



# PLANETARY GEARHEADS

*Low Starting Torque*

**K Series**

行星式減速機 低啓動扭矩 **K** 系列



低啓動扭矩

低溫昇、低噪音

高性能精密螺旋齒設計、高效率

**100%**  
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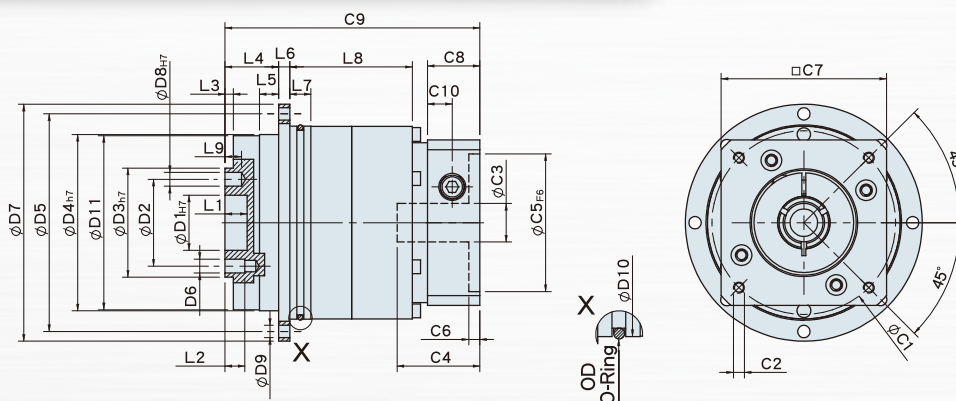


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# SERIES PHFK



## PHFK Single Stage Dims. 單段外型尺寸圖



## Specifications 規格

Unit: mm

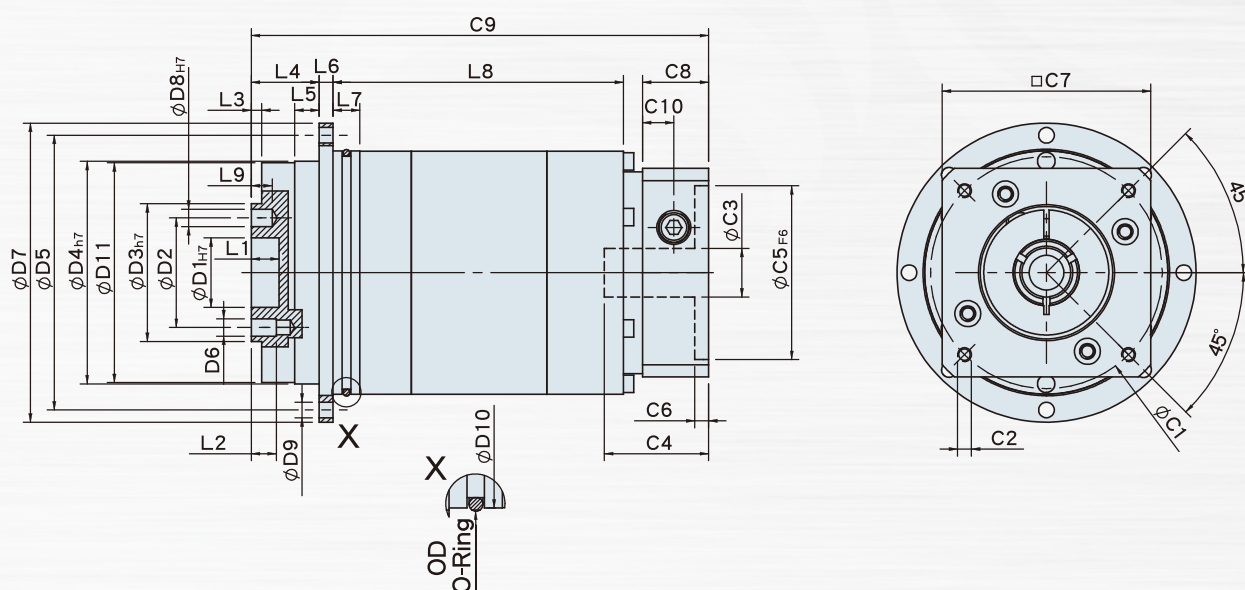
| Dimensions<br>尺寸              | PHFK42  | PHFK42A | PHFK60  | PHFK90  | PHFK115     | PHFK142  | PHFK200   |
|-------------------------------|---------|---------|---------|---------|-------------|----------|-----------|
| D1 <sub>H7</sub>              | 12      | 12      | 20      | 31.5    | 40          | 50       | 80        |
| D2                            | 20      | 20      | 31.5    | 50      | 63          | 80       | 125       |
| D3 <sub>h7</sub>              | 28      | 30      | 40      | 63      | 80          | 100      | 160       |
| D4 <sub>h7</sub>              | 47      | 52      | 64      | 90      | 110         | 140      | 200       |
| D5                            | 67      | 67      | 79      | 109     | 135         | 168      | 233       |
| D6                            | M3x0.5P | M3x0.5P | M5x0.8P | M6x1.0P | M6x1.0P     | M8x1.25P | M10x1.5P  |
| D7                            | 72      | 72      | 86      | 118     | 145         | 179      | 247       |
| D8 <sub>H7</sub>              | 3       | 3       | 5       | 6       | 6           | 8        | 10        |
| D9                            | 3.4     | 3.4     | 4.5     | 5.5     | 5.5         | 6.6      | 9         |
| D10                           | 60      | 60      | 70      | 95      | 120         | 152      | 212       |
| D11                           | 46.2    | 51.2    | 63.2    | 89.2    | 109.2       | 139.2    | 199.2     |
| L1                            | 4       | 4       | 8       | 12      | 12          | 12       | 12        |
| L2                            | 6       | 6       | 7.2     | 12      | 13.5        | 16       | 22.5      |
| L3                            | 3       | 1.5     | 3       | 6       | 6           | 6        | 8         |
| L4                            | 19.5    | 19.5    | 19.5    | 30      | 29          | 38       | 50        |
| L5                            | 7       | 6.5     | 7       | 10      | 10          | 14.6     | 15        |
| L6                            | 4       | 4       | 4       | 7       | 8           | 10       | 12        |
| L7                            | 5       | 5       | 7.7     | 8       | 10          | 12       | 17        |
| L8                            | 25      | 32.7    | 37.5    | 36.5    | 54.5        | 65       | 92        |
| L9                            | 4       | 4       | 6       | 7       | 7           | 7        | 10        |
| C1 <sup>2</sup>               | 46      | 46      | 70      | 90      | 115         | 145      | 200       |
| C2 <sup>2</sup>               | M4x0.7P | M4x0.7P | M5x0.8P | M6x1.0P | M8x1.25P    | M8x1.25P | M12x1.75P |
| C3 <sup>2</sup>               | ≤8/≤11  | ≤8/≤11  | ≤14/≤19 | ≤19/≤24 | ≤24/≤32/≤38 | ≤35/≤38  | ≤50       |
| C4 <sup>2</sup>               | 28.6    | 28.6    | 36.5    | 41.2    | 51.1        | 69.7     | 81        |
| C5 <sup>2</sup> <sub>F6</sub> | 30      | 30      | 50      | 70      | 95          | 110      | 114.3     |
| C6 <sup>2</sup>               | 4.1     | 4.1     | 4       | 6.7     | 6           | 8.5      | 6         |
| C7 <sup>2</sup>               | 42      | 42      | 60      | 90      | 115         | 140      | 180       |
| C8 <sup>2</sup>               | 17      | 17      | 19      | 25.5    | 30          | 38       | 40        |
| C9 <sup>2</sup>               | 75.3    | 83      | 92.5    | 107     | 131.5       | 171.5    | 215       |
| C10 <sup>2</sup>              | 7.4     | 7.4     | 9       | 11.3    | 13.9        | 17.8     | 21        |
| OD                            | 56x2    | 56x2    | 66x2    | 90x3    | 110x3       | 145x3    | 200x5     |

\*2. C1~C10 are motor specific dimensions (metric std shown), sizes may vary according to motor flange. Specifications subject to change without notice.

\*2. C1~C10 是公製標準馬達連接板尺寸，請依所選用的馬達決定。本公司有權針對以上數據規格進行設計變更不先行告知。



## PHFK Double Stage Dims.-1 雙段外型尺寸圖-1



## Specifications 規格

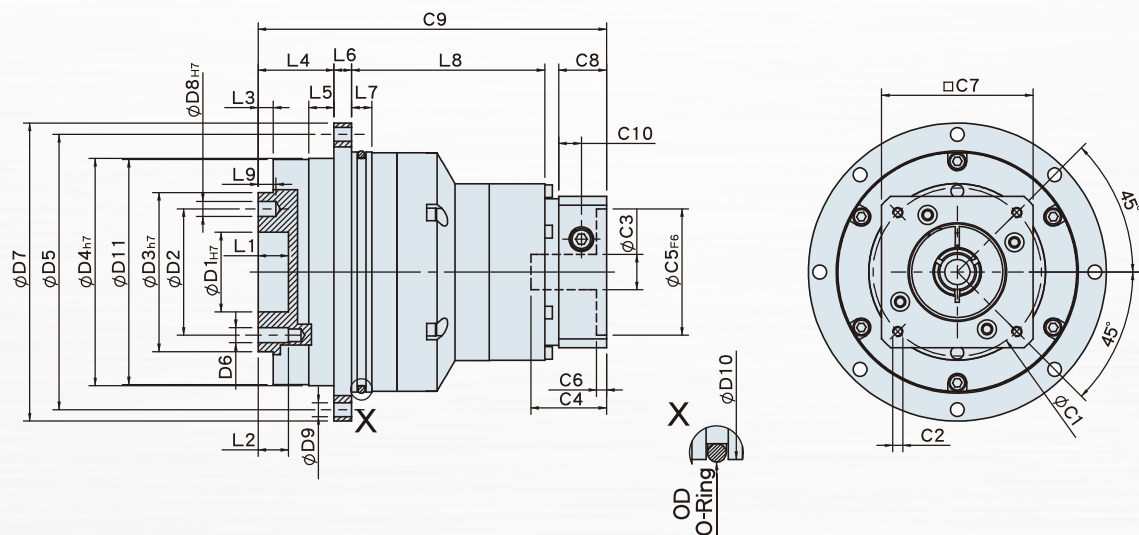
Unit: mm

| Dimensions<br>尺寸   | PHFK42  | PHFK42A | PHFK60  | PHFK90  |
|--------------------|---------|---------|---------|---------|
| D1 H7              | 12      | 12      | 20      | 31.5    |
| D2                 | 20      | 20      | 31.5    | 50      |
| D3 h7              | 28      | 30      | 40      | 63      |
| D4 h7              | 47      | 52      | 64      | 90      |
| D5                 | 67      | 67      | 79      | 109     |
| D6                 | M3x0.5P | M3x0.5P | M5x0.8P | M6x1.0P |
| D7                 | 72      | 72      | 86      | 118     |
| D8 H7              | 3       | 3       | 5       | 6       |
| D9                 | 3.4     | 3.4     | 4.5     | 5.5     |
| D10                | 60      | 60      | 70      | 95      |
| D11                | 46.2    | 51.2    | 63.2    | 89.2    |
| L1                 | 4       | 4       | 8       | 12      |
| L2                 | 6       | 6       | 7.2     | 12      |
| L3                 | 3       | 3       | 3       | 6       |
| L4                 | 19.5    | 19.5    | 19.5    | 30      |
| L5                 | 7       | 7       | 7       | 10      |
| L6                 | 4       | 4       | 4       | 7       |
| L7                 | 5       | 5       | 7.7     | 8       |
| L8                 | 54.5    | 62.2    | 72.5    | 81.5    |
| L9                 | 4       | 4       | 6       | 7       |
| C1 <sup>2</sup>    | 46      | 46      | 70      | 90      |
| C2 <sup>2</sup>    | M4x0.7P | M4x0.7P | M5x0.8P | M6x1.0P |
| C3 <sup>2</sup>    | ≤8/≤11  | ≤8/≤11  | ≤14/≤19 | ≤19/≤24 |
| C4 <sup>2</sup>    | 28.6    | 28.6    | 36.5    | 41.2    |
| C5 <sup>2</sup> F6 | 30      | 30      | 50      | 70      |
| C6 <sup>2</sup>    | 4.1     | 4.1     | 4       | 6.7     |
| C7 <sup>2</sup>    | 42      | 42      | 60      | 90      |
| C8 <sup>2</sup>    | 17      | 17      | 19      | 25.5    |
| C9 <sup>2</sup>    | 103     | 110.7   | 127.5   | 151.1   |
| C10 <sup>2</sup>   | 7.4     | 7.4     | 9       | 11.3    |
| OD                 | 56x2    | 56x2    | 66x2    | 90x3    |

\*2. C1~C10 are motor specific dimensions (metric std shown), sizes may vary according to motor flange. Specifications subject to change without notice.

