| | 最高轉速 Maximum rotating speed(rpm) | ≤ 3000 | ≤ 3000 | ≤ 3000 | |
| | 最高速度 Maximum Speed (mm/s) ※1※2 | 水平使用 Horizontal (kg) | ≤ 100 | ≤ 300 | ≤ 600 |
| | | 垂直使用 Vertical (kg) | ≤ 100 | ≤ 300 | ≤ 600 |
| | 最大可搬重量 Maximum Payload※3 | 水平使用 Horizontal (kg) | ≤ 25 | ≤ 20 | ≤ 12 |
| | | 垂直使用 Vertical (kg) | ≤ 8 | ≤ 8 | ≤ 3.5 |
| 定格推力 Rated Thrust (N) | 1094 | 365 | 182 | | |
| 標準行程 Stroke (increments) (mm) | 50-500mm / 50 間隔 (50 increments) | | | | |
| 部品 Parts | 馬達尺寸 Motor Dimension (mm) | 35□ | | | |
| | 滾珠螺桿規格 Ball Screw Spec | C7 Ø10mm | | | |

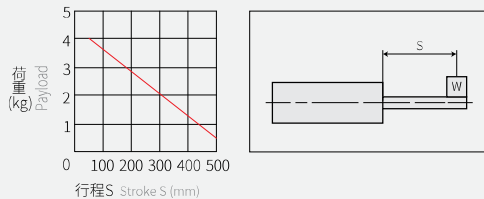
- ※1 此處最高速度為軟體移動速度設定為 100% 時。
The maximum speed shown here is when software speed setting is 100%.
- ※2 長行程時，會產生螺桿偏擺，需將速度調降（線速度請參閱尺寸圖下方表格）
During in a long stroke, it causes ballscrew deflection, the speed must reduce.
(Please refer to the linear velocity from the data sheet below the dimension graph.)
- ※3 此荷重條件外部需搭配輔助滑軌以承受徑向負載。
If payload is near maximum, it requires to collocate externally with auxiliary guideway for bearing radial load.

出力軸變形量 Shaft Output Deformation Value



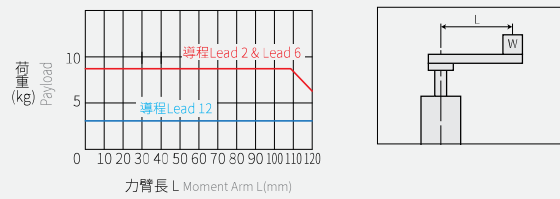
※此圖表為參考值。
This form is only reference values.

水平安裝荷重 Load In Horizontal Installation



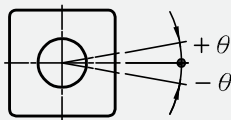
※無外部輔助機構，負載延伸距離0。
No external auxiliary mechanism, extension distance of load = 0.

垂直安裝負載 Load In Vertical Installation



※計算條件:3000rpm/min, 加減速0.3s。
Calculation conditions: 3000 rpm / min, acceleration and deceleration: 0.3s.

出力桿的防止迴轉精度 Anti-rotating Accuracy of Rod



防止迴轉精度 θ
Anti-rotating accuracy
±0°

※內附滾珠滑軌機構，所以推桿軸心不迴轉。
With built-in circular guideway, so the rod shaft of actuator does not r

對應控制器一覽表 Corresponding Controller Chart

| 外觀 Exterior | 控制器型號 Controller Model | 控制介面 Control Mode | 特點 Features | 電氣規格 Electrical Spec | 詳細參閱 Reference Page |
|----------------|--|--|---|---|------------------------|
| | TC100 | Pulse 控制 Pulse Control Mode | Line driver 200k Hz / Open collector 60k Hz 同時只能使用一種。 Support Line driver and Open collector Max.pulse receiving speed 200k/60k Hz. | 控制電路只能使用 24V。 工作電壓 DC24V，額定電流 2A，峰值電流 3A。 | P.297 |
| | | I/O 控制 I/O Control Mode | 利用 I/O 變化，最多可以執行 127 個位置控制。 By I/O control, max. 127 positioning points, can be executed. | 工作電壓 DC48V，額定電流 1A，峰值電流 2A。 | |
| | | 通訊控制 Communication Control Mode | 採 Modbus 的 RS485 通訊或 EtherCAT (最大並接 16 台以上) 及一組 mini USB (TOYO-Single 專用) With Modbus RS-485 or EtherCAT (connect over 16 axes in series) and USB module | 使用 DC48V 時在相同扭力下，轉速會提升，詳細內容請跟服務窗口連絡。 The voltage of control circuit is 24V only. Operating voltage DC24V, rated current 2A, peak current 3A. | |
| 選配 | EtherCAT 透過 EtherCAT 可串接 16 軸以上 With EtherCAT, connect over 16 axes can be in series. | Operating voltage DC48V, rated current 1A, peak current 2A. When the voltage is DC48V but same torque, the rotation speed will be raised.Please contact your service window to details. | | | |

CGTY4



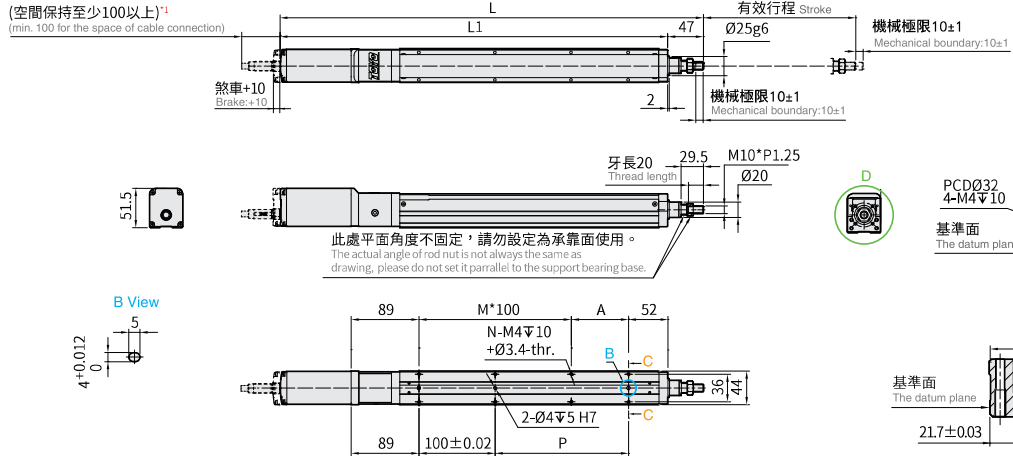
螺桿驅動 Ball Screw Drive

M 馬達直結 Motor Hidden In



• CAD圖面可至www.toyorobot.com下載 •
Please do wnload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



*1 線材最小彎曲半徑不可小於60
The minimum bending radius of the wire should not be less than 60mm.

| 有效行程 Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |
|--------------------------------|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 極限行程 Limit Stroke (±1) | 70 | 120 | 170 | 220 | 270 | 320 | 370 | 420 | 470 | 520 |
| L | 406.5 | 456.5 | 506.5 | 556.5 | 606.5 | 656.5 | 706.5 | 756.5 | 806.5 | 856.5 |
| L1 | 359.5 | 409.5 | 459.5 | 509.5 | 559.5 | 609.5 | 659.5 | 709.5 | 759.5 | 809.5 |
| A | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 |
| M | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 |
| N | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 |
| P | 25 | 75 | 125 | 175 | 225 | 275 | 325 | 375 | 425 | 475 |
| *1 Weight (kg) | 1.33 | 1.58 | 1.83 | 2.08 | 2.32 | 2.57 | 2.82 | 3.07 | 3.31 | 3.56 |
| 線速度 Linear Speed mm/s | 導程 Lead 2 | ≤ 100 | | | | | | | | |
| | 導程 Lead 6 | ≤ 300 | | | | | | | | |
| | 導程 Lead 12 | ≤ 600 | | | | | | | | |

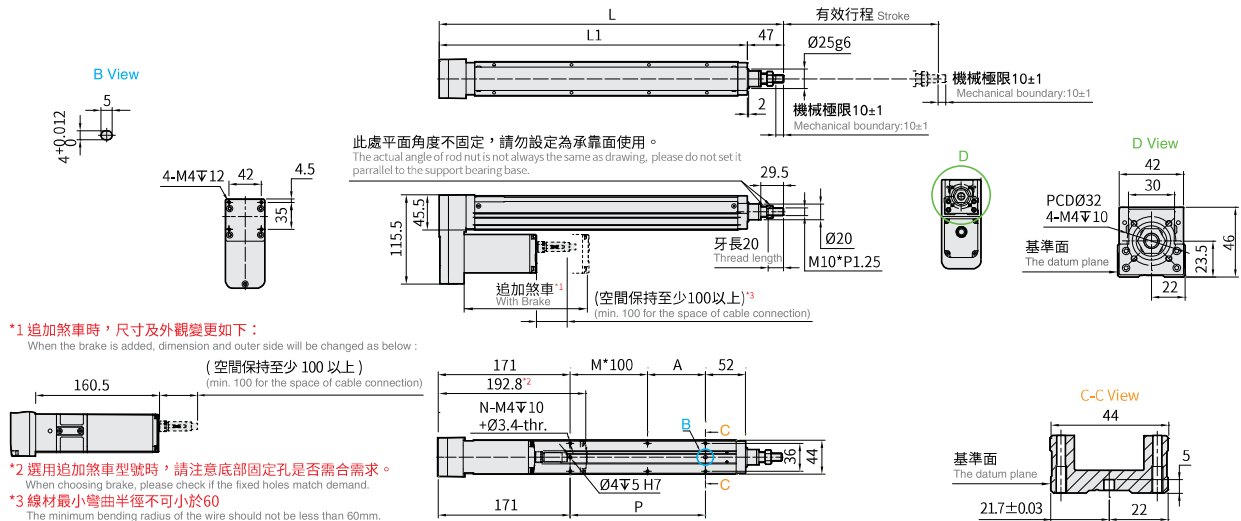
*1 重量包含本體與馬達 • Weight of model with motor.

BM 馬達下折 Motor Bottom Side

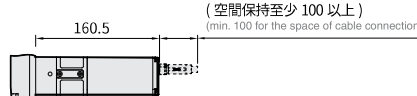


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單位 Unit : mm



*1 追加煞車時，尺寸及外觀變更如下：
When the brake is added, dimension and outer side will be changed as below:



*2 選用追加煞車型號時，請注意底部固定孔是否需求。
When choosing brake, please check if the fixed holes match demand.

*3 線材最小彎曲半徑不可小於60
The minimum bending radius of the wire should not be less than 60mm.

| 有效行程 Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |
|--------------------------------|------------|-------|------|------|------|------|------|------|------|------|
| 極限行程 Limit Stroke (±1) | 70 | 120 | 170 | 220 | 270 | 320 | 370 | 420 | 470 | 520 |
| L | 295 | 345 | 395 | 445 | 495 | 545 | 595 | 645 | 695 | 745 |
| L1 | 248 | 298 | 348 | 398 | 448 | 498 | 548 | 598 | 648 | 698 |
| A | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 |
| M | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 |
| N | 4 | 4 | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 |
| P | 25 | 75 | 125 | 175 | 225 | 275 | 325 | 375 | 425 | 475 |
| *1 Weight (kg) | 1.63 | 1.88 | 2.13 | 2.38 | 2.62 | 2.87 | 3.12 | 3.37 | 3.61 | 3.86 |
| 線速度 Linear Speed mm/s | 導程 Lead 2 | ≤ 100 | | | | | | | | |
| | 導程 Lead 6 | ≤ 300 | | | | | | | | |
| | 導程 Lead 12 | ≤ 600 | | | | | | | | |

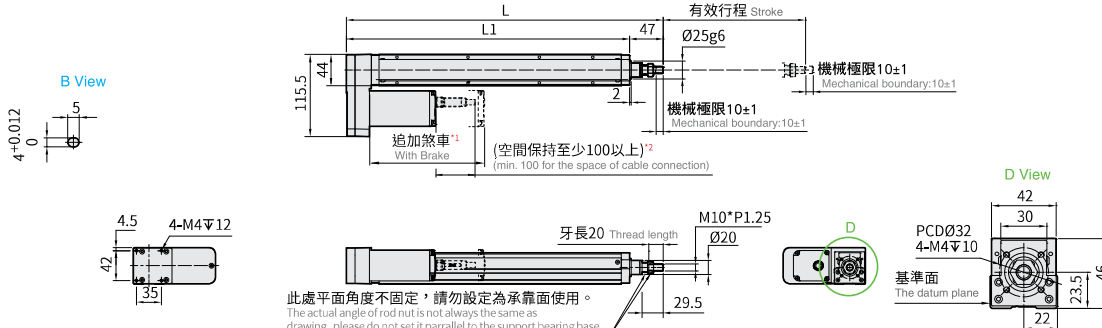
*1 重量包含本體與馬達 • Weight of model with motor.

