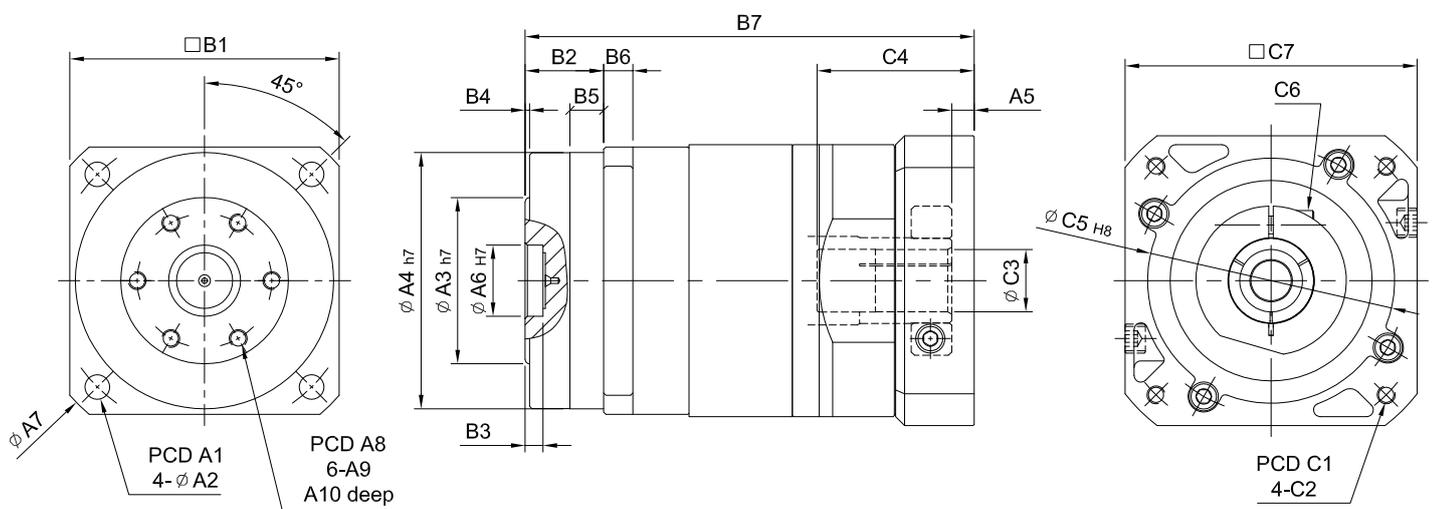
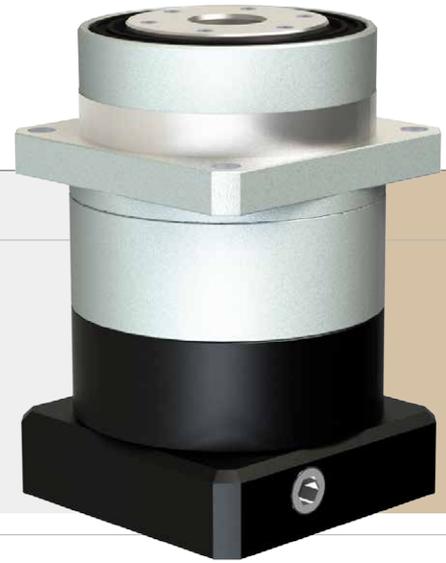


