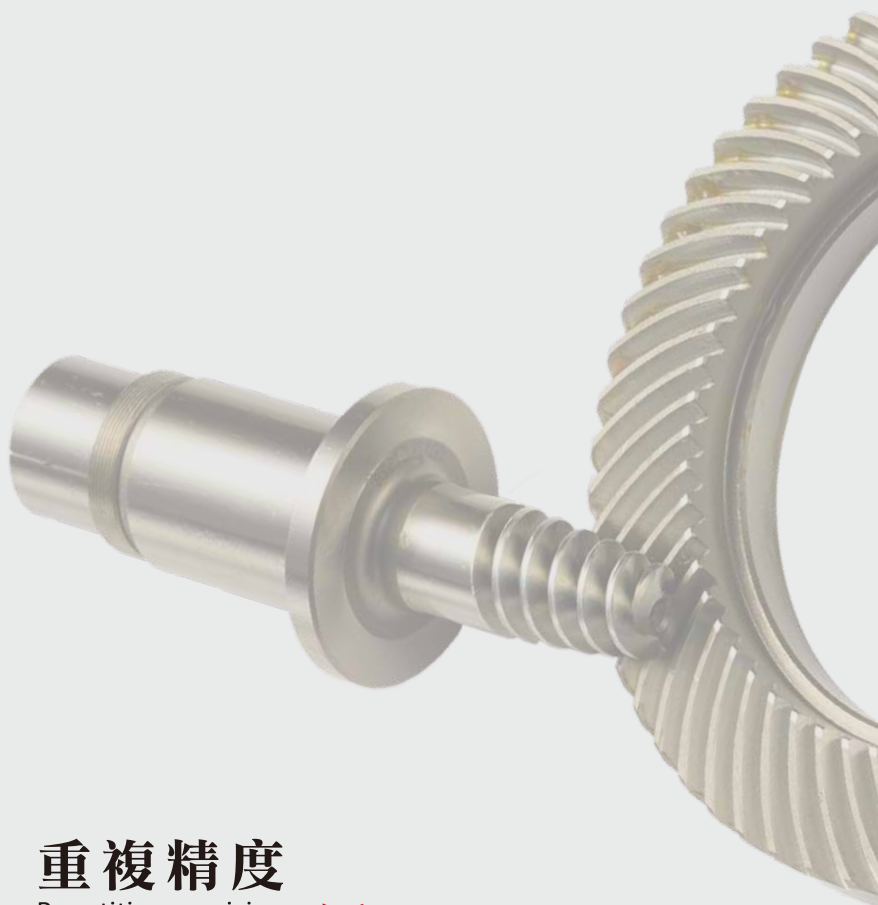


HD

海波齒旋轉台

Hypoid Gear Drive

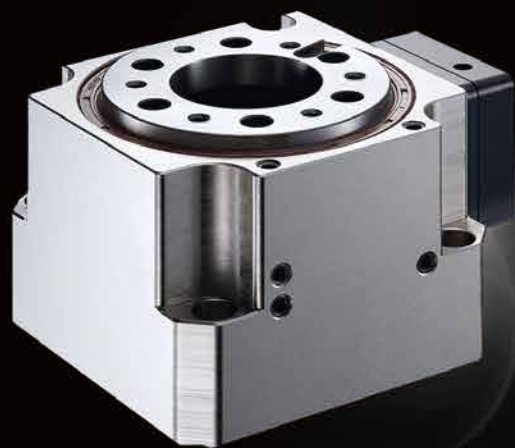
High precision Drive



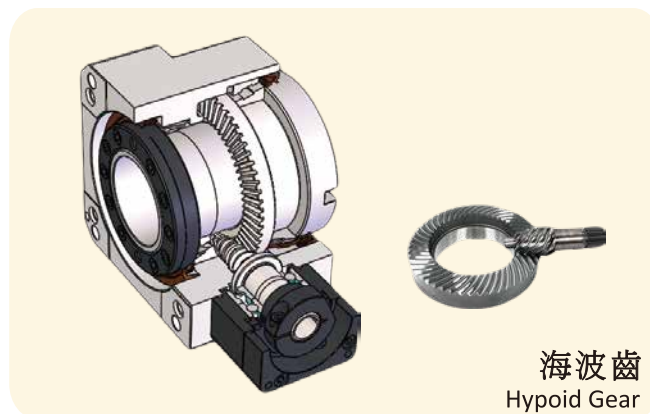
重複精度

Repetitive precision

≤ 5 rev/sec

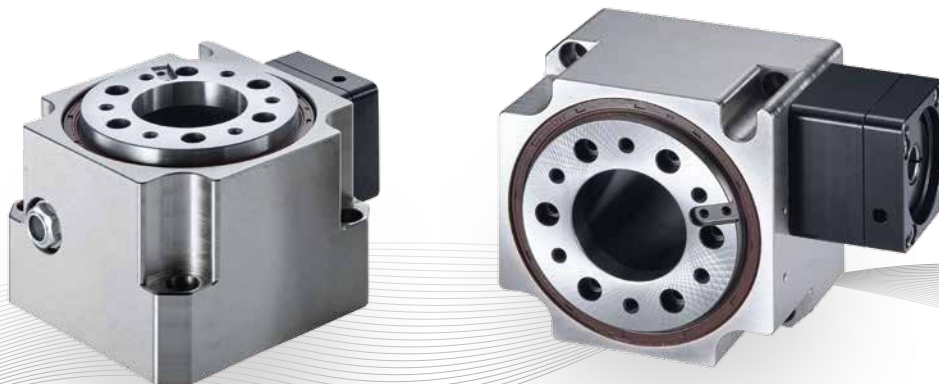


HD 多曲面螺旋驅動



高精度旋轉定位 High-precision rotation positioning

海波齒又名戩齒輪，它是直交軸傳動，具螺旋狀的齒輪，它不同於螺旋傘型齒輪，它具備高減速比、高傳動效率、高轉矩、高精度、低磨耗的優點，傳動精度可達10角秒。



Feature 1

IP65防護 Protection

具防水等級
適用於濕式環境
Waterproof grade
Suitable for wet environments

Feature 2

高剛性·高扭矩 High rigidity · high torque

合金鋼外殼及大模數齒根設計
最適用於大慣量負載的旋轉需求
Alloy steel shell and large modulus tooth root design
Suitable for large inertial load rotation needs

Feature 3

高精度 High precision

齒輪達JIS 0 級要求(齒輪幾何公差 $\leq 0.002\text{mm}$)
超低背隙
Gear up to JIS 0 rating
(gear geometry tolerance $\leq 0.002\text{mm}$) Ultra low backlash

Feature 4

高傳導效率 High conduction efficiency

齒輪以螺旋導程設計,以滑動方式轉動
傳動效率達96%
Gears designed with spiral lead, rotated in a sliding manner Transmission efficiency up to 96%

Feature 5

超低噪音 Ultra low noise

1500rpm運轉噪音值小於50dB
1500rpm running noise value is less than 50dB

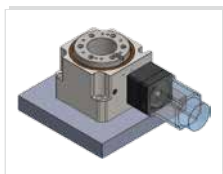
Feature 6

壽命長 Long life

使用高硬度、高密度齒輪材料
精度壽命佳
Using high hardness, high density gear materials with excellent life expectancy

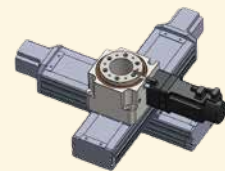


■ 應用範例 Application



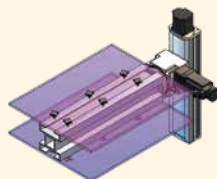
臥式安裝 Horizontal installation

HD 最適用於大盤徑、大慣量
需快速定位的旋轉用途