BL 馬達左折 Motor Left Side



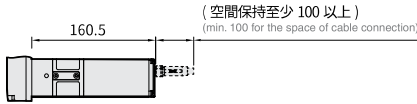
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*1 追加煞車時，尺寸及外觀變更如下：

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The minimum bending radius of the wire should not be less than 60mm.

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| L1 | 248 | 298 | 348 | 398 | 448 | 498 | 548 | 598 | 648 | 698 | |
| A | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 | |
| M | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | |
| N | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | |
| P | 25 | 75 | 125 | 175 | 225 | 275 | 325 | 375 | 425 | 475 | |
| ※1 Weight (kg) | 1.63 | 1.88 | 2.13 | 2.38 | 2.62 | 2.87 | 3.12 | 3.37 | 3.61 | 3.86 | |
| 線速度 Linear Speed mm/s | 導程 Lead 2 | | | | | | | | | | ≤ 100 |
| | 導程 Lead 6 | | | | | | | | | | ≤ 300 |
| | 導程 Lead 12 | | | | | | | | | | ≤ 600 |

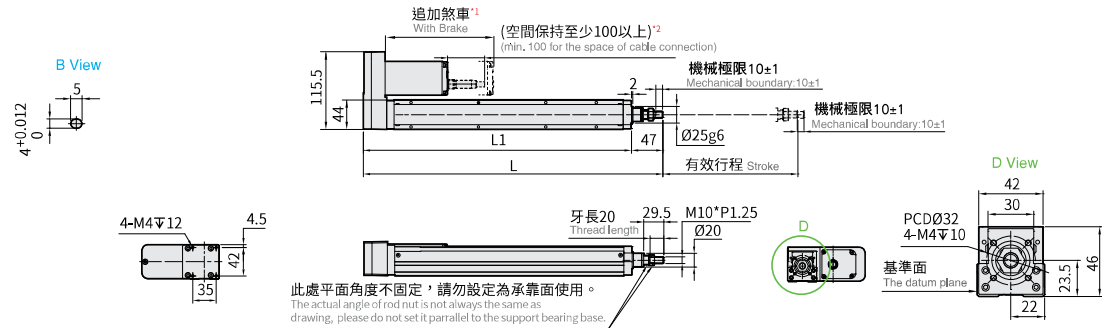
※1 重量包含本體與馬達。Weight of model with motor.

BR 馬達右折 Motor Right Side



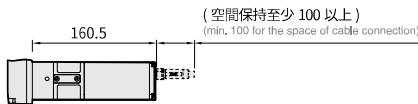
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| M | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | |
| N | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | |
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| ※1 Weight (kg) | 1.63 | 1.88 | 2.13 | 2.38 | 2.62 | 2.87 | 3.12 | 3.37 | 3.61 | 3.86 | |
| 線速度 Linear Speed mm/s | 導程 Lead 2 | | | | | | | | | | ≤ 100 |
| | 導程 Lead 6 | | | | | | | | | | ≤ 300 |
| | 導程 Lead 12 | | | | | | | | | | ≤ 600 |

※1 重量包含本體與馬達。Weight of model with motor.

CGTY4



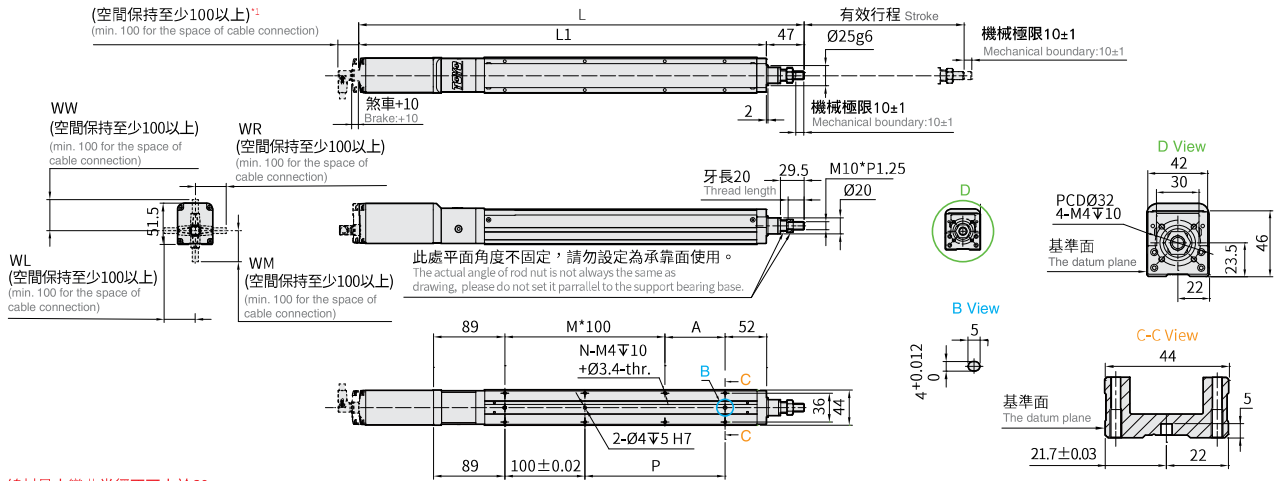
螺桿驅動 Ball Screw Drive

M 馬達直結 Motor Hidden In (90度金屬接頭) 90° Metal Connector



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| 線速度 Linear Speed mm/s | 導程 Lead 2 | ≤ 100 | | | | | | | | |
| | 導程 Lead 6 | ≤ 300 | | | | | | | | |
| | 導程 Lead 12 | ≤ 600 | | | | | | | | |

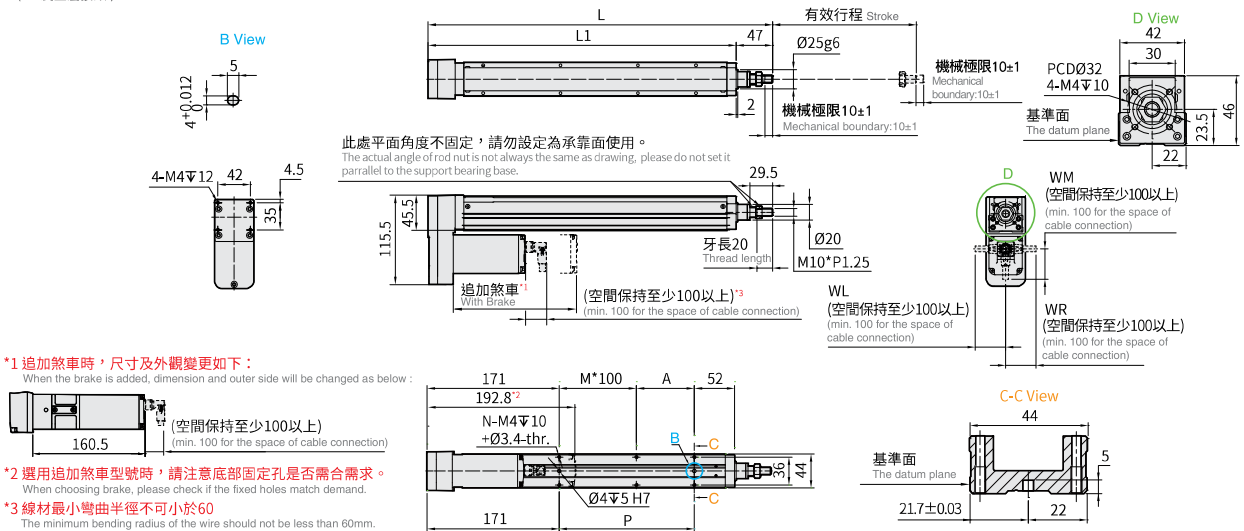
※1 重量包含本體與馬達 • Weight of model with motor.

BM 馬達下折 Motor Bottom Side (90度金屬接頭) 90° Metal Connector



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| L1 | 248 | 298 | 348 | 398 | 448 | 498 | 548 | 598 | 648 | 698 |
| A | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 |
| M | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 |
| N | 4 | 4 | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 |
| P | 25 | 75 | 125 | 175 | 225 | 275 | 325 | 375 | 425 | 475 |
| ※1 Weight (kg) | 1.63 | 1.88 | 2.13 | 2.38 | 2.62 | 2.87 | 3.12 | 3.37 | 3.61 | 3.86 |
| 線速度 Linear Speed mm/s | 導程 Lead 2 | ≤ 100 | | | | | | | | |
| | 導程 Lead 6 | ≤ 300 | | | | | | | | |
| | 導程 Lead 12 | ≤ 600 | | | | | | | | |

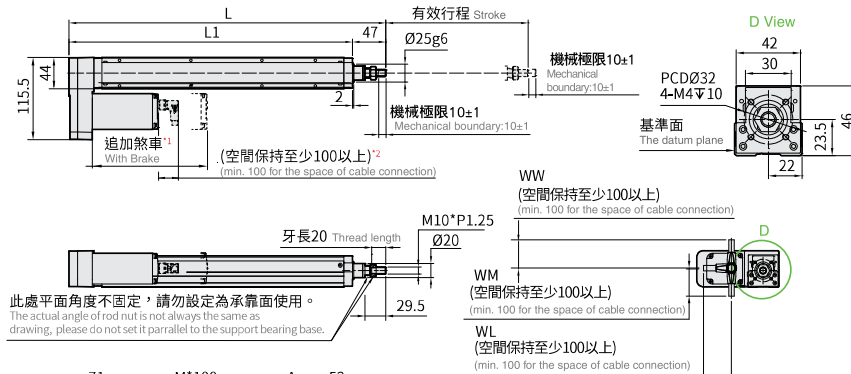
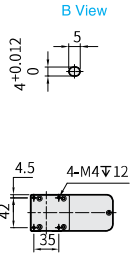
※1 重量包含本體與馬達 • Weight of model with motor.

BL 馬達左折 Motor Left Side
(90度金屬接頭) 90° Metal Connector

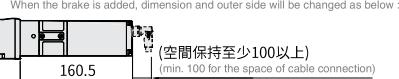


• CAD圖面可至www.toyorobot.com下載 •
Please do wnload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



*1 追加煞車時，尺寸及外觀變更如下：



*2 線材最小彎曲半徑不可小於60

The minimum bending radius of the wire should not be less than 60mm.

| 有效行程 Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | |
|------------------------|------------|------|------|------|------|------|------|------|------|------|-------|
| 極限行程 Limit Stroke (±1) | 70 | 120 | 170 | 220 | 270 | 320 | 370 | 420 | 470 | 520 | |
| L | 295 | 345 | 395 | 445 | 495 | 545 | 595 | 645 | 695 | 745 | |
| L1 | 248 | 298 | 348 | 398 | 448 | 498 | 548 | 598 | 648 | 698 | |
| A | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 | |
| M | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | |
| N | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | |
| P | 25 | 75 | 125 | 175 | 225 | 275 | 325 | 375 | 425 | 475 | |
| ※1 Weight (kg) | 1.63 | 1.88 | 2.13 | 2.38 | 2.62 | 2.87 | 3.12 | 3.37 | 3.61 | 3.86 | |
| 線速度 Linear Speed mm/s | 導程 Lead 2 | | | | | | | | | | ≤ 100 |
| | 導程 Lead 6 | | | | | | | | | | ≤ 300 |
| | 導程 Lead 12 | | | | | | | | | | ≤ 600 |

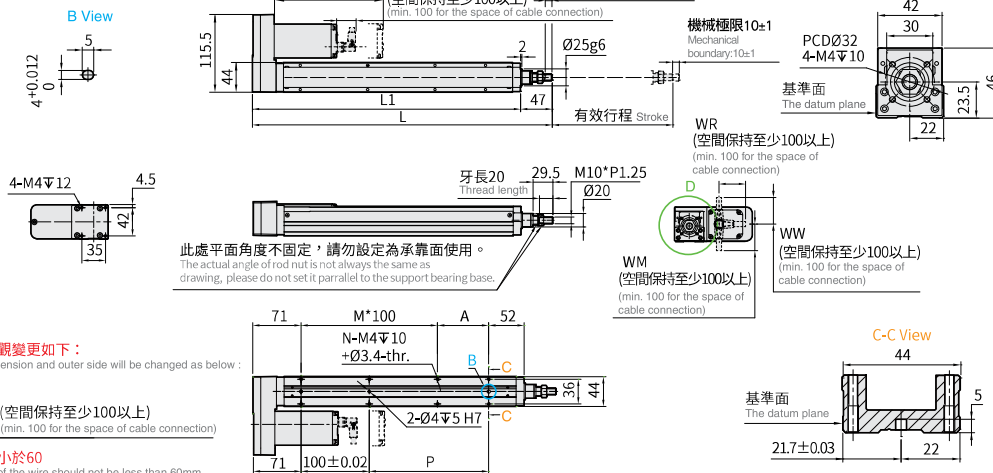
※1 重量包含本體與馬達。Weight of model with motor.

