

## MOTOR WIRING DIAGRAM

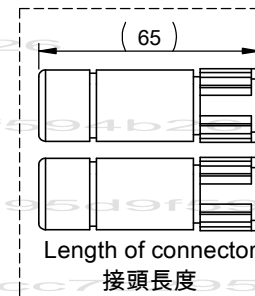
## 馬達電源線配線表

| Connector ( male )<br>金屬接頭(公) | Signal<br>訊號 |
|-------------------------------|--------------|
| 1                             | V            |
| 2                             | U            |
| 3                             | W            |
| ≡                             | GND          |

## ANALOG ENCODER WIRING DIAGRAM

## 編碼器配線表

| Function<br>功能                  | Connector (male)<br>金屬接頭(公) | Signal<br>訊號     |
|---------------------------------|-----------------------------|------------------|
| Power<br>電源                     | 4                           | 5V               |
|                                 | 5                           | 5V               |
|                                 | 6                           | 0V               |
| Incremental<br>signals<br>增量訊號  | 2                           | U <sub>2</sub> - |
|                                 | 3                           | U <sub>1</sub> - |
|                                 | 9                           | U <sub>2</sub> + |
| Reference<br>mark<br>參考點        | 10                          | U <sub>1</sub> + |
|                                 | 1                           | U <sub>0</sub> - |
|                                 | 8                           | U <sub>0</sub> + |
| Temperature<br>Switch<br>溫度感測訊號 | Case                        | Shield           |
|                                 | 11                          | T+               |
|                                 | 12                          | T-               |

Length of connector  
接頭長度

|    |                                    |                     |                                  |
|----|------------------------------------|---------------------|----------------------------------|
| 1  | Cont. torque<br>連續轉矩               | (Nm)                | 16                               |
| 2  | Peak torque<br>瞬間轉矩                | (Nm)                | 48                               |
| 3  | Cont. current<br>連續電流              | (Arms)              | 3.8                              |
| 4  | Peak current<br>瞬間電流               | (Arms)              | 12                               |
| 5  | Max. speed<br>最高轉速                 | (rpm)               | 500 (without payload, 空載)        |
| 6  | *Repeatability<br>重現性              | (arcsec)            | ±3                               |
| 7  | *Accuracy range<br>精度              | (arcsec)            | ±30 (without error mapping, 未補償) |
| 8  | Encoder type<br>編碼器式樣              |                     | Incremental type, 1Vpp(增量型)      |
| 9  | Line count<br>脈波數                  | (per revolution)    | 3600                             |
| 10 | Inertia of rotating part<br>旋轉部慣性矩 | (kgm <sup>2</sup> ) | 0.026                            |
| 11 | Temperature sensor<br>溫度感測器        |                     | PTC SNM100                       |
| 12 | IP level<br>保護等級                   |                     | IP40                             |
| 13 | Motor color<br>馬達顏色                |                     | Black, 黑色                        |

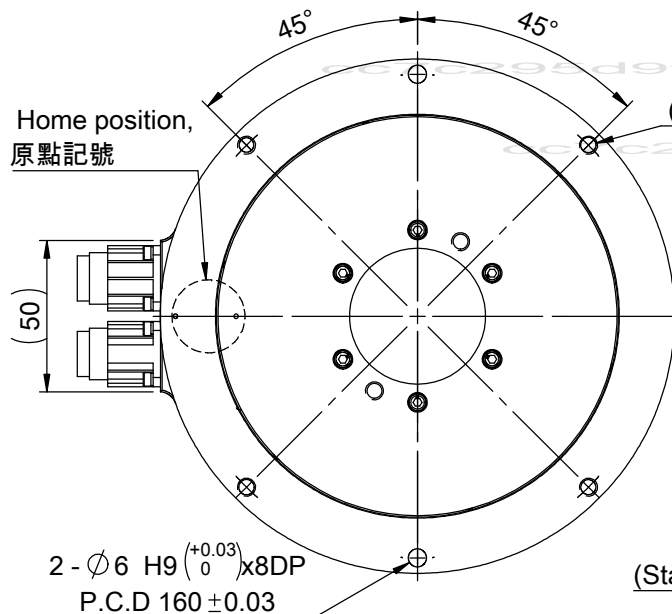
All the specification in the table are in ±10% of tolerance.  
表內所有規格誤差範圍±10%。

|                          |                      |                    |              |                          |                    |
|--------------------------|----------------------|--------------------|--------------|--------------------------|--------------------|
| ROUGH M%<br>8.0a<br>▽    | FIT M%<br>3.2a<br>▽▽ | GRD<br>0.8a<br>▽▽▽ | SCALE<br>1:X | TYPE<br>DMY65G           | DATE<br>Aug.05.19' |
| SHEET METAL TOLERANCE mm |                      |                    |              | CUSTOMER<br>/            | DRN<br>陳詠富         |
| UP<br>TO 6               | 6<br>30              | 30<br>120          | 120<br>300   | MATERIAL<br>/            | CHK<br>吳定韓         |
| ±0.1                     | ±0.2                 | ±0.3               | ±0.4         | PART NO.<br>FM17M1957100 | APPD<br>蔡尚恩        |
|                          |                      |                    |              | NAME<br>直驅馬達             | DWG. NO<br>M19571  |
|                          |                      |                    |              |                          | SHEET<br>A1 1-1    |

4 - M6x1.0Px12DP

P.C.D 160

(Rotor fixture, 轉動部固定孔)

Home position,  
原點記號

4 - M6x1.0Px12DP

P.C.D 160

(Stator fixture, 馬達固定孔)

2 -  $\phi 6$  H9  $\left( \begin{smallmatrix} +0.03 \\ 0 \end{smallmatrix} \right)$  x8DP  
P.C.D 160 ±0.03Motor connector  
馬達線接頭Encoder connector  
編碼器接頭2 -  $\phi 6$  H9  $\left( \begin{smallmatrix} +0.03 \\ 0 \end{smallmatrix} \right)$  x4DP  
P.C.D 160 ±0.03

View X

## NOTE :

1.Ensure the flatness of mounting surface to be within 0.01/300 mm.

2.\*Inspected by Hiwin solution.

## 註 :

1.為確保精度，安裝HIWIN轉矩馬達的安裝面，平面度需在0.01/300 mm。

2.\*以HIWIN檢測方式檢驗。

| ITEM | DATE | MODIFIED | DESCRIPTION | APPD |
|------|------|----------|-------------|------|
|      |      |          |             |      |
|      |      |          |             |      |
|      |      |          |             |      |