\*2. C1~C10 是公製標準馬達連接板尺寸，請依所選用的馬達決定。本公司有權針對以上數據規格進行設計變更不先行告知。

## PHFK Double Stage Dims.-2 雙段外型尺寸圖-2



### Specifications 規格

Unit: mm

| Dimensions 尺寸                 | PHFK60T | PHFK90T | PHFK115T | PHFK142T    | PHFK200T |
|-------------------------------|---------|---------|----------|-------------|----------|
| D1 <sub>H7</sub>              | 20      | 31.5    | 40       | 50          | 80       |
| D2                            | 31.5    | 50      | 63       | 80          | 125      |
| D3 <sub>H7</sub>              | 40      | 63      | 80       | 100         | 160      |
| D4 <sub>H7</sub>              | 64      | 90      | 110      | 140         | 200      |
| D5                            | 79      | 109     | 135      | 168         | 233      |
| D6                            | M5x0.8P | M6x1.0P | M6x1.0P  | M8x1.25P    | M10x1.5P |
| D7                            | 86      | 118     | 145      | 179         | 247      |
| D8 <sub>H7</sub>              | 5       | 6       | 6        | 8           | 10       |
| D9                            | 4.5     | 5.5     | 5.5      | 6.6         | 9        |
| D10                           | 70      | 95      | 120      | 152         | 212      |
| D11                           | 63.2    | 89.2    | 109.2    | 139.2       | 199.2    |
| L1                            | 8       | 12      | 12       | 12          | 12       |
| L2                            | 7.2     | 12      | 13.5     | 16          | 22.5     |
| L3                            | 3       | 6       | 6        | 6           | 8        |
| L4                            | 19.5    | 30      | 29       | 38          | 50       |
| L5                            | 7       | 10      | 10       | 14.6        | 15       |
| L6                            | 4       | 7       | 8        | 10          | 12       |
| L7                            | 7.7     | 8       | 10       | 12          | 17       |
| L8                            | 65.2    | 69.5    | 93.5     | 110         | 161.7    |
| L9                            | 6       | 7       | 7        | 7           | 10       |
| C1 <sup>2</sup>               | 46      | 70      | 90       | 115         | 145      |
| C2 <sup>2</sup>               | M4x0.7P | M5x0.8P | M6x1.0P  | M8x1.25P    | M8x1.25P |
| C3 <sup>2</sup>               | ≤8/≤11  | ≤14/≤19 | ≤19/≤24  | ≤24/≤32/≤38 | ≤35/≤38  |
| C4 <sup>2</sup>               | 28.6    | 36.5    | 41.2     | 51.1        | 69.7     |
| C5 <sup>2</sup> <sub>F6</sub> | 30      | 50      | 70       | 95          | 110      |
| C6 <sup>2</sup>               | 4.1     | 4       | 6.7      | 6           | 8.5      |
| C7 <sup>2</sup>               | 42      | 60      | 90       | 115         | 140      |
| C8 <sup>2</sup>               | 17      | 19      | 25.5     | 30          | 38       |
| C9 <sup>2</sup>               | 113.7   | 138     | 163.1    | 198         | 281      |
| C10 <sup>2</sup>              | 7.4     | 9       | 11.3     | 13.9        | 17.8     |
| OD                            | 66x2    | 90x3    | 110x3    | 145x3       | 200x5    |

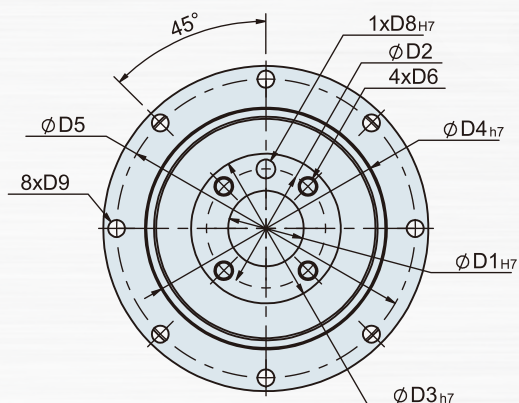
\*2. C1 ~ C10 are motor specific dimensions (metric std shown), sizes may vary according to motor flange. Specification subject to change without notice.

\*2. C1 ~ C10 是公製標準馬達連接板尺寸，請依所選用的馬達決定。本公司有權針對以上數據規格進行設計變更不先行告知。

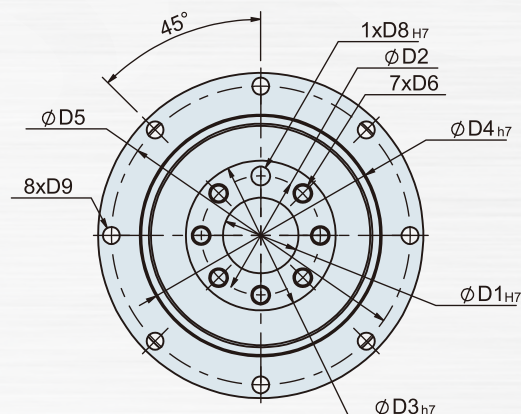


## PHFK Flange Dims. 法蘭面尺寸圖

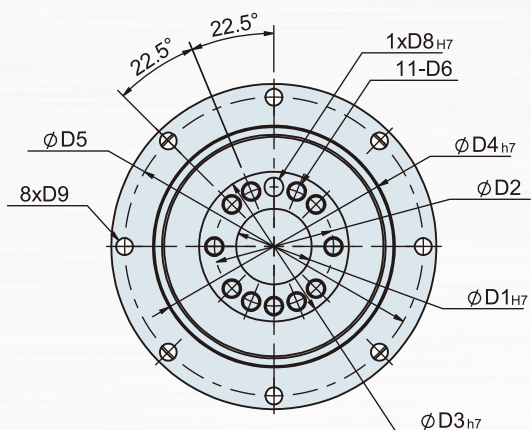
PHFK42  
PHFK42A



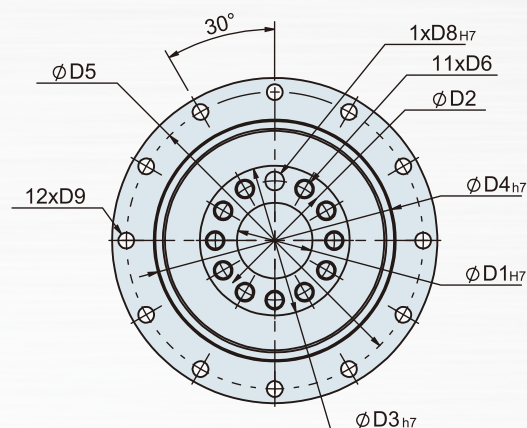
PHFK60  
PHFK90



PHFK115



PHFK142  
PHFK200



## Specifications 規格

Unit: mm

| Dimensions<br>尺寸 | PHFK42  | PHFK42A | PHFK60  | PHFK90  | PHFK115 | PHFK142  | PHFK200  |
|------------------|---------|---------|---------|---------|---------|----------|----------|
| D1 <sub>H7</sub> | 12      | 12      | 20      | 31.5    | 40      | 50       | 80       |
| D2               | 20      | 20      | 31.5    | 50      | 63      | 80       | 125      |
| D3 <sub>H7</sub> | 28      | 30      | 40      | 63      | 80      | 100      | 160      |
| D4 <sub>H7</sub> | 47      | 52      | 64      | 90      | 110     | 140      | 200      |
| D5               | 67      | 67      | 79      | 109     | 135     | 168      | 233      |
| D6               | M3x0.5P | M3x0.5P | M5x0.8P | M6x1.0P | M6x1.0P | M8x1.25P | M10x1.5P |
| D8 <sub>H7</sub> | 3       | 3       | 5       | 6       | 6       | 8        | 10       |
| D9               | 3.4     | 3.4     | 4.5     | 5.5     | 5.5     | 6.6      | 9        |