BR 馬達右折 Motor Right Side
(90度金屬接頭) 90° Metal Connector



• CAD圖面可至www.toyorobot.com下載 •
Please do wnload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



*1 追加煞車時，尺寸及外觀變更如下：



*2 線材最小彎曲半徑不可小於60

The minimum bending radius of the wire should not be less than 60mm.

| 有效行程 Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | |
|------------------------|------------|------|------|------|------|------|------|------|------|------|-------|
| 極限行程 Limit Stroke (±1) | 70 | 120 | 170 | 220 | 270 | 320 | 370 | 420 | 470 | 520 | |
| L | 295 | 345 | 395 | 445 | 495 | 545 | 595 | 645 | 695 | 745 | |
| L1 | 248 | 298 | 348 | 398 | 448 | 498 | 548 | 598 | 648 | 698 | |
| A | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 | |
| M | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | |
| N | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | |
| P | 25 | 75 | 125 | 175 | 225 | 275 | 325 | 375 | 425 | 475 | |
| ※1 Weight (kg) | 1.63 | 1.88 | 2.13 | 2.38 | 2.62 | 2.87 | 3.12 | 3.37 | 3.61 | 3.86 | |
| 線速度 Linear Speed mm/s | 導程 Lead 2 | | | | | | | | | | ≤ 100 |
| | 導程 Lead 6 | | | | | | | | | | ≤ 300 |
| | 導程 Lead 12 | | | | | | | | | | ≤ 600 |

※1 重量包含本體與馬達。Weight of model with motor.

CGTY5



螺桿驅動 Ball Screw Drive



最大行程 Maximum Stroke **600mm**

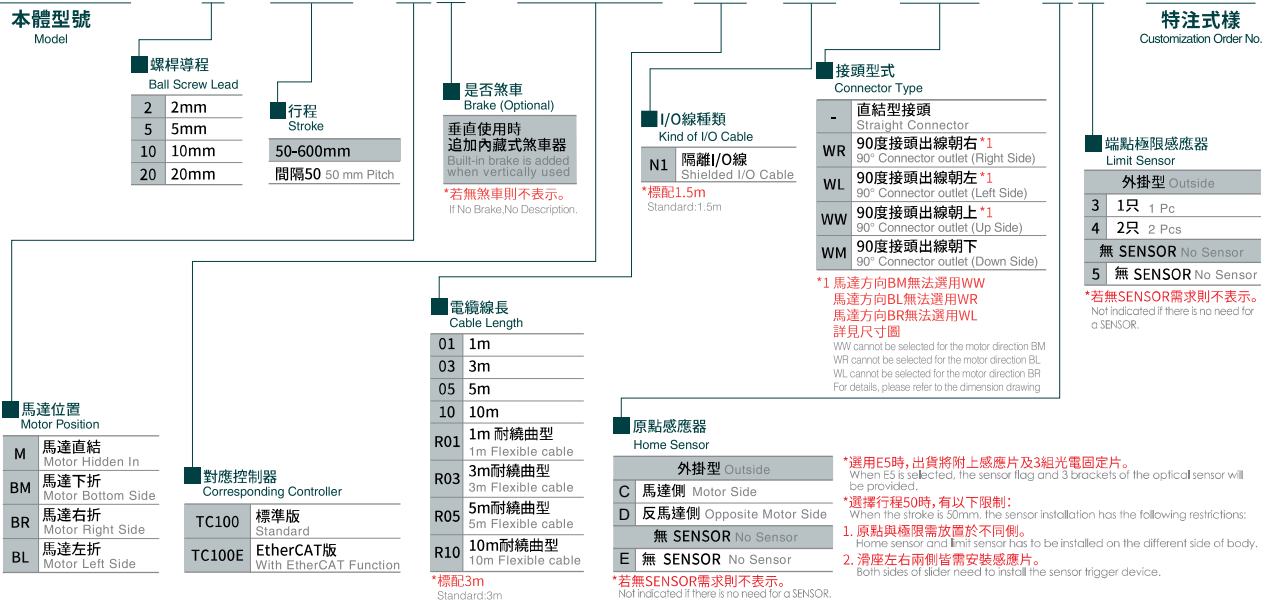
最高速度 Maximum Speed **1000mm/s**

馬達尺寸 Motor Dimension **42□mm**

滾珠螺桿 Ball Screw **Ø12mm**

型號表示方式 Ordering Method

CGTY5 - L5 - 100 - MB - TC100 - 03 - N1 - WR - C4 - A001

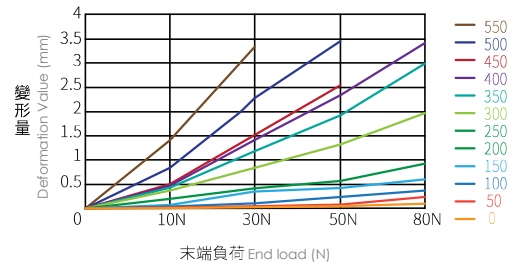


基本仕様 Specification

| | | | | | | |
|-------------------------------|--------------------------------------|----------------------|--------|--------|--------|--------|
| 規格 Spec | 位置重複精度 Repeatability (mm) | ±0.01 | | | | |
| | 螺桿導程 Ball Screw Lead (mm) | 2 | 5 | 10 | 20 | |
| | 最高轉速 Maximum rotating speed(rpm) | ≤ 3000 | ≤ 3000 | ≤ 3000 | ≤ 3000 | |
| | 最高速度 Maximum Speed (mm/s) ※1※2 | 水平使用 Horizontal (kg) | ≤ 100 | ≤ 250 | ≤ 500 | ≤ 1000 |
| | | 垂直使用 Vertical (kg) | ≤ 100 | ≤ 250 | ≤ 500 | ≤ 1000 |
| | 最大可搬重量 Maximum Payload※3 | 水平使用 Horizontal (kg) | ≤ 30 | ≤ 30 | ≤ 15 | ≤ 10 |
| 垂直使用 Vertical (kg) | | ≤ 10 | ≤ 10 | ≤ 5 | ≤ 2.5 | |
| 定額推力 Rated Thrust (N) | 1147 | 459 | 229 | 115 | | |
| 標準行程 Stroke (increments) (mm) | 50-600mm / 50 間隔 (50 increments) | | | | | |
| 部品 Parts | 馬達尺寸 Motor Dimension (mm) | 42□ | | | | |
| | 滾珠螺桿規格 Ball Screw Spec | C7 Ø12mm | | | | |

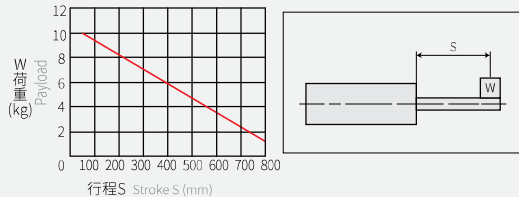
- ※1 此處最高速度為軟體移動速度設定為 100% 時。
The maximum speed shown here is when software speed setting is 100%.
- ※2 長行程時，會產生螺桿偏擺，需將速度調降（線速度請參閱尺寸圖下方表格）
During in a long stroke, it causes ballscrew deflection, the speed must reduce.
(Please refer to the linear velocity from the data sheet below the dimension graph.)
- ※3 此荷重條件外部需搭配輔助滑軌以承受徑向負載。
If payload is near maximum, it requires to collocate externally with auxiliary guideway for bearing radial load.

出力軸變形量 Shaft Output Deformation Value



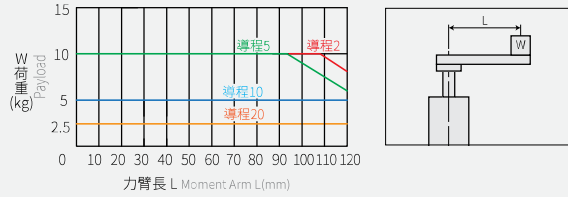
※此圖表為參考值。
This form is only reference values.

水平安裝荷重 Load In Horizontal Installation



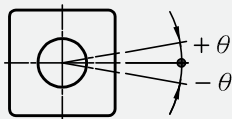
※無外部輔助機構，負載延伸距離0。
No external auxiliary mechanism, extension distance of load = 0.

垂直安裝負載 Load In Vertical Installation



※計算條件:3000rpm/min，加減速0.3s。
Calculation conditions: 3000 rpm / min, acceleration and deceleration: 0.3s.

出力桿的防止迴轉精度 Anti-rotating Accuracy of Rod



防止迴轉精度 θ
Anti-rotating accuracy
±0°

※內附滾珠滑軌機構，所以推桿軸心不迴轉。
With built-in circular guideway, so the rod shaft of actuator does not rotate.

對應控制器一覽表 Corresponding Controller Chart

| 外觀 Exterior | 控制器型號 Controller Model | 控制介面 Control Mode | 特點 Features | 電氣規格 Electrical Spec | 詳細參閱 Reference Page |
|----------------|---------------------------|--|--|---|------------------------|
| | TC100 | Pulse 控制 Pulse Control Mode | Line driver 200k Hz / Open collector 60k Hz 同時只能使用一種。 Support Line driver and Open collector Max.pulse receiving speed 200k/60k Hz. | 控制電路只能使用 24V。 工作電壓 DC24V，額定電流 2A，峰值電流 3A。 | P.297 |
| | | I/O 控制 I/O Control Mode | 利用 I/O 變化，最多可以執行 127 個位置控制。 By I/O control, max. 127 positioning points, can be executed. | 工作電壓 DC48V，額定電流 1A，峰值電流 2A。 | |
| | | 通訊控制 Communication Control Mode | 採 Modbus 的 RS485 通訊或 EtherCAT (最大並接 16 台以上) 及一組 mini USB (TOYO-Single 專用) With Modbus RS-485 or EtherCAT (connect over 16 axes in series) and USB module | 使用 DC48V 時在相同扭力下，轉速會提升，詳細內容請跟服務窗口連絡。 The voltage of control circuit is 24V only. Operating voltage DC24V, rated current 2A, peak current 3A. | |
| | | 選配 EtherCAT 透過 EtherCAT 可串接 16 軸以上 With EtherCAT, connect over 16 axes can be in series. | Operating voltage DC48V, rated current 1A, peak current 2A. When the voltage is DC48V but same torque, the rotation speed will be raised.Please contact your service window to details. | | |

CGTY5



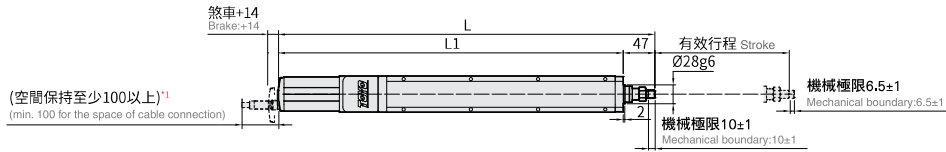
螺桿驅動 Ball Screw Drive

M 馬達直結 Motor Hidden In

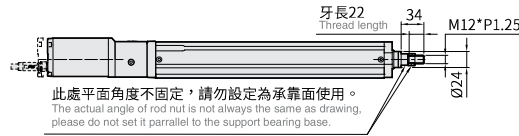
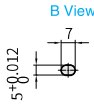


CAD圖面可至www.toyorobot.com下載
Please do wnload the CAD file from TOYO's website : www.toyorobot.com

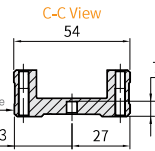
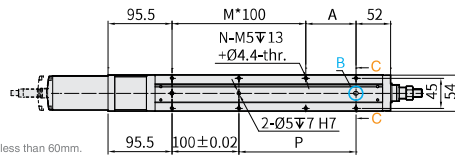
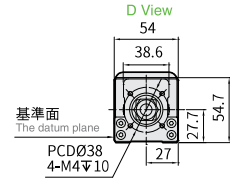
單位 Unit : mm



(空間保持至少100以上)^{*1}
(min. 100 for the space of cable connection)



此處平面角度不固定，請勿設定為承靠面使用。
The actual angle of rod nut is not always the same as drawing, please do not set it parallel to the support bearing base.