## MODEL : FD

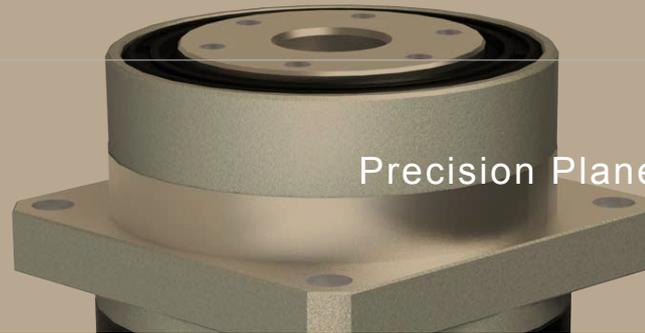
雙段 2-Stage

RATIO : 15, 20, 25, 30, 35, 40, 50, 70, 100



unit: mm

| Model Code  | 60                       | 90            | 120             | 170               |
|-------------|--------------------------|---------------|-----------------|-------------------|
| <b>A</b> A1 | 70                       | 105           | 135             | 190               |
| A2          | 5.5                      | 9             | 11              | 13                |
| A3          | 38                       | 59.6          | 74.6            | 119.6             |
| A4          | 56                       | 85            | 115             | 165               |
| A5          | 5.5                      | 5.5 · 6       | 10              | 10                |
| A6          | 14                       | 24            | 32              | 47                |
| A7          | 80                       | 119           | 158             | 218               |
| A8          | 30                       | 45            | 60              | 100               |
| A9          | M4xP0.7                  | M6xP1.0       | M8xP1.25        | M8xP1.25          |
| A10         | 8                        | 12            | 16              | 16                |
| <b>B</b> B1 | 60                       | 90            | 120             | 170               |
| B2          | 21                       | 27            | 35              | 53                |
| B3          | 5                        | 5             | 8               | 10                |
| B4          | 1                        | 1             | 2               | 2                 |
| B5          | 8                        | 11            | 15              | 22                |
| B6          | 8                        | 10            | 13              | 16                |
| B7          | 92.5                     | 124.5 · 132.5 | 200             | 222 · 242         |
| <b>C</b> C1 | 45 · 46 · 48.5 · 63 · 70 | 70 · 90       | 115 · 145 · 165 | 115 · 145 · 165   |
| C2          | M3 · M4 · M5             | M5 · M6       | M6 · M8 · M10   | M6 · M8 · M10     |
| C3          | 8 · 9 · 10 · 12.7 · 14   | 14 · 19       | 24 · 28 · 32    | 24 · 28 · 32 · 35 |
| C4          | 33                       | 33.5 · 41.5   | 67              | 67 · 82           |
| C5          | 30 · 40 · 50             | 50 · 70       | 95 · 110 · 130  | 95 · 110 · 130    |
| C6          | M4xP0.7                  | M5xP0.8       | M8xP1.25        | M8xP1.25          |
| C7          | 46 · 55 · 60             | 80            | 122 · 130 · 150 | 122 · 130 · 150   |



Precision Planetary Reducer

| 規格<br>Parameter   | 代號         | 單位<br>Unit | 速比<br>Ratio | 60  | 90        | 120       | 170       |
|---|------------|------------|-------------|---|-----------|-----------|-----------|
| 額定輸出扭矩 Rated Output Torque<br>(Nominal output torque)   | $T_{2N}$   | Nm         | 15          | 15  | 112       | 216       | -         |
|   |            |            | 20          | 20  | 110       | 208       | 491       |
|   |            |            | 25          | 25  | 108       | 333       | 510       |
|   |            |            | 30          | 30  | 112       | 216       | -         |
|   |            |            | 35          | 35  | 105       | 309       | 473       |
|   |            |            | 40          | 40  | 110       | 208       | 491       |
|   |            |            | 50          | 50  | 108       | 333       | 510       |
|   |            |            | 70          | 70  | 105       | 309       | 473       |
|   |            |            | 100         | 100   | 294       | 542       |           |
| 最大加速扭矩 Max. Acceleration Torque                         | $T_{2B}$   | Nm         | 15~100      | 1.8 倍額定輸出力矩 1.8 Times of Rated Output Torque  |           |           |           |
| 最大輸出扭矩 Max. Output Torque<br>急停扭矩 Emergency Stop Torque | $T_{2NOT}$ | Nm         | 15~100      | 3 倍額定輸出力矩 3 Times of Rated Output Torque  |           |           |           |
| 額定輸入轉速 Rated Input Speed                                | $n_{1N}$   | rpm        | 15~100      | 3,000   |           |           |           |
| 最大輸入轉速 Max. Input Speed                                 | $n_{1B}$   | rpm        | 15~100      | 5,000   |           |           |           |
| 扭轉剛性 Torsional Rigidity                                 |            | Nm/arcmin  | 15~100      | 4   | 12        | 27        | 49        |
| 容許徑向力 Max. Radial Force                                 | $F_{2rB}$  | N          | 15~100      | 460   | 1,400     | 2,260     | 3,300     |
| 容許軸向力 Max. Axial Force                                  | $F_{2aB}$  | N          | 15~100      | 230   | 660       | 1,130     | 1,650     |
| 使用壽命 Service Life                                       | $L_H$      | hr         | 15~100      | S5 周期運轉 : >30,000(S1 連續運轉 : >15,000 小時)<br>S5 Cycle Operation : >30,000(S1 Continuous Operation : >15,000hrs) |           |           |           |
| 效率 Efficiency   | $\eta$     | %          | 15~100      | $\leq 94\%$   |           |           |           |
| 使用溫度 Operating Temperature                              |            | °C         | 15~100      | - 25° C ~ + 90° C   |           |           |           |
| 潤滑 Lubrication  |            |            | 15~100      | 全合成潤滑油脂 Synthetic Grease  |           |           |           |
| 防護等級 Protection Class                                   |            |            | 15~100      | IP 65   |           |           |           |
| 安裝方向 Mounting Position                                  |            |            | 15~100      | 任意方向 Any  |           |           |           |
| 噪音值 Noise Level   |            | dB         | 15~100      | $\leq 58$   | $\leq 62$ | $\leq 65$ | $\leq 67$ |
| 重量 Weight $\pm 2\%$                                     |            | Kg         | 15~100      | 1.24  | 3.3       |           |           |

■ 轉動慣量 Mass Moments of Inertia (kg.cm<sup>2</sup>)

| Ratio | 60 | 90   | 120  | 170  |
|-------|----|------|------|------|
| 15    | 50 | 0.45 | 3.21 | -    |
| 20    | 68 | 0.42 | 2.8  | 6.63 |
| 25    | 22 | 0.42 | 2.71 | 6.63 |
| 30    | 50 | 0.42 | 3.21 | -    |
| 35    | 63 | 0.42 | 2.54 | 6.55 |
| 40    | 68 | 0.42 | 2.8  | 6.63 |
| 50    | 72 | 0.42 | 2.71 | 6.63 |
| 70    | 63 | 0.42 | 2.54 | 6.55 |
| 100   | 45 | 0.42 | 2.51 | 6.46 |