★ Specifications subject to change without notice. 本公司有權針對以上數據規格逕行設計變更不先行告知。

# PHFK Specs. Table 性能規格共表

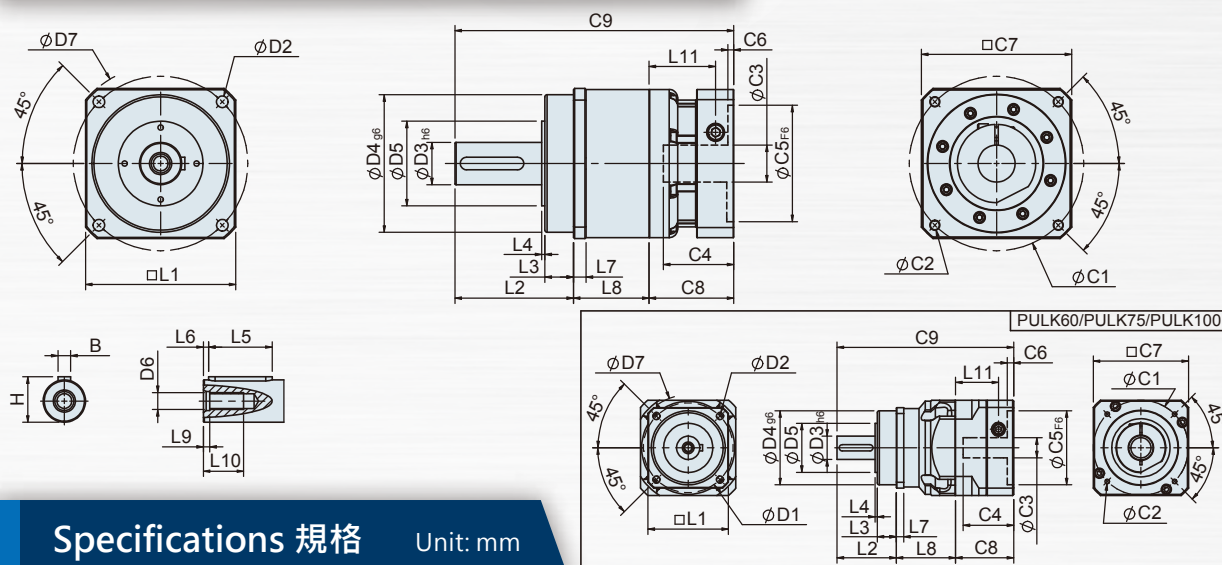
| Specifications 規格                                                                                                                                                                                                                                                                                                                                                                                                                       |                  | Stage<br>節數                                                                                                          | Ratio<br>減速比   | PHFK42<br>PHFK42A                          | PHFK60         | PHFK90         | PHFK115    | PHFK142      | PHFK200      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----------------------------------------------------------------------------------------------------------------------|----------------|--------------------------------------------|----------------|----------------|------------|--------------|--------------|
| Nominal Output Torque $T_{2N}$<br>額定輸出力矩                                                                                                                                                                                                                                                                                                                                                                                                | N • m            | 1                                                                                                                    | 3              | -                                          | 40             | 105            | 180        | 340          | 580          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         |                  |                                                                                                                      | 4              | 16                                         | 43             | 110            | 240        | 500          | 1100         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         |                  |                                                                                                                      | 5              | 17                                         | 50             | 130            | 290        | 600          | 1200         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         |                  |                                                                                                                      | 7              | 14                                         | 44             | 125            | 270        | 530          | 1100         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         |                  | 2                                                                                                                    | 10             | 11                                         | 37             | 95             | 220        | 430          | 900          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         |                  |                                                                                                                      | Ratio<br>減速比   | PHFK42<br>PHFK42A                          | PHFK60(T)      | PHFK90(T)      | PHFK115T   | PHFK142T     | PHFK200T     |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         |                  |                                                                                                                      | 15             | -                                          | 40             | 105            | 180        | 600          | 1200         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         |                  |                                                                                                                      | 20             | 16                                         | 43             | 110            | 240        | 600          | 1200         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         |                  |                                                                                                                      | 25             | 17                                         | 50             | 130            | 290        | 600          | 1200         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         |                  |                                                                                                                      | 30             | 17                                         | 50             | 130            | 290        | 600          | 1200         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         |                  |                                                                                                                      | 35             | 17                                         | 50             | 130            | 290        | 600          | 1200         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         |                  |                                                                                                                      | 40             | 17                                         | 50             | 130            | 290        | 600          | 1200         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         |                  |                                                                                                                      | 50             | 17                                         | 50             | 130            | 290        | 600          | 1200         |
| 70                                                                                                                                                                                                                                                                                                                                                                                                                                      | 14               | 44                                                                                                                   | 125            | 270                                        | 530            | 1100           |            |              |              |
| 100                                                                                                                                                                                                                                                                                                                                                                                                                                     | 11               | 37                                                                                                                   | 95             | 220                                        | 430            | 900            |            |              |              |
| Emergency Stop Torque $T_{2NOT}$<br>急停力矩                                                                                                                                                                                                                                                                                                                                                                                                | N • m            | 3.0 times of Nominal Output Torque 3.0倍額定輸出力矩<br>(*最大輸出力矩 Max. Output Torque $T_{2B}$ =60% of Emergency Stop Torque) |                |                                            |                |                |            |              |              |
| Starting Torque<br>啓動力矩                                                                                                                                                                                                                                                                                                                                                                                                                 | N • m            | 1<br>2                                                                                                               | 3-10<br>12-100 | 0.05<br>0.05                               | 0.09<br>0.09   | 0.3<br>0.25    | 0.6<br>0.3 | 1.6<br>0.55  | 4.2<br>1.4   |
| Nominal Input Speed $n_{1N}$<br>額定輸入轉速                                                                                                                                                                                                                                                                                                                                                                                                  | rpm              | 1,2                                                                                                                  | 3-100          | 5000                                       | 5000           | 4000           | 4000       | 3000         | 3000         |
| Max. Input Speed $n_{1max}$<br>最大輸入轉速                                                                                                                                                                                                                                                                                                                                                                                                   | rpm              | 1,2                                                                                                                  | 3-100          | 10000                                      | 10000          | 8000           | 8000       | 6000         | 5000         |
| Micro Backlash P0<br>超精密背隙                                                                                                                                                                                                                                                                                                                                                                                                              | arcmin           | 1<br>2                                                                                                               | 3-10<br>12-100 | ≤ 2<br>≤ 4                                 | ≤ 2<br>≤ 4     | ≤ 2<br>≤ 4     | ≤ 1<br>≤ 3 | ≤ 1<br>≤ 3   | ≤ 1<br>≤ 3   |
| Precision Backlash P1<br>精密背隙                                                                                                                                                                                                                                                                                                                                                                                                           | arcmin           | 1<br>2                                                                                                               | 3-10<br>12-100 | ≤ 4<br>≤ 6                                 | ≤ 4<br>≤ 6     | ≤ 4<br>≤ 6     | ≤ 3<br>≤ 5 | ≤ 3<br>≤ 5   | ≤ 3<br>≤ 5   |
| Standard Backlash P2<br>標準背隙                                                                                                                                                                                                                                                                                                                                                                                                            | arcmin           | 1<br>2                                                                                                               | 3-10<br>12-100 | ≤ 8<br>≤ 10                                | ≤ 8<br>≤ 10    | ≤ 8<br>≤ 10    | ≤ 5<br>≤ 7 | ≤ 5<br>≤ 7   | ≤ 5<br>≤ 7   |
| Torsional Rigidity<br>扭轉剛性                                                                                                                                                                                                                                                                                                                                                                                                              | N • m<br>/arcmin | 1,2                                                                                                                  | 3-100          | 6                                          | 12             | 30             | 80         | 150          | 450          |
| Max. Bending Moment $M_{2kB}^1$<br>容許彎曲力矩                                                                                                                                                                                                                                                                                                                                                                                               | N • m            | 1,2                                                                                                                  | 3-100          | 37                                         | 110            | 250            | 435        | 1170         | 2360         |
| Max. Axial Load $F_{2aB}^1$<br>容許軸向力                                                                                                                                                                                                                                                                                                                                                                                                    | N                | 1,2                                                                                                                  | 3-100          | 870                                        | 1200           | 2500           | 3380       | 8000         | 10050        |
| Operating Temp. 使用溫度                                                                                                                                                                                                                                                                                                                                                                                                                    | °C               |                                                                                                                      | 3-100          | -10 °C ~ +90 °C                            |                |                |            |              |              |
| Service Life 使用壽命                                                                                                                                                                                                                                                                                                                                                                                                                       | hr               |                                                                                                                      | 3-100          | 30,000 (15,000/ Continuous Operation 連續運轉) |                |                |            |              |              |
| Efficiency<br>效率                                                                                                                                                                                                                                                                                                                                                                                                                        | %                | 1<br>2                                                                                                               | 3-10<br>12-100 | ≥ 97%<br>≥ 94%                             |                |                |            |              |              |
| Weight<br>重量                                                                                                                                                                                                                                                                                                                                                                                                                            | kg               | 1<br>2                                                                                                               | 3-10<br>12-100 | 0.7<br>1.1                                 | 1.5<br>2.3/1.8 | 3.3<br>6.0/4.1 | 6.2<br>8.1 | 13.6<br>17.9 | 32.1<br>38.6 |
| Mounting Position 安裝方向                                                                                                                                                                                                                                                                                                                                                                                                                  | -                | 1,2                                                                                                                  | 3-100          | Any Direction 任意方向                         |                |                |            |              |              |
| Noise Level <sup>2</sup> 噪音值                                                                                                                                                                                                                                                                                                                                                                                                            | dBA/1m           | 1,2                                                                                                                  | 3-100          | 56                                         | 58             | 60             | 63         | 65           | 67           |
| Protection Class 防護等級                                                                                                                                                                                                                                                                                                                                                                                                                   | -                | 1,2                                                                                                                  | 3-100          | IP54                                       |                |                |            |              |              |
| Lubrication 潤滑                                                                                                                                                                                                                                                                                                                                                                                                                          | -                | 1,2                                                                                                                  | 3-100          | Synthetic Lubricant 全合成潤滑油脂                |                |                |            |              |              |
| Inertia (J1) 減速機轉動慣量                                                                                                                                                                                                                                                                                                                                                                                                                    |                  |                                                                                                                      |                |                                            |                |                |            |              |              |
| Stage 節數                                                                                                                                                                                                                                                                                                                                                                                                                                | Ratio 減速比        | unit 單位                                                                                                              |                | PHFK42(A)                                  | PHFK60         | PHFK90         | PHFK115    | PHFK142      | PHFK200      |
| 1                                                                                                                                                                                                                                                                                                                                                                                                                                       | 3                | Kg • cm <sup>2</sup>                                                                                                 |                | -                                          | 0.19           | 0.72           | 2.35       | 9.05         | 29.80        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         | 4                |                                                                                                                      |                | 0.02                                       | 0.18           | 0.67           | 1.66       | 7.17         | 25.86        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         | 5                |                                                                                                                      |                | 0.02                                       | 0.17           | 0.65           | 1.50       | 6.52         | 23.63        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         | 7                |                                                                                                                      |                | 0.02                                       | 0.14           | 0.60           | 1.45       | 6.17         | 22.92        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         | 10               |                                                                                                                      |                | 0.02                                       | 0.14           | 0.58           | 1.41       | 6.10         | 22.73        |
| Stage 節數                                                                                                                                                                                                                                                                                                                                                                                                                                | Ratio 減速比        |                                                                                                                      |                | PHFK42(A)                                  | PHFK60(T)      | PHFK90(T)      | PHFK115T   | PHFK142T     | PHFK200T     |
| 2                                                                                                                                                                                                                                                                                                                                                                                                                                       | 15/20            |                                                                                                                      |                | 0.02                                       | 0.17(0.02)     | 0.65(0.17)     | 0.65       | 2.35         | 9.05         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         | 25/30/35/40      |                                                                                                                      |                | 0.02                                       | 0.14(0.02)     | 0.60(0.14)     | 0.60       | 1.45         | 6.17         |
|                                                                                                                                                                                                                                                                                                                                                                                                                                         | 50/70/100        |                                                                                                                      |                | 0.02                                       | 0.14(0.02)     | 0.58(0.14)     | 0.58       | 1.41         | 6.10         |
| * 1. Applied to the output shaft center @100rpm. 輸出轉速100 rpm時・作用於輸出軸中心位置。<br>* 2. Measured at 3000 rpm with no load. These values are measured by gearbox with ratio = 10 (1-stage) or ratio = 100 (2-stage) at nominal input speed or 3000 rpm (If nominal input speed is higher than 3000 rpm) with no load. 3000 rpm空載量測。<br>※ The above figures/specifications are subject to change without prior notice. 本公司有權對以上數據規格逕行設計變更不先行告知。 |                  |                                                                                                                      |                |                                            |                |                |            |              |              |

\* 1. Applied to the output shaft center @100rpm. 輸出轉速100 rpm時，作用於輸出軸中心位置。  
 \* 2. Measured at 3000 rpm with no load. These values are measured by gearbox with ratio = 10 (1-stage) or ratio = 100 (2-stage) at nominal input speed or 3000 rpm (If nominal input speed is higher than 3000 rpm) with no load. 3000 rpm空載量測。  
 ※ The above figures/specifications are subject to change without prior notice. 本公司有權對以上數據規格逕行設計變更不先行告知。

# SERIES PULK



## PULK Single Stage Dims. 單段外型尺寸圖



## Specifications 規格 Unit: mm

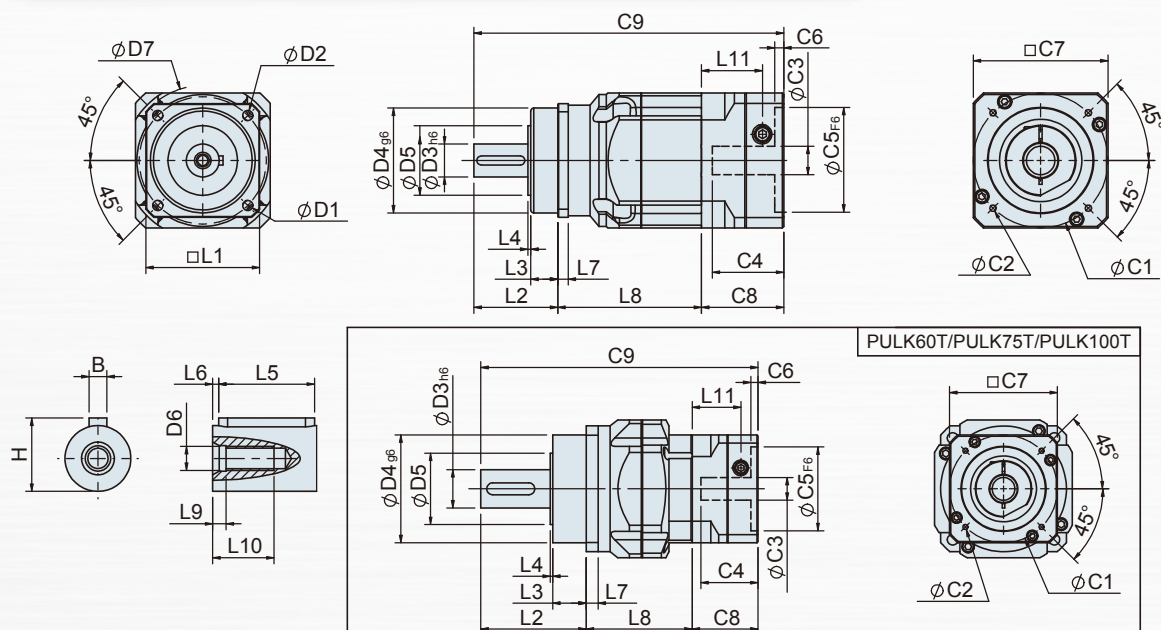
| Dimensions 尺寸                 | PULK60  | PULK75   | PULK100     | PULK140  | PULK180   |
|-------------------------------|---------|----------|-------------|----------|-----------|
| D1                            | 68      | 85       | 120         | 165      | 215       |
| D2                            | 5.5     | 6.8      | 9           | 11       | 13        |
| D3 <sub>h6</sub>              | 16      | 22       | 32          | 40       | 55        |
| D4 <sub>g6</sub>              | 60      | 70       | 90          | 130      | 160       |
| D5                            | 34.4    | 46.4     | 59.6        | 79.2     | 94.5      |
| D6                            | M5x0.8P | M8x1.25P | M12x1.75P   | M16x2.0P | M20x2.5P  |
| D7                            | 80      | 100      | 138         | 186      | 239       |
| L1                            | 62      | 76       | 105         | 142      | 180       |
| L2                            | 48.5    | 56       | 88          | 112      | 112       |
| L3                            | 18.5    | 18       | 28          | 27       | 27        |
| L4                            | 1.5     | 2        | 2           | 3        | 3         |
| L5                            | 25      | 32       | 40          | 60       | 70        |
| L6                            | 2       | 2        | 5           | 5        | 6         |
| L7                            | 6       | 7        | 10          | 12       | 15        |
| L8                            | 32.5    | 56       | 46          | 71.5     | 92        |
| L9                            | 4       | 4.5      | 6           | 6        | 8         |
| L10                           | 16.5    | 20.5     | 30          | 38       | 48        |
| L11                           | 35.5    | 40.5     | 41.8        | 62.8     | 74        |
| C1 <sup>2</sup>               | 70      | 90       | 115         | 165      | 200       |
| C2 <sup>2</sup>               | M5x0.8P | M6x1.0P  | M8x1.25P    | M10x1.5P | M12x1.75P |
| C3 <sup>2</sup>               | ≤14/≤19 | ≤19/≤24  | ≤24/≤32/≤38 | ≤35/≤38  | ≤50       |
| C4 <sup>2</sup>               | 37      | 47.8     | 51          | 66.5     | 81        |
| C5 <sup>2</sup> <sub>F6</sub> | 50      | 70       | 95          | 130      | 114.3     |
| C6 <sup>2</sup>               | 4       | 6        | 6           | 5.5      | 6         |
| C7 <sup>2</sup>               | 60      | 90       | 115         | 140      | 180       |
| C8 <sup>2</sup>               | 46      | 55       | 58          | 80       | 93        |
| C9 <sup>2</sup>               | 127     | 167      | 192         | 263.5    | 297       |
| B                             | 5       | 6        | 10          | 12       | 16        |
| H                             | 18      | 24.5     | 35          | 43       | 59        |

\*2. C1~C9 are motor specific dimensions (metric std shown), sizes may vary according to motor flange. Specifications subject to change without notice.