^{*1} 線材最小彎曲半徑不可小於60

The minimum bending radius of the wire should not be less than 60mm.

| 有效行程 Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 |
|--------------------------------|------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 極限行程 Limit Stroke (±1) | 66.5 | 116.5 | 166.5 | 216.5 | 266.5 | 316.5 | 366.5 | 416.5 | 466.5 | 516.5 | 566.5 | 616.5 |
| L | 411 | 461 | 511 | 561 | 611 | 661 | 711 | 761 | 811 | 861 | 911 | 961 |
| L1 | 364 | 414 | 464 | 514 | 564 | 614 | 664 | 714 | 764 | 814 | 864 | 914 |
| A | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 |
| M | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 |
| N | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | 16 | 16 |
| P | 25 | 75 | 125 | 175 | 225 | 275 | 325 | 375 | 425 | 475 | 525 | 575 |
| ※1 Weight (kg) | 1.91 | 2.12 | 2.34 | 2.56 | 2.77 | 2.99 | 3.21 | 3.42 | 3.64 | 3.86 | 4.07 | 4.29 |
| 線速度 Linear Speed mm/s | 導程 Lead 2 | ≤ 100 | | | | | | | | | | |
| | 導程 Lead 5 | ≤ 250 | | | | | | | | | | |
| | 導程 Lead 10 | ≤ 500 | | | | | | | | | | |
| | 導程 Lead 20 | ≤ 1000 | | | | | | | | | | |

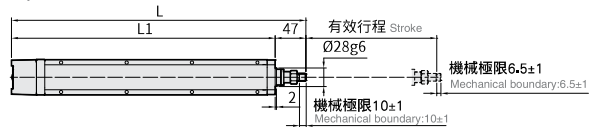
※1 重量包含本體與馬達。 Weight of model with motor.

BM 馬達下折 Motor Bottom Side

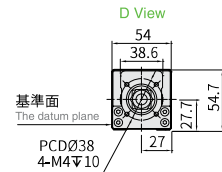
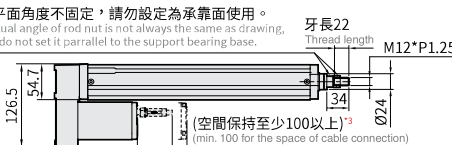
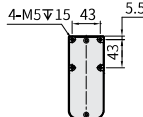
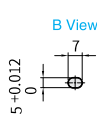


CAD圖面可至www.toyorobot.com下載
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單位 Unit : mm



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The actual angle of rod nut is not always the same as drawing, please do not set it parallel to the support bearing base.



^{*1} 追加煞車時，尺寸及外觀變更如下：

When the brake is added, dimension and outer side will be changed as below :

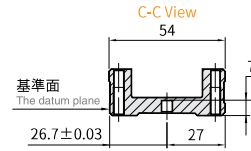
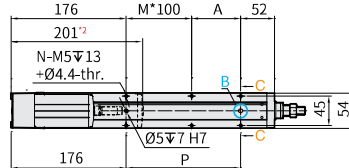


^{*2} 選用追加煞車型號時，請注意底部固定孔是否需求。

When choosing brake, please check if the fixed holes match demand.

^{*3} 線材最小彎曲半徑不可小於60

The minimum bending radius of the wire should not be less than 60mm.



| 有效行程 Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 |
|--------------------------------|------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 極限行程 Limit Stroke (±1) | 66.5 | 116.5 | 166.5 | 216.5 | 266.5 | 316.5 | 366.5 | 416.5 | 466.5 | 516.5 | 566.5 | 616.5 |
| L | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 |
| L1 | 253 | 303 | 353 | 403 | 453 | 503 | 553 | 603 | 653 | 703 | 753 | 803 |
| A | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 |
| M | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 |
| N | 4 | 4 | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 |
| P | 25 | 75 | 125 | 175 | 225 | 275 | 325 | 375 | 425 | 475 | 525 | 575 |
| ※1 Weight (kg) | 2.3 | 2.49 | 2.69 | 2.89 | 3.08 | 3.28 | 3.48 | 3.67 | 3.87 | 4.07 | 4.26 | 4.46 |
| 線速度 Linear Speed mm/s | 導程 Lead 2 | ≤ 100 | | | | | | | | | | |
| | 導程 Lead 5 | ≤ 250 | | | | | | | | | | |
| | 導程 Lead 10 | ≤ 500 | | | | | | | | | | |
| | 導程 Lead 20 | ≤ 1000 | | | | | | | | | | |

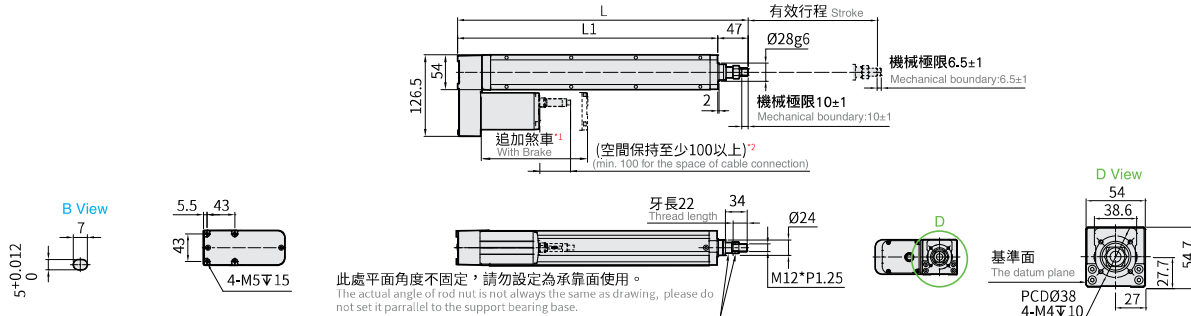
※1 重量包含本體與馬達。 Weight of model with motor.

BL 馬達左折 Motor Left Side



CAD圖面可至www.toyorobot.com下載
Please do wnload the CAD file from TOYO's website : www.toyorobot.com

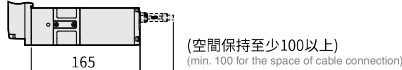
單位 Unit : mm



此處平面角度不固定，請勿設定為承靠面使用。
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When the brake is added, dimension and outer side will be changed as below :



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The minimum bending radius of the wire should not be less than 60mm.

| 有效行程 Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 |
|------------------------|------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 極限行程 Limit Stroke (±1) | 66.5 | 116.5 | 166.5 | 216.5 | 266.5 | 316.5 | 366.5 | 416.5 | 466.5 | 516.5 | 566.5 | 616.5 |
| L | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 |
| L1 | 253 | 303 | 353 | 403 | 453 | 503 | 553 | 603 | 653 | 703 | 753 | 803 |
| A | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 |
| M | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 |
| N | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | 16 | 16 |
| P | 25 | 75 | 125 | 175 | 225 | 275 | 325 | 375 | 425 | 475 | 525 | 575 |
| *1 Weight (kg) | 2.3 | 2.49 | 2.69 | 2.89 | 3.08 | 3.28 | 3.48 | 3.67 | 3.87 | 4.07 | 4.26 | 4.46 |
| 線速度 Linear Speed mm/s | 導程 Lead 2 | ≤ 100 | | | | | | | | | | |
| | 導程 Lead 5 | ≤ 250 | | | | | | | | | | |
| | 導程 Lead 10 | ≤ 500 | | | | | | | | | | |
| | 導程 Lead 20 | ≤ 1000 | | | | | | | | | | |

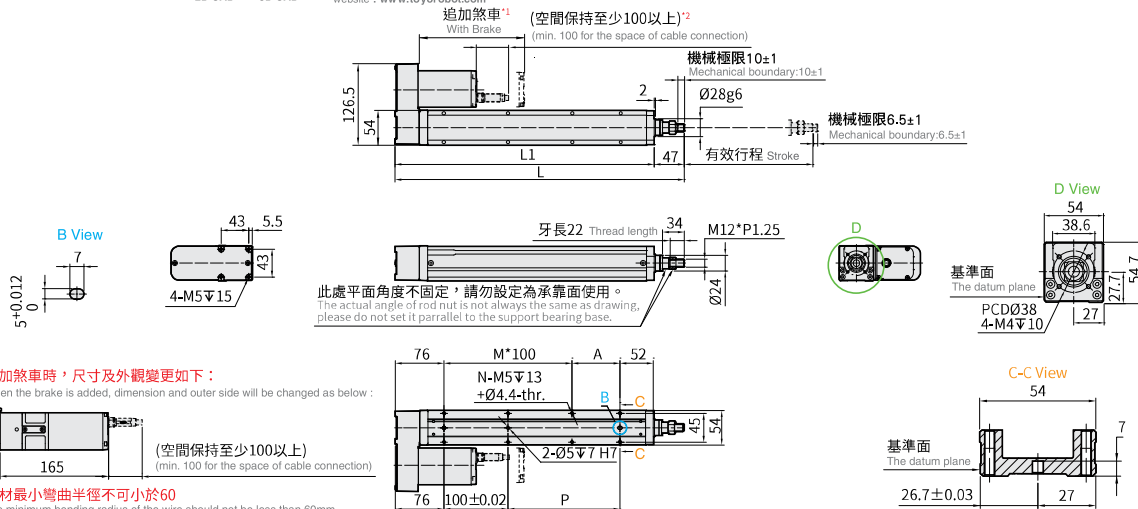
*1 重量包含本體與馬達。 Weight of model with motor.

BR 馬達右折 Motor Right Side



CAD圖面可至www.toyorobot.com下載
Please do wnload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



此處平面角度不固定，請勿設定為承靠面使用。
The actual angle of rod nut is not always the same as drawing, please do not set it parallel to the support bearing base.

*1 追加煞車時，尺寸及外觀變更如下：

When the brake is added, dimension and outer side will be changed as below :



*2 線材最小彎曲半徑不可小於60

The minimum bending radius of the wire should not be less than 60mm.

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|------------------------|------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 極限行程 Limit Stroke (±1) | 66.5 | 116.5 | 166.5 | 216.5 | 266.5 | 316.5 | 366.5 | 416.5 | 466.5 | 516.5 | 566.5 | 616.5 |
| L | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 |
| L1 | 253 | 303 | 353 | 403 | 453 | 503 | 553 | 603 | 653 | 703 | 753 | 803 |
| A | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 |
| M | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 |
| N | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | 16 | 16 |
| P | 25 | 75 | 125 | 175 | 225 | 275 | 325 | 375 | 425 | 475 | 525 | 575 |
| *1 Weight (kg) | 2.3 | 2.49 | 2.69 | 2.89 | 3.08 | 3.28 | 3.48 | 3.67 | 3.87 | 4.07 | 4.26 | 4.46 |
| 線速度 Linear Speed mm/s | 導程 Lead 2 | ≤ 100 | | | | | | | | | | |
| | 導程 Lead 5 | ≤ 250 | | | | | | | | | | |
| | 導程 Lead 10 | ≤ 500 | | | | | | | | | | |
| | 導程 Lead 20 | ≤ 1000 | | | | | | | | | | |

*1 重量包含本體與馬達。 Weight of model with motor.

CGTY5



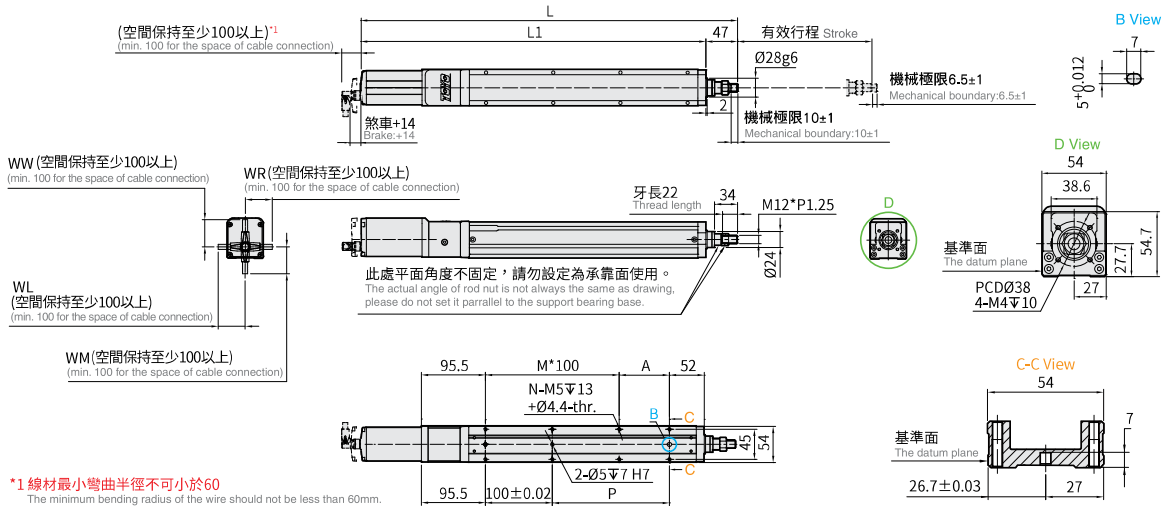
螺桿驅動 Ball Screw Drive

M 馬達直結 Motor Hidden In (90度金屬接頭) 90° Metal Connector



• CAD圖面可至www.toyorobot.com下載 •
Please do wnload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



| 有效行程 Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 |
|------------------------|------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 極限行程 Limit Stroke (±1) | 66.5 | 116.5 | 166.5 | 216.5 | 266.5 | 316.5 | 366.5 | 416.5 | 466.5 | 516.5 | 566.5 | 616.5 |
| L | 411 | 461 | 511 | 561 | 611 | 661 | 711 | 761 | 811 | 861 | 911 | 961 |
| L1 | 364 | 414 | 464 | 514 | 564 | 614 | 664 | 714 | 764 | 814 | 864 | 914 |
| A | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 |
| M | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 |
| N | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | 16 | 16 |
| P | 25 | 75 | 125 | 175 | 225 | 275 | 325 | 375 | 425 | 475 | 525 | 575 |
| ※1 Weight (kg) | 1.91 | 2.12 | 2.34 | 2.56 | 2.77 | 2.99 | 3.21 | 3.42 | 3.64 | 3.86 | 4.07 | 4.29 |
| 線速度 Linear Speed mm/s | 導程 Lead 2 | ≤ 100 | | | | | | | | | | |
| | 導程 Lead 5 | ≤ 250 | | | | | | | | | | |
| | 導程 Lead 10 | ≤ 500 | | | | | | | | | | |
| | 導程 Lead 20 | ≤ 1000 | | | | | | | | | | |