\*2. C1~C9 是公製標準馬達連接板尺寸，請依所選用的馬達決定。本公司有權針對以上數據規格進行設計變更不先行告知。



## PULK Double Stage Dims.-1 雙段外型尺寸圖-1



## Specifications 規格

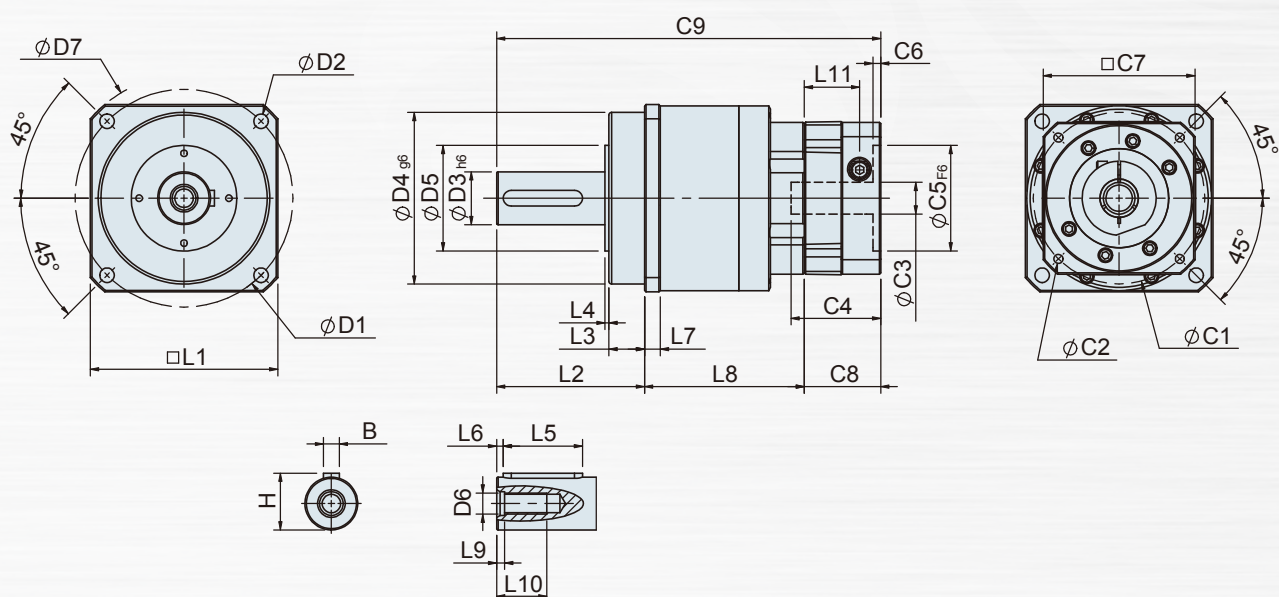
Unit: mm

| Dimensions 尺寸                 | PULK60  | PULK60T | PULK75   | PULK75T | PULK100T  |
|-------------------------------|---------|---------|----------|---------|-----------|
| D1                            | 68      |         | 85       |         | 120       |
| D2                            | 5.5     |         | 6.8      |         | 9         |
| D3 <sub>h6</sub>              | 16      |         | 22       |         | 32        |
| D4 <sub>g6</sub>              | 60      |         | 70       |         | 90        |
| D5                            | 34.4    |         | 46.4     |         | 59.6      |
| D6                            | M5x0.8P |         | M8x1.25P |         | M12x1.75P |
| D7                            | 80      |         | 100      |         | 138       |
| L1                            | 62      |         | 76       |         | 105       |
| L2                            | 48.5    |         | 56       |         | 88        |
| L3                            | 18.5    |         | 18       |         | 28        |
| L4                            | 1.5     |         | 2        |         | 2         |
| L5                            | 25      |         | 32       |         | 40        |
| L6                            | 2       |         | 2        |         | 5         |
| L7                            | 6       |         | 7        |         | 10        |
| L8                            | 65.5    | 61      | 96       | 88.5    | 88.5      |
| L9                            | 4       |         | 4.5      |         | 6         |
| L10                           | 16.5    |         | 20.5     |         | 30        |
| L11                           | 35.5    | 29      | 40.5     | 35.5    | 40.5      |
| C1 <sup>2</sup>               | 70      | 46      | 90       | 70      | 90        |
| C2 <sup>2</sup>               | M5x0.8P | M4x0.7P | M6x1.0P  | M5x0.8P | M6x1.0P   |
| C3 <sup>2</sup>               | ≤14/≤19 | ≤8/≤14  | ≤19/≤24  | ≤14/≤19 | ≤19/≤24   |
| C4 <sup>2</sup>               | 37      | 27      | 47.8     | 37      | 47.8      |
| C5 <sup>2</sup> <sub>F6</sub> | 50      | 30      | 70       | 50      | 70        |
| C6 <sup>2</sup>               | 4       | 4       | 6        | 4       | 6         |
| C7 <sup>2</sup>               | 60      | 42.6    | 90       | 60      | 90        |
| C8 <sup>2</sup>               | 46      | 38.5    | 55       | 46      | 55        |
| C9 <sup>2</sup>               | 160     | 148     | 207      | 190.5   | 231.5     |
| B                             | 5       |         | 6        |         | 10        |
| H                             | 18      |         | 24.5     |         | 35        |

\*2. C1~C9 are motor specific dimensions (metric std shown), sizes may vary according to motor flange. Specifications subject to change without notice.

\*2. C1~C9 是公製標準馬達連接板尺寸，請依所選用的馬達決定。本公司有權針對以上數據規格運行設計變更不先行告知。

## PULK Double Stage Dims.-2 雙段外型尺寸圖-2



## Specifications 規格

Unit: mm

| Dimensions 尺寸                 | PULK140T         | PULK180T   |
|-------------------------------|------------------|------------|
| D1                            | 165              | 215        |
| D2                            | 11               | 13         |
| D3 <sub>h6</sub>              | 40               | 55         |
| D4 <sub>g6</sub>              | 130              | 160        |
| D5                            | 79.2             | 94.5       |
| D6                            | M16x2.0P         | M20x2.5P   |
| D7                            | 186              | 239        |
| L1                            | 142              | 180        |
| L2                            | 112              | 112        |
| L3                            | 27               | 27         |
| L4                            | 3                | 3          |
| L5                            | 60               | 70         |
| L6                            | 5                | 6          |
| L7                            | 12               | 15         |
| L8                            | 121              | 160.2      |
| L9                            | 6                | 8          |
| L10                           | 38               | 48         |
| L11                           | 41.8             | 72.6       |
| C1 <sup>2</sup>               | 130              | 130        |
| C2 <sup>2</sup>               | M8x1.25P         | M8x1.25P   |
| C3 <sup>2</sup>               | ≤ 24/ ≤ 32/ ≤ 38 | ≤ 35/ ≤ 38 |
| C4 <sup>2</sup>               | 51               | 66.7       |
| C5 <sup>2</sup> <sub>F6</sub> | 110              | 110        |
| C6 <sup>2</sup>               | 6                | 5.5        |
| C7 <sup>2</sup>               | 115              | 140        |
| C8 <sup>2</sup>               | 58               | 89.8       |
| C9 <sup>2</sup>               | 291              | 362        |
| B                             | 12               | 16         |
| H                             | 43               | 59         |

\*2. C1~C9 are motor specific dimensions (metric std shown), sizes may vary according to motor flange. Specifications subject to change without notice.

\*2. C1~C9 是公製標準馬達連接板尺寸，請依所選用的馬達決定。本公司有權針對以上數據規格逕行設計變更不先行告知。

# PULK Specs. Table 性能規格共表

| Specifications 規格                                        |                       | Stage<br>節數                                                                                                                  | Ratio<br>減速比   | PULK60                                    | PULK75         | PULK100     | PULK140      | PULK180      |
|----------------------------------------------------------|-----------------------|------------------------------------------------------------------------------------------------------------------------------|----------------|-------------------------------------------|----------------|-------------|--------------|--------------|
| Nominal Output Torque T <sub>2N</sub><br>額定輸出力矩          | N • m                 | 1                                                                                                                            | 3              | 53                                        | 145            | 180         | 340          | 580          |
|                                                          |                       |                                                                                                                              | 4              | 55                                        | 150            | 240         | 500          | 1100         |
|                                                          |                       |                                                                                                                              | 5              | 54                                        | 140            | 290         | 600          | 1200         |
|                                                          |                       |                                                                                                                              | 6              | 46                                        | 135            | 280         | 560          | 1100         |
|                                                          |                       |                                                                                                                              | 7              | 44                                        | 125            | 270         | 530          | 1100         |
|                                                          |                       |                                                                                                                              | 8              | 41                                        | 110            | 240         | 480          | 1000         |
|                                                          |                       |                                                                                                                              | 9              | 37                                        | 95             | 220         | 430          | 900          |
|                                                          |                       | 10                                                                                                                           | 37             | 95                                        | 220            | 430         | 900          |              |
|                                                          |                       | Stage<br>節數                                                                                                                  | Ratio<br>減速比   | PULK60(T)                                 | PULK75(T)      | PULK100T    | PULK140T     | PULK180T     |
|                                                          |                       | 2                                                                                                                            | 15             | 53                                        | 145            | 180         | 520          | 580          |
|                                                          |                       |                                                                                                                              | 20             | 55                                        | 150            | 240         | 600          | 1100         |
|                                                          |                       |                                                                                                                              | 25             | 54                                        | 140            | 290         | 600          | 1200         |
|                                                          |                       |                                                                                                                              | 30             | 54                                        | 140            | 290         | 600          | 1200         |
|                                                          |                       |                                                                                                                              | 35             | 54                                        | 140            | 290         | 600          | 1200         |
|                                                          |                       |                                                                                                                              | 40             | 54                                        | 140            | 290         | 600          | 1200         |
|                                                          |                       |                                                                                                                              | 45             | 54                                        | 140            | 290         | 600          | 1200         |
|                                                          |                       |                                                                                                                              | 50             | 54                                        | 140            | 290         | 600          | 1200         |
|                                                          |                       |                                                                                                                              | 60             | 46                                        | 135            | 280         | 560          | 1200         |
|                                                          |                       |                                                                                                                              | 70             | 44                                        | 125            | 270         | 530          | 1100         |
|                                                          |                       |                                                                                                                              | 80             | 41                                        | 110            | 240         | 480          | 1000         |
|                                                          |                       | 90                                                                                                                           | 37             | 95                                        | 220            | 430         | 900          |              |
| 100                                                      | 37                    | 95                                                                                                                           | 220            | 430                                       | 900            |             |              |              |
| Emergency Stop Torque T <sub>2NOT</sub><br>急停力矩          | N • m                 | 3.0 times of Nominal Output Torque 3.0倍額定輸出力矩<br>(*最大輸出力矩 Max. Output Torque T <sub>2B</sub> = 60% of Emergency Stop Torque) |                |                                           |                |             |              |              |
| Starting Torque<br>啓動力矩                                  | N • m                 | 1<br>2                                                                                                                       | 3-10<br>12-100 | 0.12<br>0.12                              | 0.4<br>0.35    | 0.75<br>0.4 | 2.0<br>0.8   | 5.0<br>1.8   |
| Nominal Input Speed n <sub>1N</sub><br>額定輸入轉速            | rpm                   | 1,2                                                                                                                          | 3-100          | 4000                                      | 3500           | 3000        | 2500         | 2500         |
| Max. Input Speed n <sub>1max</sub><br>最大輸入轉速             | rpm                   | 1,2                                                                                                                          | 3-100          | 6000                                      | 6000           | 5000        | 4500         | 4500         |
| Micro Backlash P0<br>超精密背隙                               | arcmin                | 1<br>2                                                                                                                       | 3-10<br>12-100 | ≤ 2<br>≤ 4                                | ≤ 2<br>≤ 4     | ≤ 1<br>≤ 3  | ≤ 1<br>≤ 3   | ≤ 1<br>≤ 3   |
| Precision Backlash P1<br>精密背隙                            | arcmin                | 1<br>2                                                                                                                       | 3-10<br>12-100 | ≤ 4<br>≤ 6                                | ≤ 4<br>≤ 6     | ≤ 3<br>≤ 5  | ≤ 3<br>≤ 5   | ≤ 3<br>≤ 5   |
| Standard Backlash P2<br>標準背隙                             | arcmin                | 1<br>2                                                                                                                       | 3-10<br>12-100 | ≤ 8<br>≤ 10                               | ≤ 8<br>≤ 10    | ≤ 5<br>≤ 7  | ≤ 5<br>≤ 7   | ≤ 5<br>≤ 7   |
| Torsional Rigidity<br>扭轉剛性                               | N • m<br>/arcmin      | 1,2                                                                                                                          | 3-100          | 7                                         | 14             | 25          | 50           | 150          |
| Max. Radial Load F <sub>2rB</sub> <sup>1</sup><br>容許彎曲力矩 | N                     | 1,2                                                                                                                          | 3-100          | 1800                                      | 4800           | 6950        | 11000        | 21000        |
| Max. Axial Load F <sub>2aB</sub> <sup>1</sup><br>容許軸向力   | N                     | 1,2                                                                                                                          | 3-100          | 1400                                      | 2950           | 4200        | 8500         | 13000        |
| Operating Temp. 使用溫度                                     | °C                    |                                                                                                                              | 3-100          | -10 °C ~ +90 °C                           |                |             |              |              |
| Service Life 使用壽命                                        | hr                    |                                                                                                                              | 3-100          | 30 000 (15 000/Continuous Operation 連續運轉) |                |             |              |              |
| Efficiency<br>效率                                         | %                     | 1<br>2                                                                                                                       | 3-10<br>12-100 | ≥ 97%<br>≥ 94%                            |                |             |              |              |
| Weight<br>重量                                             | kg                    | 1<br>2                                                                                                                       | 3-10<br>12-100 | 1.5<br>2.0/1.7                            | 3.5<br>5.2/4.0 | 6.6<br>8.1  | 14.5<br>17.5 | 30.8<br>37.0 |
| Mounting Position 安裝方向                                   | -                     | 1,2                                                                                                                          | 3-100          | Any Direction 任意方向                        |                |             |              |              |
| Noise Level <sup>2</sup> 噪音值                             | dBA/1m                | 1,2                                                                                                                          | 3-100          | 58                                        | 60             | 63          | 65           | 67           |
| Protection Class 防護等級                                    | -                     | 1,2                                                                                                                          | 3-100          | IP54                                      |                |             |              |              |
| Lubrication 潤滑                                           | -                     | 1,2                                                                                                                          | 3-100          | Synthetic Lubricant 全合成潤滑油脂               |                |             |              |              |
| Inertia (J1) 減速機轉動慣量                                     |                       |                                                                                                                              |                |                                           |                |             |              |              |
| Stage 節數                                                 | Ratio 減速比             | unit 單位                                                                                                                      |                | PULK60                                    | PULK75         | PULK100     | PULK140      | PULK180      |
| 1                                                        | 3                     | Kg • cm <sup>2</sup>                                                                                                         |                | 0.23                                      | 0.97           | 2.35        | 10.00        | 30.50        |
|                                                          | 4                     |                                                                                                                              |                | 0.18                                      | 0.67           | 1.66        | 7.17         | 25.86        |
|                                                          | 5                     |                                                                                                                              |                | 0.17                                      | 0.65           | 1.50        | 6.52         | 23.63        |
|                                                          | 6/7/8                 |                                                                                                                              |                | 0.14                                      | 0.60           | 1.45        | 6.17         | 22.92        |
|                                                          | 9/10                  |                                                                                                                              |                | 0.14                                      | 0.58           | 1.41        | 6.10         | 22.73        |
| Stage 節數                                                 | Ratio 減速比             |                                                                                                                              |                | PULK60(T)                                 | PULK75(T)      | PULK100T    | PULK140T     | PULK180T     |
| 2                                                        | 15/20                 | 0.17(0.02)                                                                                                                   | 0.65(0.17)     | 0.65                                      | 2.35           | 6.52        |              |              |
|                                                          | 25/30/35/40           | 0.14(0.02)                                                                                                                   | 0.60(0.14)     | 0.60                                      | 1.45           | 6.17        |              |              |
|                                                          | 45/50/60/70/80/90/100 | 0.14(0.02)                                                                                                                   | 0.58(0.14)     | 0.58                                      | 1.41           | 6.10        |              |              |

\* 1. Applied to the output shaft center @100rpm. 輸出轉速100 rpm時・作用於輸出軸中心位置。

\* 2. Measured at 3000 rpm with no load. These values are measured by gearbox with ratio = 10 (1-stage) or ratio = 100 (2-stage) at nominal input speed or 3000 rpm (If nominal input speed is higher than 3000 rpm) with no load. 3000 rpm空載量測。

※ The above figures/specifications are subject to change without prior notice. 本公司有權對以上數據規格進行設計變更不先行告知。

Products due to human error, natural disasters or other factors lead to poor or damaged, will not be covered under warranty.

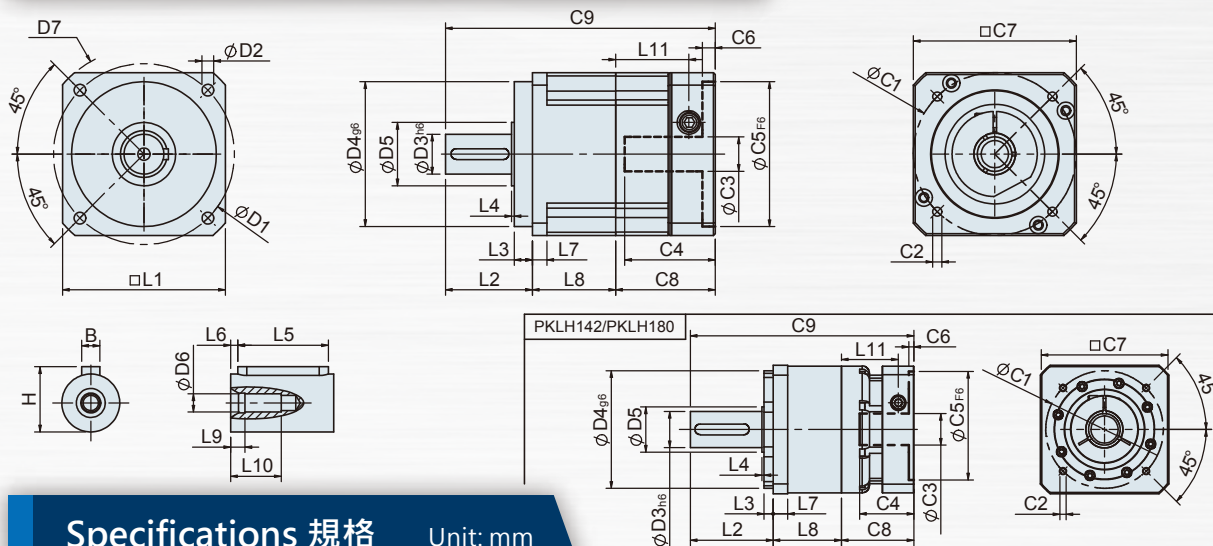
產品因人為原因或天災等因素導致不良或損壞，不在保固範圍內。



# SERIES PKLH



## PKLH Single Stage Dims. 單段外型尺寸圖



## Specifications 規格

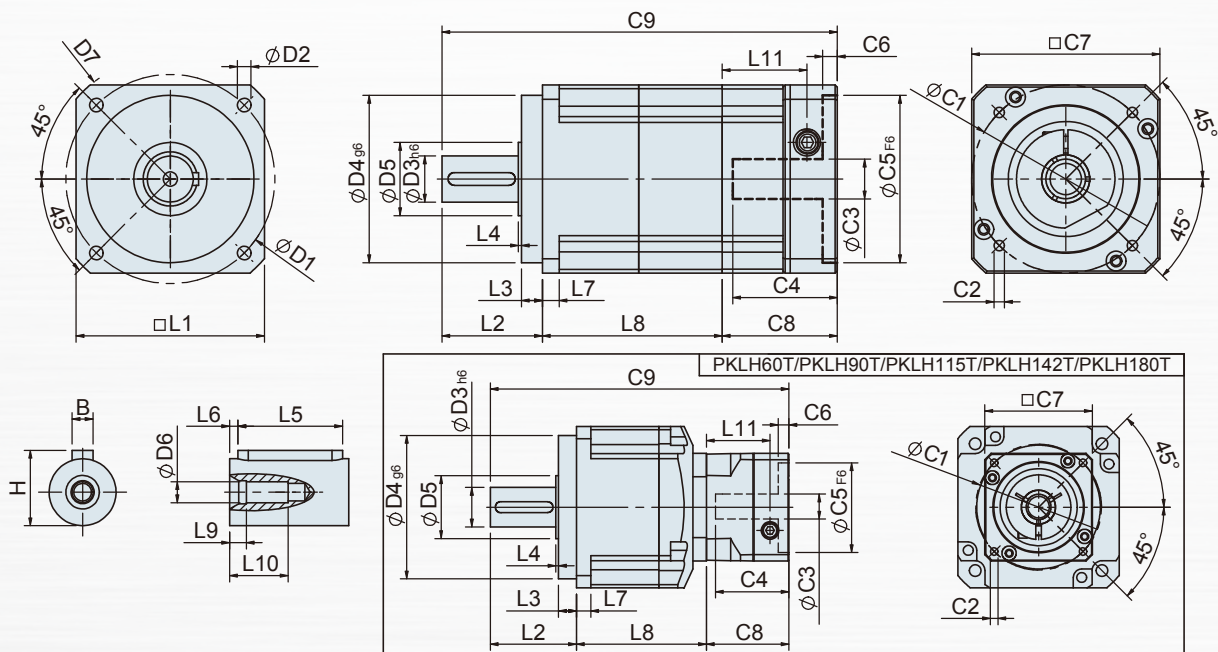
Unit: mm

| Dimensions 尺寸                 | PKLH42  | PKLH60  | PKLH90   | PKLH115     | PKLH142  | PKLH180   |
|-------------------------------|---------|---------|----------|-------------|----------|-----------|
| D1                            | 50      | 70      | 100      | 130         | 165      | 215       |
| D2                            | 3.4     | 5.5     | 6.5      | 8.5         | 10.5     | 13        |
| D3 <sub>h6</sub>              | 13      | 16      | 22       | 32          | 40       | 55        |
| D4 <sub>g6</sub>              | 35      | 50      | 80       | 110         | 130      | 160       |
| D5                            | 15      | 25      | 35       | 45          | 50       | 70        |
| D6                            | M4x0.7P | M5x0.8P | M8x1.25P | M12x1.75P   | M16x2.0P | M20x2.5P  |
| D7                            | 56      | 80      | 118      | 148         | 186      | 239       |
| L1                            | 42.6    | 60      | 90       | 115         | 142      | 182       |
| L2                            | 26      | 37      | 48       | 63          | 91.5     | 100.5     |
| L3                            | 5.5     | 7       | 10       | 10          | 10       | 16        |
| L4                            | 1       | 1.5     | 1.5      | 3.5         | 2.5      | 2.5       |
| L5                            | 15      | 25      | 32       | 40          | 60       | 70        |
| L6                            | 2       | 2       | 3        | 5           | 5        | 6         |
| L7                            | 4       | 6       | 8        | 11          | 16       | 20        |
| L8                            | 28.3    | 37      | 46       | 57          | 75.5     | 94        |
| L9                            | 4       | 4       | 4.5      | 6           | 6        | 8         |
| L10                           | 14      | 16.5    | 20.5     | 30          | 38       | 48        |
| L11                           | 29      | 35.5    | 40.5     | 53.8        | 62.8     | 70        |
| C1 <sup>2</sup>               | 46      | 70      | 90       | 115         | 145      | 200       |
| C2 <sup>2</sup>               | M4x0.7P | M5x0.8P | M6x1.0P  | M8x1.25P    | M8x1.25P | M12x1.75P |
| C3 <sup>2</sup>               | ≤8/≤14  | ≤14/≤19 | ≤19/≤24  | ≤24/≤32/≤38 | ≤35/≤38  | ≤50       |
| C4 <sup>2</sup>               | 27      | 37      | 41       | 56.3        | 66.5     | 82        |
| C5 <sup>2</sup> <sub>F6</sub> | 30      | 50      | 70       | 95          | 110      | 114.3     |
| C6 <sup>2</sup>               | 4       | 4       | 6        | 10          | 5.5      | 10        |
| C7 <sup>2</sup>               | 42.6    | 60      | 90       | 115         | 140      | 180       |
| C8 <sup>2</sup>               | 38.5    | 46      | 55       | 75          | 80       | 95        |
| C9 <sup>2</sup>               | 92.8    | 120     | 149      | 195         | 247      | 289.5     |
| B                             | 5       | 5       | 6        | 10          | 12       | 16        |
| H                             | 15      | 18      | 24.5     | 35          | 43       | 59        |

\*2. C1~C9 are motor specific dimensions (metric std shown), sizes may vary according to motor flange. Specifications subject to change without notice.