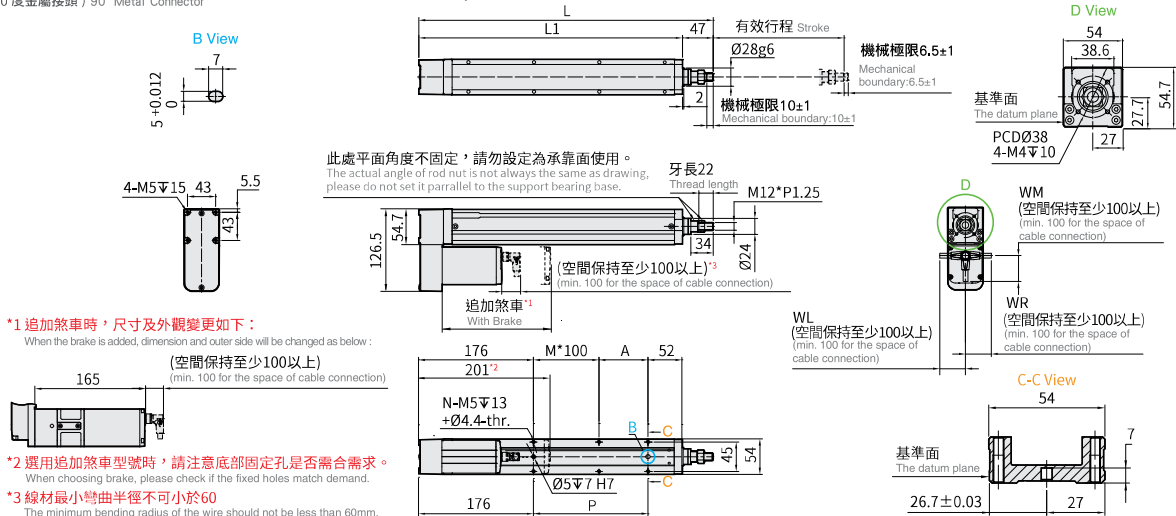
※1 重量包含本體與馬達。 Weight of model with motor.

BM 馬達下折 Motor Bottom Side (90度金屬接頭) 90° Metal Connector



• CAD圖面可至www.toyorobot.com下載 •
Please do wnload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



| 有效行程 Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 |
|------------------------|------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 極限行程 Limit Stroke (±1) | 66.5 | 116.5 | 166.5 | 216.5 | 266.5 | 316.5 | 366.5 | 416.5 | 466.5 | 516.5 | 566.5 | 616.5 |
| L | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 |
| L1 | 253 | 303 | 353 | 403 | 453 | 503 | 553 | 603 | 653 | 703 | 753 | 803 |
| A | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 |
| M | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 |
| N | 4 | 4 | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 |
| P | 25 | 75 | 125 | 175 | 225 | 275 | 325 | 375 | 425 | 475 | 525 | 575 |
| ※1 Weight (kg) | 2.3 | 2.49 | 2.69 | 2.89 | 3.08 | 3.28 | 3.48 | 3.67 | 3.87 | 4.07 | 4.26 | 4.46 |
| 線速度 Linear Speed mm/s | 導程 Lead 2 | ≤ 100 | | | | | | | | | | |
| | 導程 Lead 5 | ≤ 250 | | | | | | | | | | |
| | 導程 Lead 10 | ≤ 500 | | | | | | | | | | |
| | 導程 Lead 20 | ≤ 1000 | | | | | | | | | | |

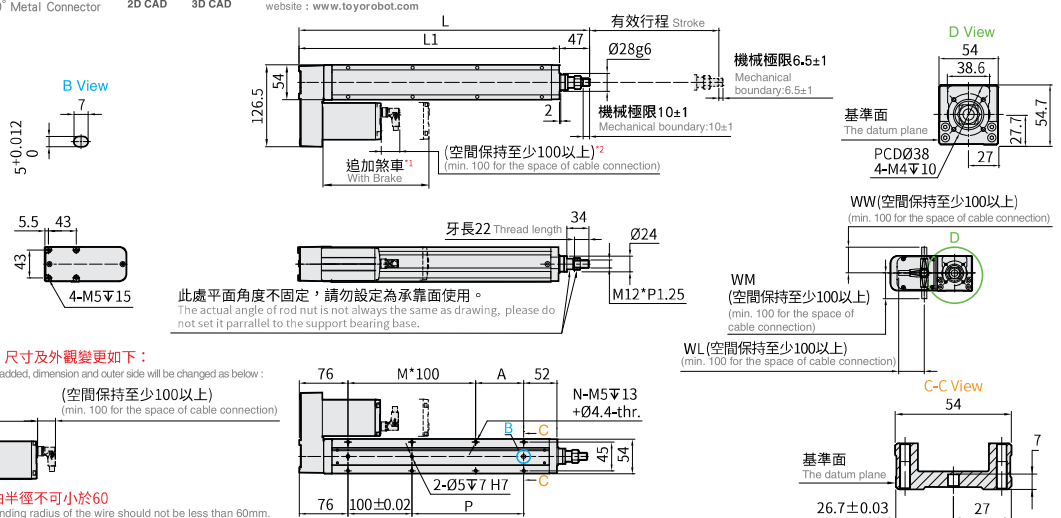
※1 重量包含本體與馬達。 Weight of model with motor.

BL 馬達左折 Motor Left Side
(90度金屬接頭) 90° Metal Connector



CAD圖面可至www.toyorobot.com下載
Please do wload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



*1 追加煞車時，尺寸及外觀變更如下：
When the brake is added, dimension and outer side will be changed as below :



*2 線材最小彎曲半徑不可小於60
The minimum bending radius of the wire should not be less than 60mm.

| 有效行程 Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 |
|--------------------------------|------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 極限行程 Limit Stroke (±1) | 66.5 | 116.5 | 166.5 | 216.5 | 266.5 | 316.5 | 366.5 | 416.5 | 466.5 | 516.5 | 566.5 | 616.5 |
| L | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 |
| L1 | 253 | 303 | 353 | 403 | 453 | 503 | 553 | 603 | 653 | 703 | 753 | 803 |
| A | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 |
| M | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 |
| N | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | 16 | 16 |
| P | 25 | 75 | 125 | 175 | 225 | 275 | 325 | 375 | 425 | 475 | 525 | 575 |
| *1 Weight (kg) | 2.3 | 2.49 | 2.69 | 2.89 | 3.08 | 3.28 | 3.48 | 3.67 | 3.87 | 4.07 | 4.26 | 4.46 |
| 線速度 Linear Speed mm/s | 導程 Lead 2 | ≤ 100 | | | | | | | | | | |
| | 導程 Lead 5 | ≤ 250 | | | | | | | | | | |
| | 導程 Lead 10 | ≤ 500 | | | | | | | | | | |
| | 導程 Lead 20 | ≤ 1000 | | | | | | | | | | |

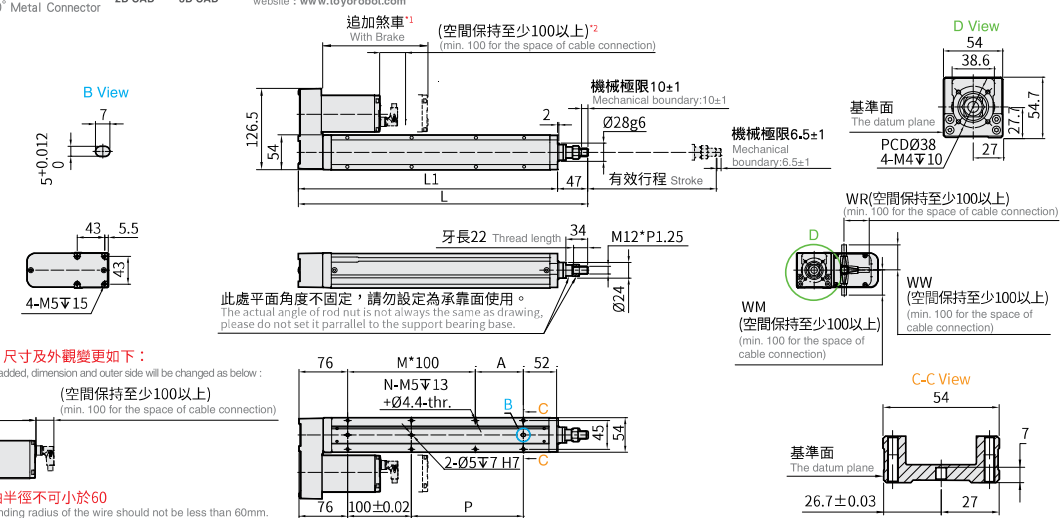
*1 重量包含本體與馬達。 Weight of model with motor.

BR 馬達右折 Motor Right Side
(90度金屬接頭) 90° Metal Connector



CAD圖面可至www.toyorobot.com下載
Please do wload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



*1 追加煞車時，尺寸及外觀變更如下：
When the brake is added, dimension and outer side will be changed as below :



*2 線材最小彎曲半徑不可小於60
The minimum bending radius of the wire should not be less than 60mm.

| 有效行程 Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 |
|--------------------------------|------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 極限行程 Limit Stroke (±1) | 66.5 | 116.5 | 166.5 | 216.5 | 266.5 | 316.5 | 366.5 | 416.5 | 466.5 | 516.5 | 566.5 | 616.5 |
| L | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 850 |
| L1 | 253 | 303 | 353 | 403 | 453 | 503 | 553 | 603 | 653 | 703 | 753 | 803 |
| A | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 | 25 | 75 |
| M | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 |
| N | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | 16 | 16 |
| P | 25 | 75 | 125 | 175 | 225 | 275 | 325 | 375 | 425 | 475 | 525 | 575 |
| *1 Weight (kg) | 2.3 | 2.49 | 2.69 | 2.89 | 3.08 | 3.28 | 3.48 | 3.67 | 3.87 | 4.07 | 4.26 | 4.46 |
| 線速度 Linear Speed mm/s | 導程 Lead 2 | ≤ 100 | | | | | | | | | | |
| | 導程 Lead 5 | ≤ 250 | | | | | | | | | | |
| | 導程 Lead 10 | ≤ 500 | | | | | | | | | | |
| | 導程 Lead 20 | ≤ 1000 | | | | | | | | | | |

*1 重量包含本體與馬達。 Weight of model with motor.

CGTY8



螺桿驅動 Ball Screw Drive



最大行程 800mm
Maximum Stroke

最高速度 1000mm/s
Maximum Speed

馬達尺寸 42□mm
Motor Dimension

滾珠螺桿 Ø16mm
Ball Screw

型號表示方式 Ordering Method

CGTY8 - L5 - 100 - M B - TC100 - 03 - N1 - WR - C4 - A001

本體型號
Model

螺桿導程
Ball Screw Lead

| | |
|----|------|
| 5 | 5mm |
| 10 | 10mm |
| 20 | 20mm |

行程
Stroke

| |
|------------------|
| 50-800mm |
| 間隔50 50 mm Pitch |

是否煞車
Brake (Optional)

垂直使用時
追加內藏式煞車器
Built-in brake is added
when vertically used

*若無煞車則不表示。
If No Brake, No Description.

I/O線種類
Kind of I/O Cable

| | |
|----|------------------------------|
| N1 | 隔離I/O線 Shielded I/O Cable |
|----|------------------------------|

*標配1.5m
Standard:1.5m

接頭型式
Connector Type

| | |
|----|---|
| - | 直結型接頭 Straight Connector |
| WR | 90度接頭出線朝右 *1 90° Connector outlet (Right Side) |
| WL | 90度接頭出線朝左 *1 90° Connector outlet (Left Side) |
| WW | 90度接頭出線朝上 *1 90° Connector outlet (Up Side) |
| WM | 90度接頭出線朝下 90° Connector outlet (Down Side) |

端點極限感應器
Limit Sensor

| | |
|-------------|--------------------|
| 外掛型 Outside | |
| 3 | 1只 1 Pc |
| 4 | 2只 2 Pcs |
| 無 SENSOR | No Sensor |
| 5 | 無 SENSOR No Sensor |

*若無SENSOR需求則不表示。
Not indicated if there is no need for a SENSOR.

原點感應器
Home Sensor

| | |
|-------------|--------------------------|
| 外掛型 Outside | |
| C | 馬達側 Motor Side |
| D | 反馬達側 Opposite Motor Side |
| 無 SENSOR | No Sensor |
| E | 無 SENSOR No Sensor |

*若無SENSOR需求則不表示。
Not indicated if there is no need for a SENSOR.

馬達位置
Motor Position

| | |
|----|---------------------------|
| M | 馬達直結 Motor Hidden In |
| BM | 馬達下折 Motor Bottom Side |
| BR | 馬達右折 Motor Right Side |
| BL | 馬達左折 Motor Left Side |

對應控制器
Corresponding Controller

| | |
|--------|-------------------------------------|
| TC100 | 標準版 Standard |
| TC100E | EtherCAT版 With EtherCAT Function |

電纜線長
Cable Length

| | |
|-----|-------------------------------|
| 01 | 1m |
| 03 | 3m |
| 05 | 5m |
| 10 | 10m |
| R01 | 1m耐繞曲型 1m Flexible cable |
| R03 | 3m耐繞曲型 3m Flexible cable |
| R05 | 5m耐繞曲型 5m Flexible cable |
| R10 | 10m耐繞曲型 10m Flexible cable |

*標配3m
Standard:3m

*1 馬達方向BM無法選用WW
馬達方向BL無法選用WR
馬達方向BR無法選用WL
詳見尺寸圖

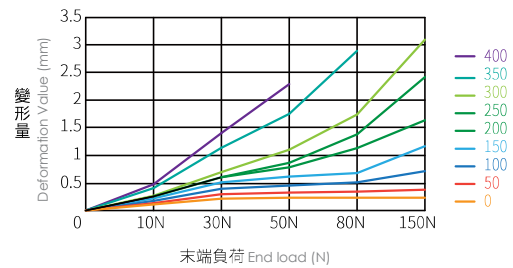
WW cannot be selected for the motor direction BM
WR cannot be selected for the motor direction BL
WL cannot be selected for the motor direction BR
For details, please refer to the dimension drawing

基本仕様 Specification

| | | | | | |
|-------------------------------|--------------------------------------|----------------------|--------|--------|--------|
| 規格 Spec | 位置重複精度 Repeatability (mm) | ±0.01 | | | |
| | 螺桿導程 Ball Screw Lead (mm) | 5 | 10 | 20 | |
| | 最高轉速 Maximum rotating speed(rpm) | ≦ 3000 | ≦ 3000 | ≦ 3000 | |
| | 最高速度 Maximum Speed (mm/s) ※1※2 | 水平使用 Horizontal (kg) | ≦ 250 | ≦ 500 | ≦ 1000 |
| | | 垂直使用 Vertical (kg) | ≦ 250 | ≦ 500 | ≦ 1000 |
| | 最大可搬重量 Maximum Payload※3 | 水平使用 Horizontal (kg) | ≦ 30 | ≦ 15 | ≦ 10 |
| | | 垂直使用 Vertical (kg) | ≦ 10 | ≦ 5 | ≦ 2.5 |
| 定格推力 Rated Thrust (N) | 459 | 229 | 115 | | |
| 標準行程 Stroke (increments) (mm) | 50-800mm / 50 間隔 (50 increments) | | | | |
| 部品 Parts | 馬達尺寸 Motor Dimension (mm) | 42□ | | | |
| | 滾珠螺桿規格 Ball Screw Spec | C7 Ø16mm | | | |

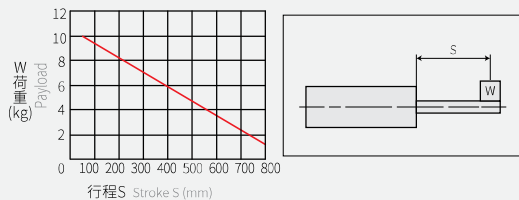
- ※1 此處最高速度為軟體移動速度設定為 100% 時。
The maximum speed shown here is when software speed setting is 100%.
- ※2 長行程時，會產生螺桿偏擺，需將速度調降（線速度請參閱尺寸圖下方表格）
During in a long stroke, it causes ballscrew deflection, the speed must reduce.
(Please refer to the linear velocity from the data sheet below the dimension graph.)
- ※3 此荷重條件外部需搭配輔助滑軌以承受徑向負載。
If payload is near maximum, it requires to collocate externally with auxiliary guideway for bearing radial load.

出力軸變形量 Shaft Output Deformation Value



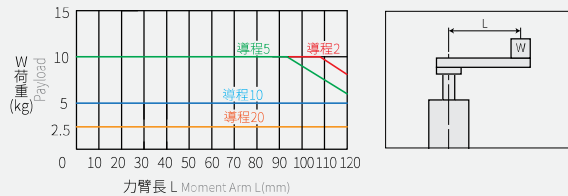
※此圖表為參考值。
This form is only reference values.

水平安裝荷重 Load In Horizontal Installation



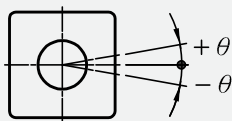
※無外部輔助機構，負載延伸距離0。
No external auxiliary mechanism, extension distance of load = 0.

垂直安裝負載 Load In Vertical Installation



※計算條件:3000rpm/min，加減速0.3s。
Calculation conditions: 3000 rpm / min, acceleration and deceleration: 0.3s.

出力桿的防止迴轉精度 Anti-rotating Accuracy of Rod



防止迴轉精度 θ
Anti-rotating accuracy
±0°

※內附滾珠滑軌機構，所以推桿軸心不迴轉。
With built-in circular guideway, so the rod shaft of actuator does not rotate.

對應控制器一覽表 Corresponding Controller Chart

| 外觀 Exterior | 控制器型號 Controller Model | 控制介面 Control Mode | 特點 Features | 電氣規格 Electrical Spec | 詳細參閱 Reference Page |
|----------------|---------------------------|--|--|---|------------------------|
| | TC100 | Pulse 控制 Pulse Control Mode | Line driver 200k Hz / Open collector 60k Hz 同時只能使用一種。 Support Line driver and Open collector Max.pulse receiving speed 200k/60k Hz. | 控制電路只能使用 24V。 工作電壓 DC24V，額定電流 2A，峰值電流 3A。 | P.297 |
| | | I/O 控制 I/O Control Mode | 利用 I/O 變化，最多可以執行 127 個位置控制。 By I/O control, max. 127 positioning points, can be executed. | 工作電壓 DC48V，額定電流 1A，峰值電流 2A。 | |
| | | 通訊控制 Communication Control Mode | 採 Modbus 的 RS485 通訊或 EtherCAT (最大並接 16 台以上) 及一組 mini USB (TOYO-Single 專用) With Modbus RS-485 or EtherCAT (connect over 16 axes in series) and USB module | 使用 DC48V 時在相同扭力下，轉速會提升，詳細內容請跟服務窗口連絡。 The voltage of control circuit is 24V only. Operating voltage DC24V, rated current 2A, peak current 3A. | |
| | | 選配 EtherCAT 透過 EtherCAT 可串接 16 軸以上 With EtherCAT, connect over 16 axes can be in series. | Operating voltage DC48V, rated current 1A, peak current 2A. When the voltage is DC48V but same torque, the rotation speed will be raised.Please contact your service window to details. | | |

CGTY8



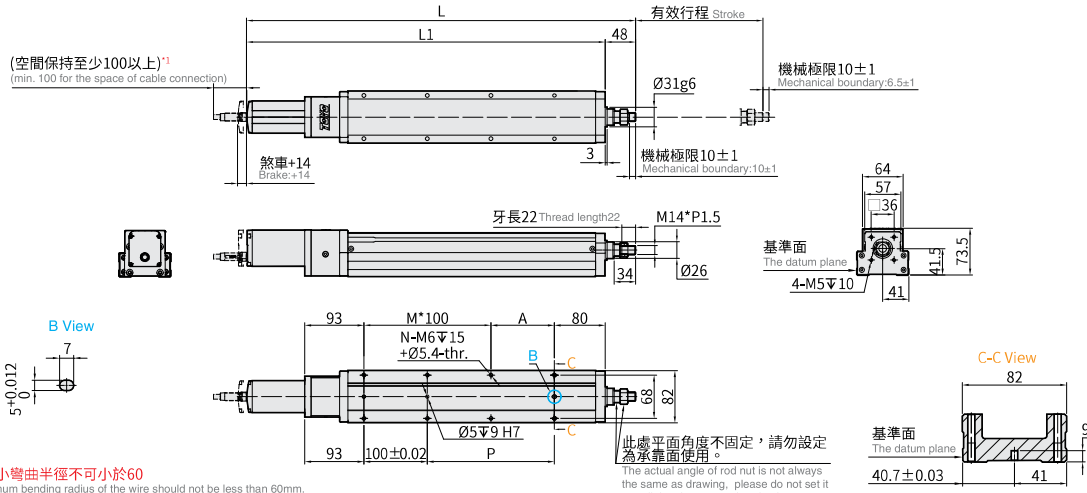
螺桿驅動 Ball Screw Drive

M 馬達直結 Motor Hidden In



CAD圖面可至www.toyorobot.com下載
Please do wnload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



*1 線材最小彎曲半徑不可小於60

The minimum bending radius of the wire should not be less than 60mm.

此處平面角度不固定，請勿設定為基準面使用。
The actual angle of rod nut is not always the same as drawing, please do not set it parallel to the support bearing base.

| 有效行程 Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | |
|-----------------------------|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|
| 極限行程 Limit Stroke (±1) | 70 | 120 | 170 | 220 | 270 | 320 | 370 | 420 | 470 | 520 | 570 | 620 | 670 | 720 | 770 | 820 | |
| L | 462.5 | 512.5 | 562.5 | 612.5 | 662.5 | 712.5 | 762.5 | 812.5 | 862.5 | 912.5 | 962.5 | 1012.5 | 1062.5 | 1112.5 | 1162.5 | 1212.5 | |
| L1 | 414.5 | 464.5 | 514.5 | 564.5 | 614.5 | 664.5 | 714.5 | 764.5 | 814.5 | 864.5 | 914.5 | 964.5 | 1014.5 | 1064.5 | 1114.5 | 1164.5 | |
| A | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | |
| M | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | |
| N | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | 16 | 16 | 18 | 18 | 20 | 20 | |
| P | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | |
| *1 Weight (kg) | 4.77 | 5.12 | 5.47 | 5.81 | 6.16 | 6.51 | 6.86 | 7.21 | 7.56 | 7.9 | 8.25 | 8.6 | 8.95 | 9.3 | 9.65 | 9.99 | |
| 線速度 Linear Speed mm/s | 導程 Lead 5 | | | | | | | | | | | | | | | | ≤ 250 |
| | 導程 Lead 10 | | | | | | | | | | | | | | | | ≤ 500 |
| | 導程 Lead 20 | | | | | | | | | | | | | | | | ≤ 1000 |

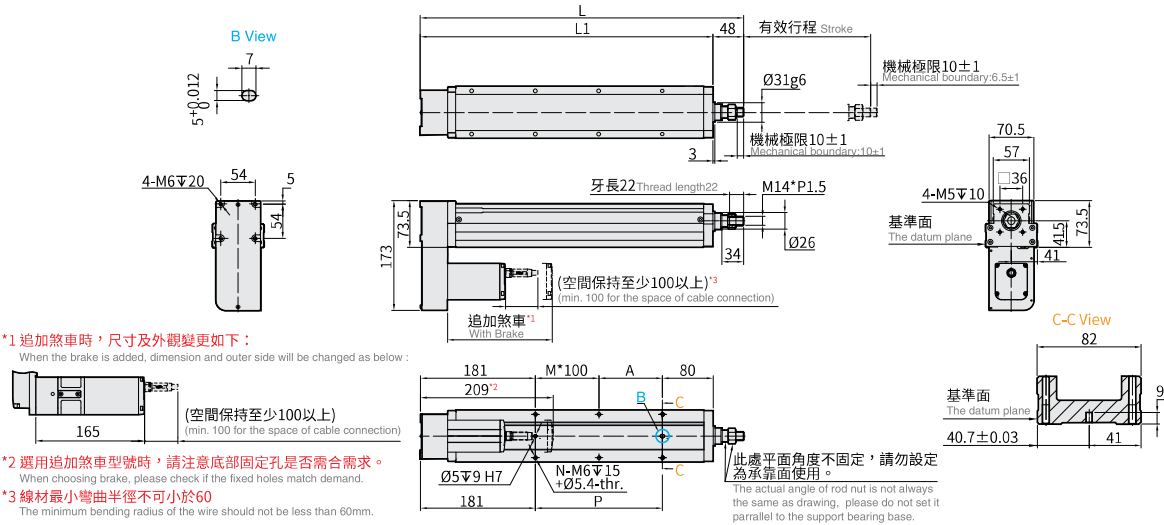
*1 重量包含本體與馬達。Weight of model with motor.