\*2. C1~C9 是公製標準馬達連接板尺寸，請依所選用的馬達決定。本公司有權針對以上數據規格逕行設計變更不先行告知。

## PKLH Double Stage Dims. 雙段外型尺寸圖



## Specifications 規格

Unit: mm

| Dimensions<br>尺寸              | PKLH42  | PKLH60  | PKLH60T | PKLH90   | PKLH90T | PKLH115T  | PKLH142T    | PKLH180T |
|-------------------------------|---------|---------|---------|----------|---------|-----------|-------------|----------|
| D1                            | 50      | 70      |         | 100      |         | 130       | 165         | 215      |
| D2                            | 3.4     | 5.5     |         | 6.5      |         | 8.5       | 10.5        | 13       |
| D3 <sub>h6</sub>              | 13      | 16      |         | 22       |         | 32        | 40          | 55       |
| D4 <sub>g6</sub>              | 35      | 50      |         | 80       |         | 110       | 130         | 160      |
| D5                            | 15      | 25      |         | 35       |         | 45        | 50          | 70       |
| D6                            | M4x0.7P | M5x0.8P |         | M8x1.25P |         | M12x1.75P | M16x2.0P    | M20x2.5P |
| D7                            | 56      | 80      |         | 118      |         | 148       | 186         | 239      |
| L1                            | 42.6    | 60      |         | 90       |         | 115       | 142         | 182      |
| L2                            | 26      | 37      |         | 48       |         | 63        | 91.5        | 100.5    |
| L3                            | 5.5     | 7       |         | 10       |         | 10        | 10          | 16       |
| L4                            | 1       | 1.5     |         | 1.5      |         | 3.5       | 2.5         | 2.5      |
| L5                            | 15      | 25      |         | 32       |         | 40        | 60          | 70       |
| L6                            | 2       | 2       |         | 3        |         | 5         | 5           | 6        |
| L7                            | 4       | 6       |         | 8        |         | 11        | 16          | 20       |
| L8                            | 55.3    | 70      | 65.5    | 90       | 78.5    | 99.5      | 127.5       | 166      |
| L9                            | 4       | 4       |         | 4.5      |         | 6         | 6           | 8        |
| L10                           | 14      | 16.5    |         | 20.5     |         | 30        | 38          | 48       |
| L11                           | 29      | 35.5    | 29      | 40.5     | 35.5    | 40.5      | 41.8        | 62.8     |
| C1 <sup>2</sup>               | 46      | 70      | 46      | 90       | 70      | 90        | 115         | 145      |
| C2 <sup>2</sup>               | M4x0.7P | M5x0.8P | M4x0.7P | M6x1.0P  | M5x0.8P | M6x1.0P   | M8x1.25P    | M8x1.25P |
| C3 <sup>2</sup>               | ≤8/≤14  | ≤14/≤19 | ≤8/≤14  | ≤19/≤24  | ≤14/≤19 | ≤19/≤24   | ≤24/≤32/≤38 | ≤35      |
| C4 <sup>2</sup>               | 27      | 37      | 27      | 41       | 37      | 41        | 56          | 66.5     |
| C5 <sup>2</sup> <sub>F6</sub> | 30      | 50      | 30      | 70       | 50      | 70        | 95          | 110      |
| C6 <sup>2</sup>               | 4       | 4       | 4       | 6        | 4       | 6         | 10          | 5.5      |
| C7 <sup>2</sup>               | 42.6    | 60      | 42.6    | 90       | 60      | 90        | 115         | 140      |
| C8 <sup>2</sup>               | 38.5    | 46      | 38.5    | 55       | 46      | 55        | 63          | 80       |
| C9 <sup>2</sup>               | 119.8   | 153     | 141     | 193      | 172.5   | 217.5     | 282         | 346.5    |
| B                             | 5       | 5       |         | 6        |         | 10        | 12          | 16       |
| H                             | 15      | 18      |         | 24.5     |         | 35        | 43          | 59       |

\*2. C1 ~ C9 are motor specific dimensions (metric std shown), sizes may vary according to motor flange. Specifications subject to change without notice.

\*2. C1~C9 是公製標準馬達連接板尺寸，請依所選用的馬達決定。本公司有權針對以上數據規格逕行設計變更不先行告知。

# PKLH Specs. Table 性能規格共表

| Specifications 規格                        | Stage 節數       | Ratio 減速比                                                                                                             | PKLH42 | PKLH60                                    | PKLH90  | PKLH115 | PKLH142 | PKLH180 |
|------------------------------------------|----------------|-----------------------------------------------------------------------------------------------------------------------|--------|-------------------------------------------|---------|---------|---------|---------|
| Nominal Output Torque $T_{2N}$<br>額定輸出力矩 | 1              | 3                                                                                                                     | 19     | 53                                        | 145     | 290     | 520     | 950     |
|                                          |                | 4                                                                                                                     | 20     | 55                                        | 150     | 300     | 550     | 1000    |
|                                          |                | 5                                                                                                                     | 17     | 54                                        | 140     | 290     | 600     | 1050    |
|                                          |                | 6                                                                                                                     | 15     | 46                                        | 135     | 280     | 560     | 1000    |
|                                          |                | 7                                                                                                                     | 14     | 44                                        | 125     | 270     | 530     | 960     |
|                                          |                | 8                                                                                                                     | 12     | 41                                        | 110     | 240     | 480     | 900     |
|                                          |                | 9                                                                                                                     | 11     | 37                                        | 95      | 220     | 430     | 800     |
|                                          |                | 10                                                                                                                    | 11     | 37                                        | 95      | 220     | 430     | 800     |
|                                          | 2              | 15                                                                                                                    | 19     | 53                                        | 145     | 290     | 520     | 950     |
|                                          |                | 20                                                                                                                    | 20     | 55                                        | 150     | 300     | 550     | 1000    |
|                                          |                | 25                                                                                                                    | 17     | 54                                        | 140     | 290     | 600     | 1050    |
|                                          |                | 30                                                                                                                    | 17     | 54                                        | 140     | 290     | 600     | 1050    |
|                                          |                | 35                                                                                                                    | 17     | 54                                        | 140     | 290     | 600     | 1050    |
|                                          |                | 40                                                                                                                    | 17     | 54                                        | 140     | 290     | 600     | 1050    |
|                                          |                | 45                                                                                                                    | 17     | 54                                        | 140     | 290     | 600     | 1050    |
|                                          |                | 50                                                                                                                    | 17     | 54                                        | 140     | 290     | 600     | 1050    |
|                                          |                | 60                                                                                                                    | 15     | 46                                        | 135     | 280     | 560     | 1000    |
|                                          |                | 70                                                                                                                    | 14     | 44                                        | 125     | 270     | 530     | 960     |
|                                          |                | 80                                                                                                                    | 12     | 41                                        | 110     | 240     | 480     | 900     |
|                                          |                | 90                                                                                                                    | 11     | 37                                        | 95      | 220     | 430     | 800     |
|                                          |                | 100                                                                                                                   | 11     | 37                                        | 95      | 220     | 430     | 800     |
| Emergency Stop Torque $T_{2NOT}$<br>急停力矩 | N • m          | 3.0 times of Nominal Output Torque 3.0倍額定輸出力矩<br>(*最大輸出力矩 Max. Output Torque $T_{2B}$ = 60% of Emergency Stop Torque) |        |                                           |         |         |         |         |
| Starting Torque<br>啓動力矩                  | N • m          | 1                                                                                                                     | 3-10   | 0.05                                      | 0.1     | 0.35    | 0.7     | 1.8     |
|                                          |                | 2                                                                                                                     | 12-100 | 0.05                                      | 0.1     | 0.3     | 0.35    | 0.6     |
| Nominal Input Speed $n_{1N}$<br>額定輸入轉速   | rpm            | 1,2                                                                                                                   | 3-100  | 4000                                      | 4000    | 3000    | 3000    | 2500    |
| Max. Input Speed $n_{1max}$<br>最大輸入轉速    | rpm            | 1,2                                                                                                                   | 3-100  | 8000                                      | 8000    | 6000    | 6000    | 5000    |
| Micro Backlash P0<br>超精密背隙               | arcmin         | 1                                                                                                                     | 3-10   | ≤ 4                                       | ≤ 4     | ≤ 4     | ≤ 3     | ≤ 3     |
|                                          |                | 2                                                                                                                     | 12-100 | ≤ 6                                       | ≤ 6     | ≤ 6     | ≤ 5     | ≤ 5     |
| Precision Backlash P1<br>精密背隙            | arcmin         | 1                                                                                                                     | 3-10   | ≤ 6                                       | ≤ 6     | ≤ 6     | ≤ 5     | ≤ 5     |
|                                          |                | 2                                                                                                                     | 12-100 | ≤ 8                                       | ≤ 8     | ≤ 8     | ≤ 7     | ≤ 7     |
| Standard Backlash P2<br>標準背隙             | arcmin         | 1                                                                                                                     | 3-10   | ≤ 8                                       | ≤ 8     | ≤ 8     | ≤ 7     | ≤ 7     |
|                                          |                | 2                                                                                                                     | 12-100 | ≤ 10                                      | ≤ 10    | ≤ 10    | ≤ 9     | ≤ 9     |
| Torsional Rigidity<br>扭轉剛性               | N • m / arcmin | 1,2                                                                                                                   | 3-100  | 2.5                                       | 6       | 12      | 23      | 50      |
| Max. Radial Load $F_{2rB}^1$<br>容許彎曲力矩   | N              | 1,2                                                                                                                   | 3-100  | 640                                       | 1260    | 2230    | 4300    | 7140    |
| Max. Axial Load $F_{2aB}^1$<br>容許軸向力     | N              | 1,2                                                                                                                   | 3-100  | 410                                       | 600     | 1500    | 3310    | 4670    |
| Operating Temp. 使用溫度                     | °C             |                                                                                                                       | 3-100  | -10 °C ~ +90 °C                           |         |         |         |         |
| Service Life 使用壽命                        | hr             |                                                                                                                       | 3-100  | 20,000 (10,000/Continuous Operation 連續運轉) |         |         |         |         |
| Efficiency 效率                            | %              | 1                                                                                                                     | 3-10   | ≥ 97%                                     |         |         |         |         |
|                                          |                | 2                                                                                                                     | 12-100 | ≥ 94%                                     |         |         |         |         |
| Weight 重量                                | kg             | 1                                                                                                                     | 3-10   | 0.6                                       | 1.3     | 3.5     | 7.8     | 16.1    |
|                                          |                | 2                                                                                                                     | 12-100 | 0.9                                       | 2.0/1.6 | 5.6/3.9 | 9.5     | 19      |
| Mounting Position 安裝方向                   | -              | 1,2                                                                                                                   | 3-100  | Any Direction 任意方向                        |         |         |         |         |
| Noise Level $^2$ 噪音值                     | dBA/1m         | 1,2                                                                                                                   | 3-100  | 58                                        | 60      | 63      | 65      | 67      |
| Protection Class 防護等級                    | -              | 1,2                                                                                                                   | 3-100  | IP54                                      |         |         |         |         |
| Lubrication 潤滑                           | -              | 1,2                                                                                                                   | 3-100  | Synthetic Lubricant 全合成潤滑油脂               |         |         |         |         |

## Inertia (J1) 減速機轉動慣量

| Stage 節數 | Ratio 減速比             | unit 單位              | PKLH42 | PKLH60     | PKLH90     | PKLH115  | PKLH142  | PKLH180  |
|----------|-----------------------|----------------------|--------|------------|------------|----------|----------|----------|
| 1        | 3                     | Kg • cm <sup>2</sup> | 0.03   | 0.23       | 0.97       | 2.35     | 10.00    | 30.50    |
|          | 4                     |                      | 0.02   | 0.18       | 0.67       | 1.66     | 7.17     | 25.86    |
|          | 5                     |                      | 0.02   | 0.17       | 0.65       | 1.50     | 6.52     | 23.63    |
|          | 6/7/8                 |                      | 0.02   | 0.14       | 0.60       | 1.45     | 6.17     | 22.92    |
|          | 9/10                  |                      | 0.02   | 0.14       | 0.58       | 1.41     | 6.10     | 22.73    |
| Stage 節數 | Ratio 減速比             |                      | PKLH42 | PKLH60(T)  | PKLH90(T)  | PKLH115T | PKLH142T | PKLH180T |
| 2        | 15/20/25              |                      | 0.02   | 0.17(0.02) | 0.65(0.17) | 0.65     | 1.50     | 6.52     |
|          | 30/35/40              |                      | 0.02   | 0.14(0.02) | 0.60(0.14) | 0.60     | 1.45     | 6.17     |
|          | 45/50/60/70/80/90/100 |                      | 0.02   | 0.14(0.02) | 0.58(0.14) | 0.58     | 1.41     | 6.10     |

\* 1. Applied to the output shaft center @100rpm. 輸出轉速100 rpm時，作用於輸出軸中心位置。

\* 2. Measured at 3000 rpm with no load. These values are measured by gearbox with ratio = 10 (1-stage) or ratio = 100 (2-stage) at nominal input speed or 3000 rpm (If nominal input speed is higher than 3000 rpm) with no load. 3000 rpm空載量測。

※ The above figures/specifications are subject to change without prior notice. 本公司有權對以上數據規格逕行設計變更不先行告知。

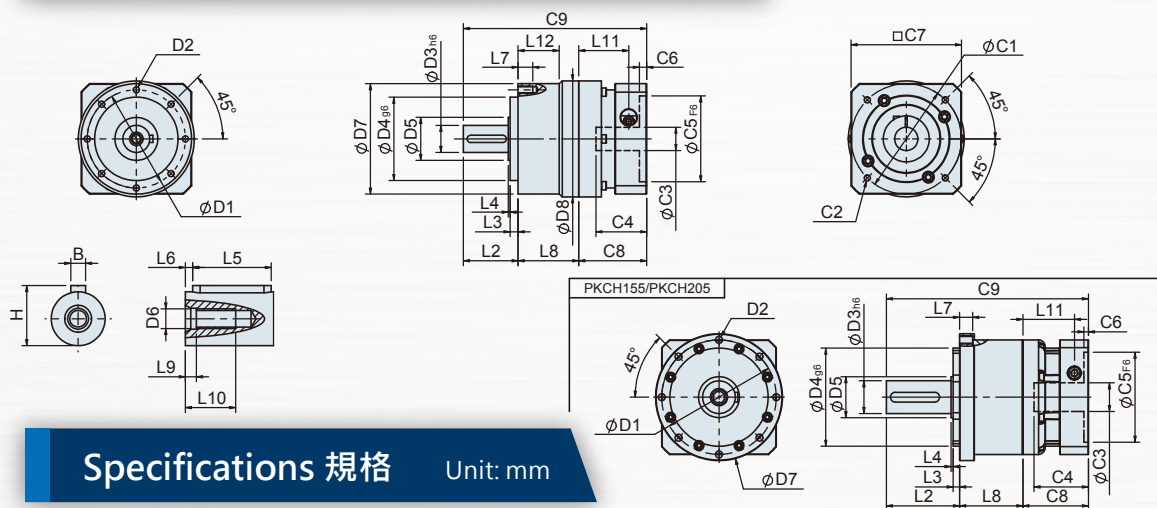
Products due to human error, natural disasters or other factors lead to poor or damaged, will not be covered under warranty.  
產品因人為原因或天災等因素導致不良或損壞，不在保固範圍內。



# SERIES PKCH



## PKCH Single Stage Dims. 單段外型尺寸圖



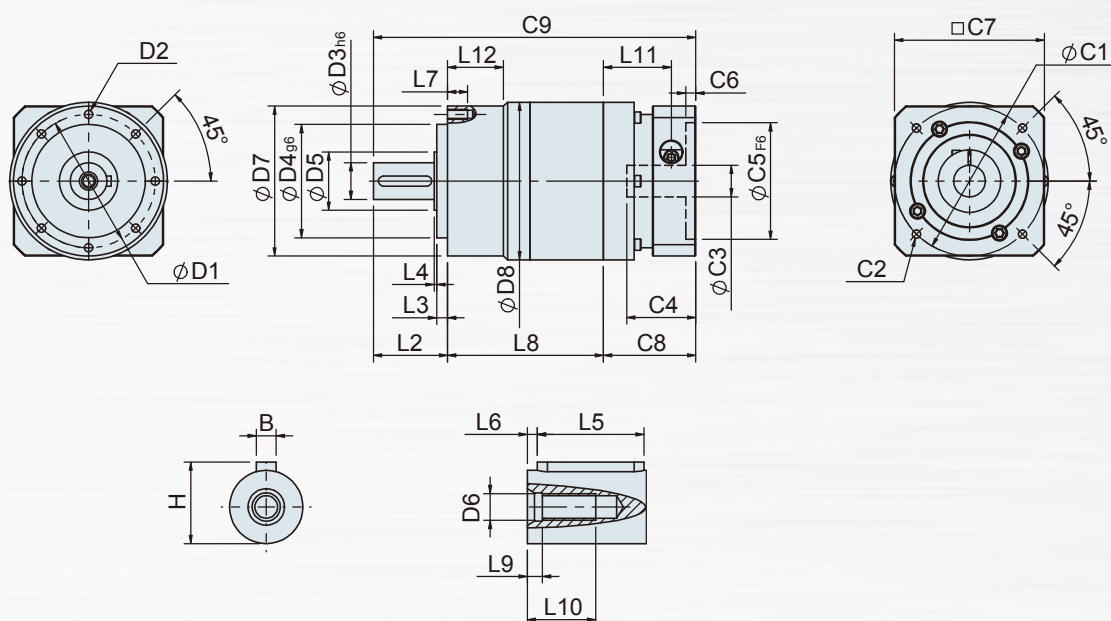
## Specifications 規格 Unit: mm

| Dimensions 尺寸                 | PKCH50   | PKCH70    | PKCH90    | PKCH120         | PKCH155   | PKCH205   |
|-------------------------------|----------|-----------|-----------|-----------------|-----------|-----------|
| D1                            | 44       | 62        | 80        | 108             | 140       | 184       |
| D2                            | M4x0.7P  | M5x0.8P   | M6x1.0P   | M8x1.25P        | M10x1.5P  | M12x1.75P |
| D3 <sub>h6</sub>              | 12       | 16        | 22        | 32              | 40        | 55        |
| D4 <sub>g6</sub>              | 35       | 52        | 68        | 90              | 120       | 160       |
| D5                            | 15       | 25        | 35        | 45              | 50        | 70        |
| D6                            | M4x0.7P  | M5x0.8P   | M8x1.25P  | M12x1.75P       | M16x2.0P  | M20x2.5P  |
| D7                            | 50       | 70        | 90        | 120             | 155       | 205       |
| D8                            | -        | -         | 94.5      | -               | -         | -         |
| L2                            | 24.5     | 36        | 44.5      | 60              | 89.5      | 96.5      |
| L3                            | 4        | 6         | 6.5       | 7               | 8         | 12        |
| L4                            | 1        | 1.5       | 1.5       | 3.5             | 2.5       | 2.5       |
| L5                            | 15       | 25        | 32        | 40              | 60        | 70        |
| L6                            | 2        | 2         | 3         | 5               | 5         | 6         |
| L7                            | 8        | 10        | 12        | 16              | 16        | 20        |
| L8                            | 29.8     | 38        | 49.5      | 60              | 77.5      | 98        |
| L9                            | 4        | 4         | 4.5       | 6               | 6         | 8         |
| L10                           | 12       | 16.5      | 20.5      | 30              | 38        | 48        |
| L11                           | 29       | 35.4      | 40.7      | 53.7            | 63        | 69.5      |
| L12                           | -        | -         | 33.5      | -               | -         | -         |
| C1 <sup>2</sup>               | 46       | 70        | 90        | 115             | 145       | 200       |
| C2 <sup>2</sup>               | M4x0.7P  | M5x0.8P   | M6x1.0P   | M8x1.25P        | M8x1.25P  | M12x1.75P |
| C3 <sup>2</sup>               | ≤8 / ≤11 | ≤14 / ≤19 | ≤19 / ≤24 | ≤24 / ≤32 / ≤38 | ≤35 / ≤38 | ≤50       |
| C4 <sup>2</sup>               | 26.5     | 37.6      | 41.4      | 51.3            | 66.5      | 77        |
| C5 <sup>2</sup> <sub>F6</sub> | 30       | 50        | 70        | 95              | 110       | 114.3     |
| C6 <sup>2</sup>               | 4.1      | 4.5       | 6         | 6               | 5.5       | 6         |
| C7 <sup>2</sup>               | 42       | 60        | 90        | 115             | 140       | 180       |
| C8 <sup>2</sup>               | 38.1     | 46.5      | 55.4      | 70              | 80        | 90        |
| C9 <sup>2</sup>               | 92.4     | 120.5     | 149.4     | 190             | 247       | 284.5     |
| B                             | 4        | 5         | 6         | 10              | 12        | 16        |
| H                             | 13.5     | 18        | 24.5      | 35              | 43        | 59        |

\*2. C1~C9 are motor specific dimensions (metric std shown), sizes may vary according to motor flange. Specifications subject to change without notice.

\*2. C1~C9 是公製標準馬達連接板尺寸，請依所選用的馬達決定。本公司有權針對以上數據規格進行設計變更不先行告知。

# PKCH Double Stage Dims.-1 雙段外型尺寸圖-1



## Specifications 規格

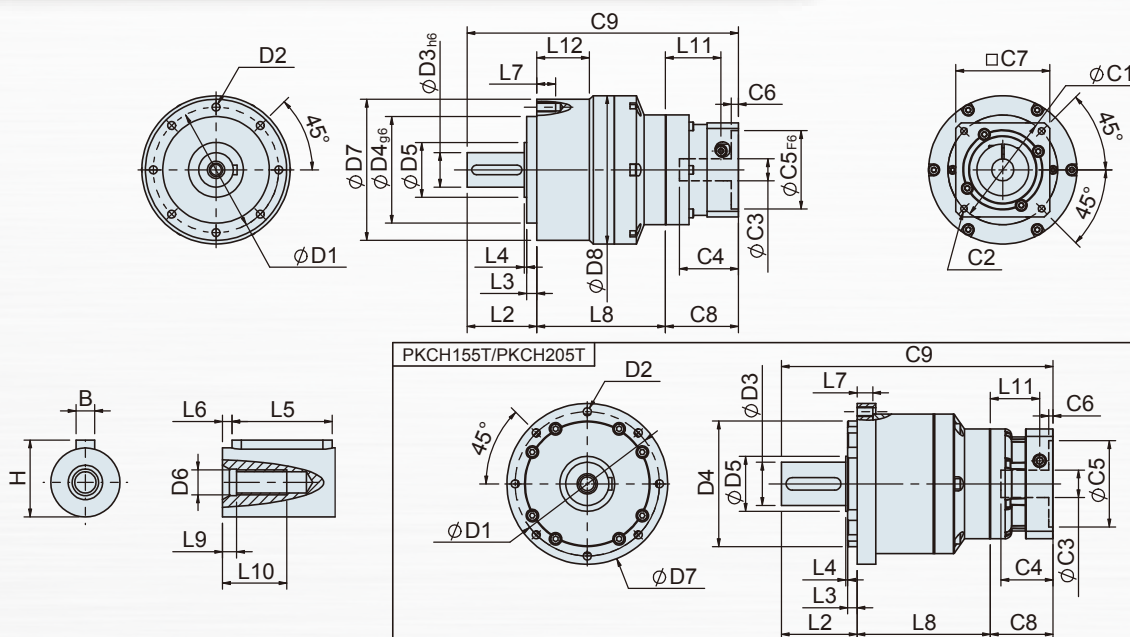
Unit: mm

| Dimensions 尺寸                 | PKCH50             | PKCH70              | PKCH90              |
|-------------------------------|--------------------|---------------------|---------------------|
| D1                            | 44                 | 62                  | 80                  |
| D2                            | M4x0.7P            | M5x0.8P             | M6x1.0P             |
| D3 <sub>h6</sub>              | 12                 | 16                  | 22                  |
| D4 <sub>g6</sub>              | 35                 | 52                  | 68                  |
| D5                            | 15                 | 25                  | 35                  |
| D6                            | M4x0.7P            | M5x0.8P             | M8x1.25P            |
| D7                            | 50                 | 70                  | 90                  |
| D8                            | -                  | -                   | 94.5                |
| L2                            | 24.5               | 36                  | 44.5                |
| L3                            | 4                  | 6                   | 6.5                 |
| L4                            | 1                  | 1.5                 | 1.5                 |
| L5                            | 15                 | 25                  | 32                  |
| L6                            | 2                  | 2                   | 3                   |
| L7                            | 8                  | 10                  | 12                  |
| L8                            | 56.8               | 71                  | 93.5                |
| L9                            | 4                  | 4                   | 4.5                 |
| L10                           | 12                 | 16.5                | 20.5                |
| L11                           | 29                 | 35.4                | 40.7                |
| L12                           | -                  | -                   | 33.5                |
| C1 <sup>2</sup>               | 46                 | 70                  | 90                  |
| C2 <sup>2</sup>               | M4x0.7P            | M5x0.8P             | M6x1.0P             |
| C3 <sup>2</sup>               | $\leq 8 / \leq 11$ | $\leq 14 / \leq 19$ | $\leq 19 / \leq 24$ |
| C4 <sup>2</sup>               | 26.5               | 37.6                | 41.4                |
| C5 <sup>2</sup> <sub>F6</sub> | 30                 | 50                  | 70                  |
| C6 <sup>2</sup>               | 4.1                | 4.5                 | 6                   |
| C7 <sup>2</sup>               | 42                 | 60                  | 90                  |
| C8 <sup>2</sup>               | 38.1               | 46.5                | 55.4                |
| C9 <sup>2</sup>               | 119.4              | 153.5               | 193.4               |
| B                             | 4                  | 5                   | 6                   |
| H                             | 13.5               | 18                  | 24.5                |

\*2. C1~C9 are motor specific dimensions (metric std shown), sizes may vary according to motor flange. Specifications subject to change without notice.