BM 馬達下折 Motor Bottom Side



CAD圖面可至www.toyorobot.com下載
Please do wnload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



*1 追加煞車時，尺寸及外觀變更如下：

When the brake is added, dimension and outer side will be changed as below :



*2 選用追加煞車型號時，請注意底部固定孔是否需合需求。

When choosing brake, please check if the fixed holes match demand.

*3 線材最小彎曲半徑不可小於60

The minimum bending radius of the wire should not be less than 60mm.

此處平面角度不固定，請勿設定為基準面使用。
The actual angle of rod nut is not always the same as drawing, please do not set it parallel to the support bearing base.

| 有效行程 Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | |
|-----------------------------|------------|------|------|------|------|------|------|------|------|------|------|------|-----|------|------|-------|--------|
| 極限行程 Limit Stroke (±1) | 70 | 120 | 170 | 220 | 270 | 320 | 370 | 420 | 470 | 520 | 570 | 620 | 670 | 720 | 770 | 820 | |
| L | 359 | 409 | 459 | 509 | 559 | 609 | 659 | 709 | 759 | 809 | 859 | 909 | 959 | 1009 | 1059 | 1109 | |
| L1 | 311 | 361 | 411 | 461 | 511 | 561 | 611 | 661 | 711 | 761 | 811 | 861 | 911 | 961 | 1011 | 1061 | |
| A | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | |
| M | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | |
| N | 4 | 4 | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | 16 | 16 | 18 | 18 | |
| P | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | |
| *1 Weight (kg) | 5.24 | 5.58 | 5.92 | 6.25 | 6.59 | 6.93 | 7.27 | 7.61 | 7.95 | 8.28 | 8.62 | 8.96 | 9.3 | 9.64 | 9.98 | 10.31 | |
| 線速度 Linear Speed mm/s | 導程 Lead 5 | | | | | | | | | | | | | | | | ≤ 250 |
| | 導程 Lead 10 | | | | | | | | | | | | | | | | ≤ 500 |
| | 導程 Lead 20 | | | | | | | | | | | | | | | | ≤ 1000 |

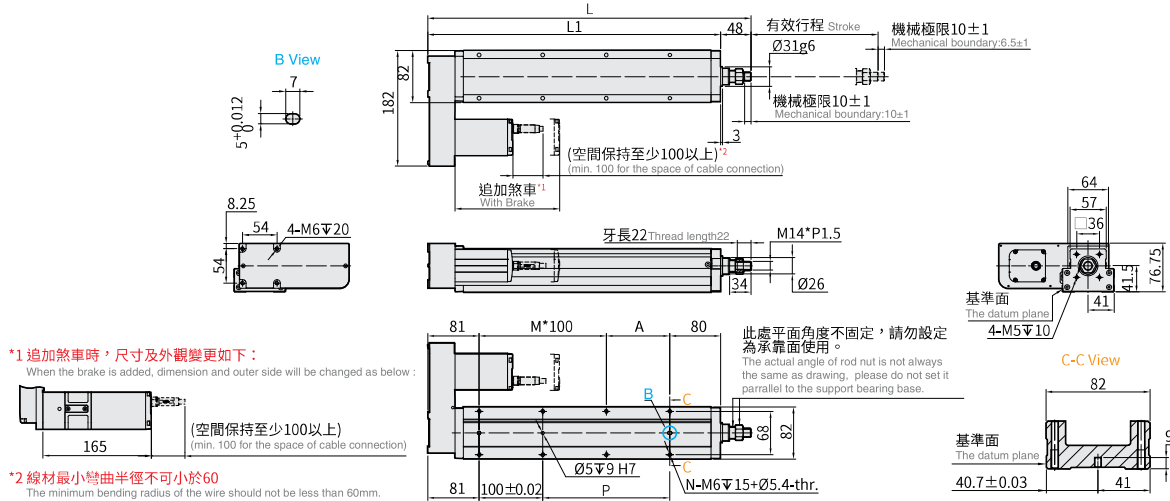
*1 重量包含本體與馬達。Weight of model with motor.

BL 馬達左折 Motor Left Side



CAD圖面可至www.toyorobot.com下載
Please do wntload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



| 有效行程 Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | |
|-----------------------------|------------|------|------|------|------|------|------|------|------|------|------|------|-----|------|------|-------|--------|
| 極限行程 Limit Stroke (±1) | 70 | 120 | 170 | 220 | 270 | 320 | 370 | 420 | 470 | 520 | 570 | 620 | 670 | 720 | 770 | 820 | |
| L | 359 | 409 | 459 | 509 | 559 | 609 | 659 | 709 | 759 | 809 | 859 | 909 | 959 | 1009 | 1059 | 1109 | |
| L1 | 311 | 361 | 411 | 461 | 511 | 561 | 611 | 661 | 711 | 761 | 811 | 861 | 911 | 961 | 1011 | 1061 | |
| A | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | |
| M | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | |
| N | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | 16 | 16 | 18 | 18 | 20 | 20 | |
| P | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | |
| ※1 Weight (kg) | 5.24 | 5.58 | 5.92 | 6.25 | 6.59 | 6.93 | 7.27 | 7.61 | 7.95 | 8.28 | 8.62 | 8.96 | 9.3 | 9.64 | 9.98 | 10.31 | |
| 線速度 Linear Speed mm/s | 導程 Lead 5 | | | | | | | | | | | | | | | | ≤ 250 |
| | 導程 Lead 10 | | | | | | | | | | | | | | | | ≤ 500 |
| | 導程 Lead 20 | | | | | | | | | | | | | | | | ≤ 1000 |

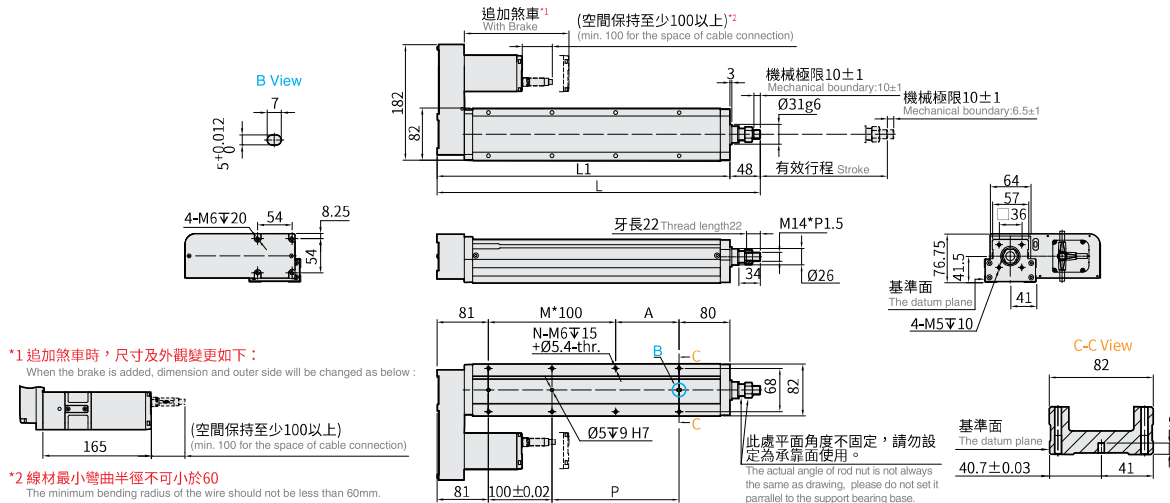
※1 重量包含本體與馬達。Weight of model with motor.

BR 馬達右折 Motor Right Side



CAD圖面可至www.toyorobot.com下載
Please do wntload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



| 有效行程 Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | |
|-----------------------------|------------|------|------|------|------|------|------|------|------|------|------|------|-----|------|------|-------|--------|
| 極限行程 Limit Stroke (±1) | 70 | 120 | 170 | 220 | 270 | 320 | 370 | 420 | 470 | 520 | 570 | 620 | 670 | 720 | 770 | 820 | |
| L | 359 | 409 | 459 | 509 | 559 | 609 | 659 | 709 | 759 | 809 | 859 | 909 | 959 | 1009 | 1059 | 1109 | |
| L1 | 311 | 361 | 411 | 461 | 511 | 561 | 611 | 661 | 711 | 761 | 811 | 861 | 911 | 961 | 1011 | 1061 | |
| A | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | |
| M | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | |
| N | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | 16 | 16 | 18 | 18 | 20 | 20 | |
| P | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | |
| ※1 Weight (kg) | 5.24 | 5.58 | 5.92 | 6.25 | 6.59 | 6.93 | 7.27 | 7.61 | 7.95 | 8.28 | 8.62 | 8.96 | 9.3 | 9.64 | 9.98 | 10.31 | |
| 線速度 Linear Speed mm/s | 導程 Lead 5 | | | | | | | | | | | | | | | | ≤ 250 |
| | 導程 Lead 10 | | | | | | | | | | | | | | | | ≤ 500 |
| | 導程 Lead 20 | | | | | | | | | | | | | | | | ≤ 1000 |

※1 重量包含本體與馬達。Weight of model with motor.

CGTY8



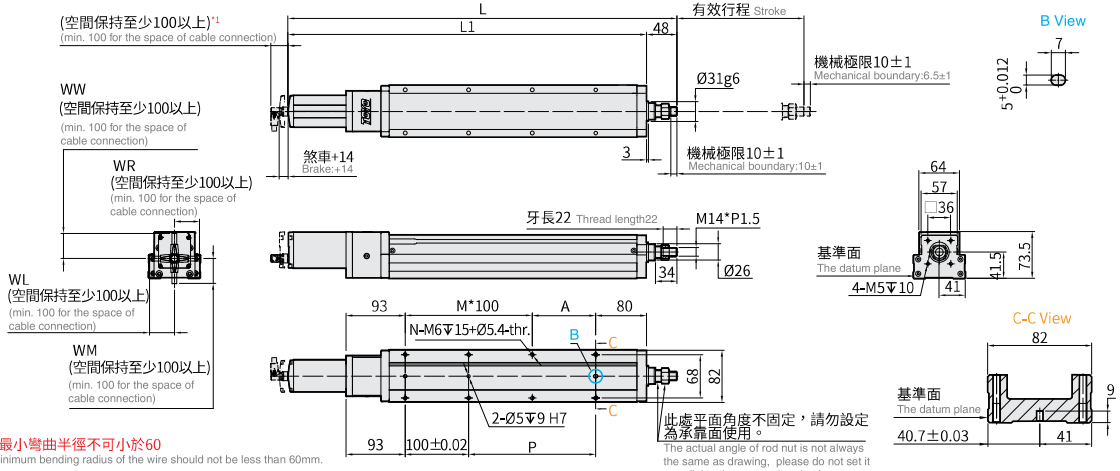
螺桿驅動 Ball Screw Drive

M 馬達直結 Motor Hidden In (90度金屬接頭) 90° Metal Connector



● CAD圖面可至www.toyorobot.com下載 ●
Please do wnload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



*1 線材最小彎曲半徑不可小於60
The minimum bending radius of the wire should not be less than 60mm.