\*2. C1~C9 是公製標準馬達連接板尺寸，請依所選用的馬達決定，本公司有權針對以上數據規格進行設計變更不先行告知。

## PKCH Double Stage Dims.-2 雙段外型尺寸圖-2



## Specifications 規格

Unit: mm

| Dimensions 尺寸                 | PKCH70T | PKCH90T  | PKCH120T  | PKCH155T    | PKCH205T  |
|-------------------------------|---------|----------|-----------|-------------|-----------|
| D1                            | 62      | 80       | 108       | 140         | 184       |
| D2                            | M5x0.8P | M6x1.0P  | M8x1.25P  | M10x1.5P    | M12x1.75P |
| D3 <sub>h6</sub>              | 16      | 22       | 32        | 40          | 55        |
| D4 <sub>g6</sub>              | 52      | 68       | 90        | 120         | 160       |
| D5                            | 25      | 35       | 45        | 50          | 70        |
| D6                            | M5x0.8P | M8x1.25P | M12x1.75P | M16x2.0P    | M20x2.5P  |
| D7                            | 70      | 90       | 120       | 155         | 205       |
| D8                            | -       | 94.5     | -         | -           | -         |
| L2                            | 36      | 44.5     | 60        | 89.5        | 96.5      |
| L3                            | 6       | 6.5      | 7         | 8           | 12        |
| L4                            | 1.5     | 1.5      | 3.5       | 2.5         | 2.5       |
| L5                            | 25      | 32       | 40        | 60          | 70        |
| L6                            | 2       | 3        | 5         | 5           | 6         |
| L7                            | 10      | 12       | 16        | 16          | 20        |
| L8                            | 66.5    | 82       | 102.5     | 129.5       | 170       |
| L9                            | 4       | 4.5      | 6         | 6           | 8         |
| L10                           | 16.5    | 20.5     | 30        | 38          | 48        |
| L11                           | 29      | 35.4     | 40.7      | 53.7        | 63        |
| L12                           | -       | 33.5     | -         | -           | -         |
| C1 <sup>2</sup>               | 46      | 70       | 90        | 115         | 145       |
| C2 <sup>2</sup>               | M4x0.7P | M5x0.8P  | M6x1.0P   | M8x1.25P    | M8x1.25P  |
| C3 <sup>2</sup>               | ≤8/≤11  | ≤14/≤19  | ≤19/≤24   | ≤24/≤32/≤38 | ≤35/≤38   |
| C4 <sup>2</sup>               | 26.5    | 37.6     | 41.4      | 51.3        | 66.5      |
| C5 <sup>2</sup> <sub>F6</sub> | 30      | 50       | 70        | 95          | 110       |
| C6 <sup>2</sup>               | 4.1     | 4.5      | 6         | 6           | 5.5       |
| C7 <sup>2</sup>               | 42      | 60       | 90        | 115         | 140       |
| C8 <sup>2</sup>               | 38.1    | 46.5     | 55.4      | 70          | 80        |
| C9 <sup>2</sup>               | 140.6   | 173      | 217.9     | 289         | 346.5     |
| B                             | 5       | 6        | 10        | 12          | 16        |
| H                             | 18      | 24.5     | 35        | 43          | 59        |

\*2. C1~C9 are motor specific dimensions (metric std shown), sizes may vary according to motor flange. Specifications subject to change without notice.

\*2. C1~C9 是公製標準馬達連接板尺寸，請依所選用的馬達決定。本公司有權針對以上數據規格逕行設計變更不先行告知。



## PKCH Specs. Table 性能規格共表

| Specifications 規格                                        |                       | Stage<br>節數          | Ratio<br>減速比                                                                                                                 | PKCH50                                    | PKCH70         | PKCH90         | PKCH120     | PKCH155    | PKCH205    |
|----------------------------------------------------------|-----------------------|----------------------|------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|----------------|----------------|-------------|------------|------------|
| Nominal Output Torque T <sub>2N</sub><br>額定輸出力矩          | N • m                 | 1                    | 3                                                                                                                            | 19                                        | 53             | 145            | 290         | 520        | 950        |
|                                                          |                       |                      | 4                                                                                                                            | 20                                        | 55             | 150            | 300         | 550        | 1000       |
|                                                          |                       |                      | 5                                                                                                                            | 17                                        | 54             | 140            | 290         | 600        | 1050       |
|                                                          |                       |                      | 6                                                                                                                            | 15                                        | 46             | 135            | 280         | 560        | 1000       |
|                                                          |                       |                      | 7                                                                                                                            | 14                                        | 44             | 125            | 270         | 530        | 960        |
|                                                          |                       |                      | 8                                                                                                                            | 12                                        | 41             | 110            | 240         | 480        | 900        |
|                                                          |                       |                      | 9                                                                                                                            | 11                                        | 37             | 95             | 220         | 430        | 800        |
|                                                          |                       |                      | 10                                                                                                                           | 11                                        | 37             | 95             | 220         | 430        | 800        |
|                                                          |                       | Stage<br>節數          | Ratio<br>減速比                                                                                                                 | PKCH50                                    | PKCH70(T)      | PKCH90(T)      | PKCH120T    | PKCH155T   | PKCH205T   |
|                                                          |                       | 2                    | 15                                                                                                                           | 19                                        | 53             | 145            | 290         | 520        | 950        |
|                                                          |                       |                      | 20                                                                                                                           | 20                                        | 55             | 150            | 300         | 550        | 1000       |
|                                                          |                       |                      | 25                                                                                                                           | 17                                        | 54             | 140            | 290         | 600        | 1050       |
|                                                          |                       |                      | 30                                                                                                                           | 17                                        | 54             | 140            | 290         | 600        | 1050       |
|                                                          |                       |                      | 35                                                                                                                           | 17                                        | 54             | 140            | 290         | 600        | 1050       |
|                                                          | 40                    |                      | 17                                                                                                                           | 54                                        | 140            | 290            | 600         | 1050       |            |
|                                                          | 45                    |                      | 17                                                                                                                           | 54                                        | 140            | 290            | 600         | 1050       |            |
|                                                          | 50                    |                      | 17                                                                                                                           | 54                                        | 140            | 290            | 600         | 1050       |            |
|                                                          | 60                    |                      | 15                                                                                                                           | 46                                        | 135            | 280            | 560         | 1000       |            |
|                                                          | 70                    |                      | 14                                                                                                                           | 44                                        | 125            | 270            | 530         | 960        |            |
|                                                          | 80                    | 12                   | 41                                                                                                                           | 110                                       | 240            | 480            | 900         |            |            |
|                                                          | 90                    | 11                   | 37                                                                                                                           | 95                                        | 220            | 430            | 800         |            |            |
|                                                          | 100                   | 11                   | 37                                                                                                                           | 95                                        | 220            | 430            | 800         |            |            |
| Emergency Stop Torque T <sub>2NOT</sub><br>急停力矩          | N • m                 |                      | 3.0 times of Nominal Output Torque 3.0倍額定輸出力矩<br>(* 最大輸出力矩 Max. Output Torque T <sub>2B</sub> =60% of Emergency Stop Torque) |                                           |                |                |             |            |            |
| Starting Torque<br>啓動力矩                                  | N • m                 | 1<br>2               | 3-10<br>12-100                                                                                                               | 0.05<br>0.05                              | 0.1<br>0.1     | 0.35<br>0.3    | 0.7<br>0.35 | 1.8<br>0.6 | 4.5<br>1.5 |
| Nominal Input Speed n <sub>1N</sub><br>額定輸入轉速            | rpm                   | 1,2                  | 3-100                                                                                                                        | 4000                                      | 4000           | 3000           | 3000        | 2500       | 2500       |
| Max. Input Speed n <sub>1max</sub><br>最大輸入轉速             | rpm                   | 1,2                  | 3-100                                                                                                                        | 8000                                      | 8000           | 6000           | 6000        | 5000       | 4000       |
| Precision Backlash P1<br>精密背隙                            | arcmin                | 1<br>2               | 3-10<br>12-100                                                                                                               | ≤ 6<br>≤ 8                                | ≤ 6<br>≤ 8     | ≤ 6<br>≤ 8     | ≤ 5<br>≤ 7  | ≤ 5<br>≤ 7 | ≤ 5<br>≤ 7 |
| Standard Backlash P2<br>標準背隙                             | arcmin                | 1<br>2               | 3-10<br>12-100                                                                                                               | ≤ 8<br>≤ 10                               | ≤ 8<br>≤ 10    | ≤ 8<br>≤ 10    | ≤ 7<br>≤ 9  | ≤ 7<br>≤ 9 | ≤ 7<br>≤ 9 |
| Torsional Rigidity<br>扭轉剛性                               | N • m<br>/arcmin      | 1,2                  | 3-100                                                                                                                        | 2.5                                       | 6              | 12             | 23          | 50         | 145        |
| Max. Radial Load F <sub>2rB</sub> <sup>1</sup><br>容許彎曲力矩 | N                     | 1,2                  | 3-100                                                                                                                        | 640                                       | 1260           | 2230           | 4300        | 7140       | 11050      |
| Max. Axial Load F <sub>2aB</sub> <sup>1</sup><br>容許軸向力   | N                     | 1,2                  | 3-100                                                                                                                        | 410                                       | 600            | 1500           | 3310        | 4670       | 6460       |
| Operating Temp. 使用溫度                                     | °C                    |                      | 3-100                                                                                                                        | -10 °C ~ +90 °C                           |                |                |             |            |            |
| Service Life 使用壽命                                        | hr                    |                      | 3-100                                                                                                                        | 20,000 (10,000/Continuous Operation 連續運轉) |                |                |             |            |            |
| Efficiency<br>效率                                         | %                     | 1<br>2               | 3-10<br>12-100                                                                                                               | ≥ 97%<br>≥ 94%                            |                |                |             |            |            |
| Weight<br>重量                                             | kg                    | 1<br>2               | 3-10<br>12-100                                                                                                               | 0.6<br>0.9                                | 1.3<br>2.0/1.6 | 3.5<br>5.6/3.9 | 7.8<br>9.5  | 16.1<br>19 | 27<br>34   |
| Mounting Position 安裝方向                                   | -                     | 1,2                  | 3-100                                                                                                                        | Any Direction 任意方向                        |                |                |             |            |            |
| Noise Level <sup>2</sup> 噪音值                             | dBA/1m                | 1,2                  | 3-100                                                                                                                        | 58                                        | 60             | 63             | 65          | 67         | 68         |
| Protection Class 防護等級                                    | -                     | 1,2                  | 3-100                                                                                                                        | IP54                                      |                |                |             |            |            |
| Lubrication 潤滑                                           | -                     | 1,2                  | 3-100                                                                                                                        | Synthetic Lubricant 全合成潤滑油脂               |                |                |             |            |            |
| Inertia (J1) 減速機轉動慣量                                     |                       |                      |                                                                                                                              |                                           |                |                |             |            |            |
| Stage 節數                                                 | Ratio 減速比             | unit 單位              |                                                                                                                              | PKCH50                                    | PKCH70         | PKCH90         | PKCH120     | PKCH155    | PKCH205    |
| 1                                                        | 3                     | Kg • cm <sup>2</sup> |                                                                                                                              | 0.03                                      | 0.23           | 0.97           | 2.35        | 10.00      | 30.50      |
|                                                          | 4                     |                      |                                                                                                                              | 0.02                                      | 0.18           | 0.67           | 1.66        | 7.17       | 25.86      |
|                                                          | 5                     |                      |                                                                                                                              | 0.02                                      | 0.17           | 0.65           | 1.50        | 6.52       | 23.63      |
|                                                          | 6/7/8                 |                      |                                                                                                                              | 0.02                                      | 0.14           | 0.60           | 1.45        | 6.17       | 22.92      |
|                                                          | 9/10                  |                      |                                                                                                                              | 0.02                                      | 0.14           | 0.58           | 1.41        | 6.10       | 22.73      |
| Stage 節數                                                 | Ratio 減速比             |                      |                                                                                                                              | PKCH50                                    | PKCH70(T)      | PKCH90(T)      | PKCH120T    | PKCH155T   | PKCH205T   |
| 2                                                        | 15/20/25              |                      |                                                                                                                              | 0.02                                      | 0.17(0.02)     | 0.65(0.17)     | 0.65        | 1.50       | 6.52       |
|                                                          | 30/35/40              |                      |                                                                                                                              | 0.02                                      | 0.14(0.02)     | 0.60(0.14)     | 0.60        | 1.45       | 6.17       |
|                                                          | 45/50/60/70/80/90/100 |                      |                                                                                                                              | 0.02                                      | 0.14(0.02)     | 0.58(0.14)     | 0.58        | 1.41       | 6.10       |

\* 1. Applied to the output shaft center @100rpm. 輸出轉速100 rpm時，作用於輸出軸中心位置。

\* 2. Measured at 3000 rpm with no load. These values are measured by gearbox with ratio = 10 (1-stage) or ratio = 100 (2-stage) at nominal input speed or 3000 rpm (If nominal input speed is higher than 3000 rpm) with no load. 3000 rpm空載量測。

※ The above figures/specifications are subject to change without prior notice. 本公司有權對以上數據規格逕行設計變更不先行告知。

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**SESAME MOTOR CORP.**

## 世協電機股份有限公司

台中市神岡區和陸路一段599號  
599, Sec 1, Hemu Rd., Shengang, Taichung,  
42953, Taiwan

TEL : +886-4-2561-0011

FAX : +886-4-2562-7766

[www.sesamemotor.com](http://www.sesamemotor.com)

[info@sesamemotor.com.tw](mailto:info@sesamemotor.com.tw)

Skype Phone : sesame\_motor

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