此處平面角度不固定，請勿設定為承靠面使用。
The actual angle of rod nut is not always the same as drawing, please do not set it parallel to the support bearing base.

| 有效行程 Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | |
|------------------------|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|
| 極限行程 Limit Stroke (±1) | 70 | 120 | 170 | 220 | 270 | 320 | 370 | 420 | 470 | 520 | 570 | 620 | 670 | 720 | 770 | 820 | |
| L | 462.5 | 512.5 | 562.5 | 612.5 | 662.5 | 712.5 | 762.5 | 812.5 | 862.5 | 912.5 | 962.5 | 1012.5 | 1062.5 | 1112.5 | 1162.5 | 1212.5 | |
| L1 | 414.5 | 464.5 | 514.5 | 564.5 | 614.5 | 664.5 | 714.5 | 764.5 | 814.5 | 864.5 | 914.5 | 964.5 | 1014.5 | 1064.5 | 1114.5 | 1164.5 | |
| A | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | |
| M | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | |
| N | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | 16 | 16 | 18 | 18 | 20 | 20 | |
| P | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | |
| ※1 Weight (kg) | 4.77 | 5.12 | 5.47 | 5.81 | 6.16 | 6.51 | 6.86 | 7.21 | 7.56 | 7.9 | 8.25 | 8.6 | 8.95 | 9.3 | 9.65 | 9.99 | |
| 線速度 Linear Speed mm/s | 導程 Lead 5 | | | | | | | | | | | | | | | | ≤ 250 |
| | 導程 Lead 10 | | | | | | | | | | | | | | | | ≤ 500 |
| | 導程 Lead 20 | | | | | | | | | | | | | | | | ≤ 1000 |

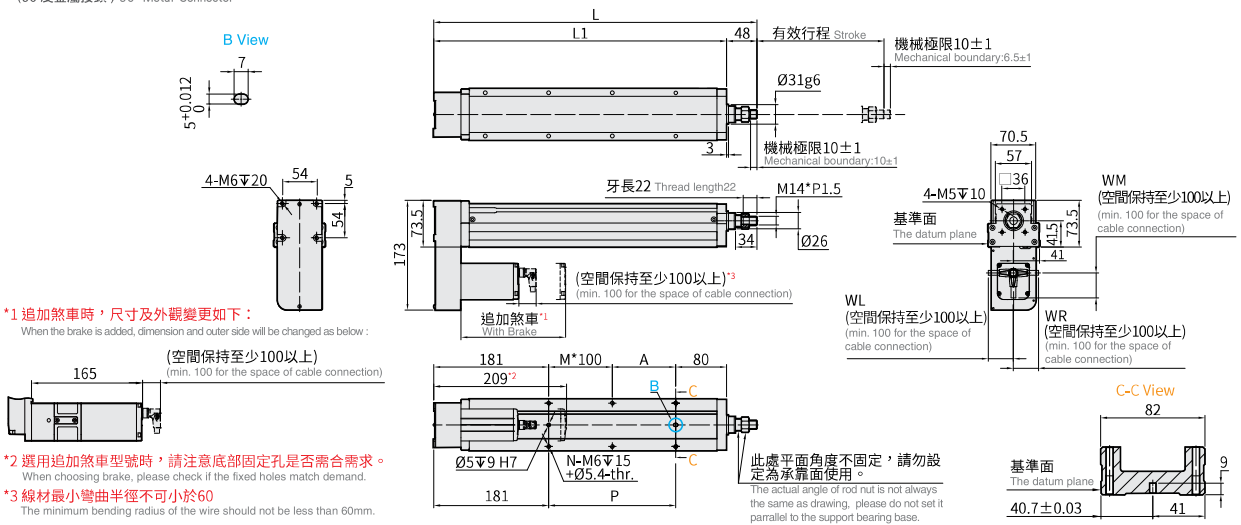
※1 重量包含本體與馬達。 Weight of model with motor.

BM 馬達下折 Motor Bottom Side (90度金屬接頭) 90° Metal Connector

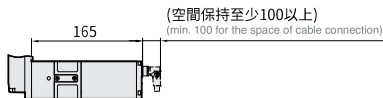


● CAD圖面可至www.toyorobot.com下載 ●
Please do wnload the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



*1 追加煞車時，尺寸及外觀變更如下：
When the brake is added, dimension and outer side will be changed as below :



*2 選用追加煞車型號時，請注意底部固定孔是否需求。
When choosing brake, please check if the fixed holes match demand.

*3 線材最小彎曲半徑不可小於60
The minimum bending radius of the wire should not be less than 60mm.

此處平面角度不固定，請勿設定為承靠面使用。
The actual angle of rod nut is not always the same as drawing, please do not set it parallel to the support bearing base.

| 有效行程 Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | |
|------------------------|------------|------|------|------|------|------|------|------|------|------|------|------|-----|------|------|-------|--------|
| 極限行程 Limit Stroke (±1) | 70 | 120 | 170 | 220 | 270 | 320 | 370 | 420 | 470 | 520 | 570 | 620 | 670 | 720 | 770 | 820 | |
| L | 359 | 409 | 459 | 509 | 559 | 609 | 659 | 709 | 759 | 809 | 859 | 909 | 959 | 1009 | 1059 | 1109 | |
| L1 | 311 | 361 | 411 | 461 | 511 | 561 | 611 | 661 | 711 | 761 | 811 | 861 | 911 | 961 | 1011 | 1061 | |
| A | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | |
| M | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | |
| N | 4 | 4 | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | 16 | 16 | 18 | 18 | |
| P | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | |
| ※1 Weight (kg) | 5.24 | 5.58 | 5.92 | 6.25 | 6.59 | 6.93 | 7.27 | 7.61 | 7.95 | 8.28 | 8.62 | 8.96 | 9.3 | 9.64 | 9.98 | 10.31 | |
| 線速度 Linear Speed mm/s | 導程 Lead 5 | | | | | | | | | | | | | | | | ≤ 250 |
| | 導程 Lead 10 | | | | | | | | | | | | | | | | ≤ 500 |
| | 導程 Lead 20 | | | | | | | | | | | | | | | | ≤ 1000 |

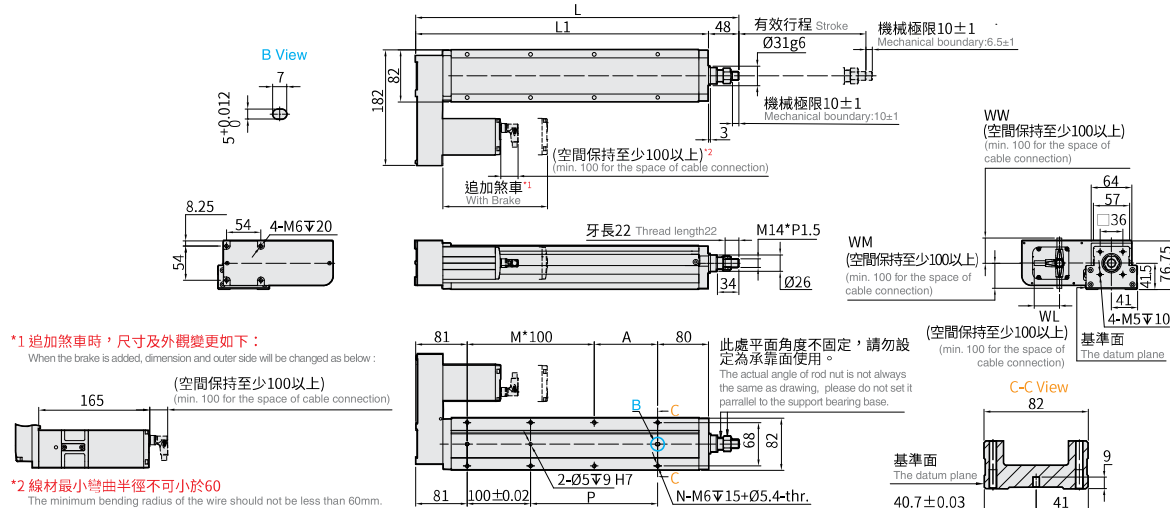
※1 重量包含本體與馬達。 Weight of model with motor.

BL 馬達左折 Motor Left Side
 (90度金屬接頭) 90° Metal Connector

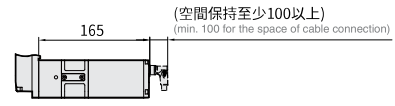


CAD圖面可至www.toyorobot.com下載
 Please do wnlod the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



*1 追加煞車時，尺寸及外觀變更如下：
 When the brake is added, dimension and outer side will be changed as below :



*2 線材最小彎曲半徑不可小於60
 The minimum bending radius of the wire should not be less than 60mm.

| 有效行程 Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | |
|------------------------|------------|------|------|------|------|------|------|------|------|------|------|------|-----|------|------|-------|--------|
| 極限行程 Limit Stroke (±1) | 70 | 120 | 170 | 220 | 270 | 320 | 370 | 420 | 470 | 520 | 570 | 620 | 670 | 720 | 770 | 820 | |
| L | 359 | 409 | 459 | 509 | 559 | 609 | 659 | 709 | 759 | 809 | 859 | 909 | 959 | 1009 | 1059 | 1109 | |
| L1 | 311 | 361 | 411 | 461 | 511 | 561 | 611 | 661 | 711 | 761 | 811 | 861 | 911 | 961 | 1011 | 1061 | |
| A | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | |
| M | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | |
| N | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | 16 | 16 | 18 | 18 | 20 | 20 | |
| P | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | |
| ※1 Weight (kg) | 5.24 | 5.58 | 5.92 | 6.25 | 6.59 | 6.93 | 7.27 | 7.61 | 7.95 | 8.28 | 8.62 | 8.96 | 9.3 | 9.64 | 9.98 | 10.31 | |
| 線速度 Linear Speed mm/s | 導程 Lead 5 | | | | | | | | | | | | | | | | ≤ 250 |
| | 導程 Lead 10 | | | | | | | | | | | | | | | | ≤ 500 |
| | 導程 Lead 20 | | | | | | | | | | | | | | | | ≤ 1000 |

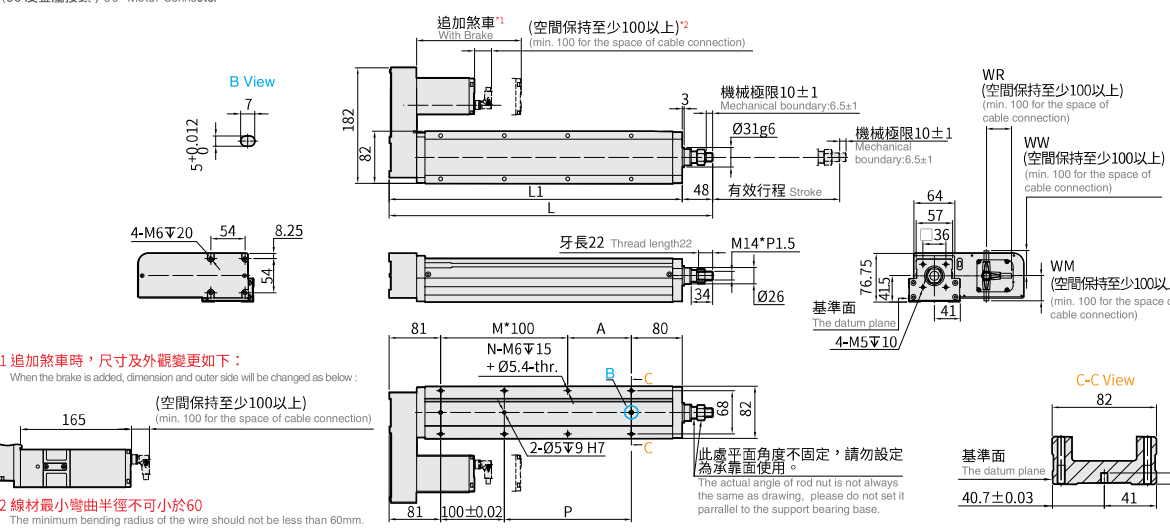
※1 重量包含本體與馬達。Weight of model with motor.

BR 馬達右折 Motor Right Side
 (90度金屬接頭) 90° Metal Connector



CAD圖面可至www.toyorobot.com下載
 Please do wnlod the CAD file from TOYO's website : www.toyorobot.com

單位 Unit : mm



*1 追加煞車時，尺寸及外觀變更如下：
 When the brake is added, dimension and outer side will be changed as below :



*2 線材最小彎曲半徑不可小於60
 The minimum bending radius of the wire should not be less than 60mm.

| 有效行程 Stroke | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | |
|------------------------|------------|------|------|------|------|------|------|------|------|------|------|------|-----|------|------|-------|--------|
| 極限行程 Limit Stroke (±1) | 70 | 120 | 170 | 220 | 270 | 320 | 370 | 420 | 470 | 520 | 570 | 620 | 670 | 720 | 770 | 820 | |
| L | 359 | 409 | 459 | 509 | 559 | 609 | 659 | 709 | 759 | 809 | 859 | 909 | 959 | 1009 | 1059 | 1109 | |
| L1 | 311 | 361 | 411 | 461 | 511 | 561 | 611 | 661 | 711 | 761 | 811 | 861 | 911 | 961 | 1011 | 1061 | |
| A | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | 50 | 100 | |
| M | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | |
| N | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 | 14 | 14 | 16 | 16 | 18 | 18 | 20 | 20 | |
| P | 50 | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | |
| ※1 Weight (kg) | 5.24 | 5.58 | 5.92 | 6.25 | 6.59 | 6.93 | 7.27 | 7.61 | 7.95 | 8.28 | 8.62 | 8.96 | 9.3 | 9.64 | 9.98 | 10.31 | |
| 線速度 Linear Speed mm/s | 導程 Lead 5 | | | | | | | | | | | | | | | | ≤ 250 |
| | 導程 Lead 10 | | | | | | | | | | | | | | | | ≤ 500 |
| | 導程 Lead 20 | | | | | | | | | | | | | | | | ≤ 1000 |

※1 重量包含本體與馬達。Weight of model with motor.