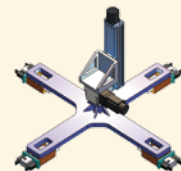
臥式安裝 Horizontal installation

馬達側向安裝，方便結合X-Y平台應用



立式安裝 Vertical installation

可使用於側向懸臂旋轉



吊式安裝 Hanging installation

高剛性機殼及軸承設計
HD 具備高承重倒裝使用



HD 100 - 30

V1

規格
Table size

減速比
Ratio

馬達規格
Motor type

100
150
200

HD100		HD150		HD200	
V1 V2	400W 伺服馬達	V1 V2	750W 伺服馬達	V1 V2	1000W 伺服馬達
T1 T2 T3 T4 T5	60型 步進馬達	T1 T2	86型 步進馬達		

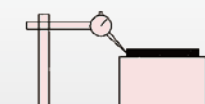


型號 / 規格 Model		HD100-30 □	HD150-30 □	HD200-30 □
容許轉矩 Max. torque	N-m	115	230	480
容許軸向載重 (Ka) Max. axial load	kg	250	600	1100
容許軸向力 (Fa) Max. axial force	N-m	200	400	700
容許徑向力 (Fr) Max. radial force	N-m	250	500	900
容許盤向轉速 Max. speed of table		540° / sec		360° / sec
減速比 Gear ratio	i	30:1		
定位精度 (絕對) Positioning precision	arc-sec	± 25	± 20	± 15
定位精度 (相對) Positioning precision	arc-sec	± 10	± 7	± 5
重複精度 Repetitive precision	arc-sec	≤ 8"	≤ 5"	≤ 5"
精度壽命 Lifetime of precision	hr	> 30000		
保護等級 Protection rating		IP65		
允許環境溫度 Temperature		-10°C ~ 60°C		
質量 Weight	kg	8.5	18.6	61

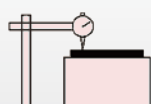
· 原點Sensor規格(選購) OMRON EE-SX672

盤面精度檢測 Positioning precision inspection

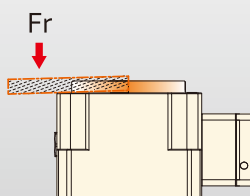
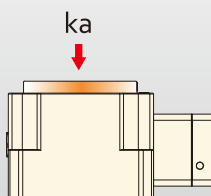
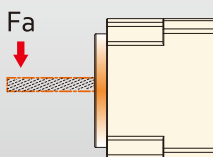
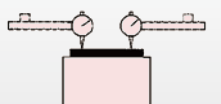
盤面同心度檢測
Concentricity inspection for table
≤ 0.008mm



盤面旋轉振幅
Amplitude of rotation for table
≤ 0.005mm



盤面與底座平行度
Parallelism for table and base
≤ 0.01mm

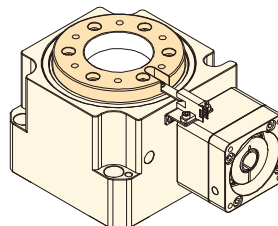
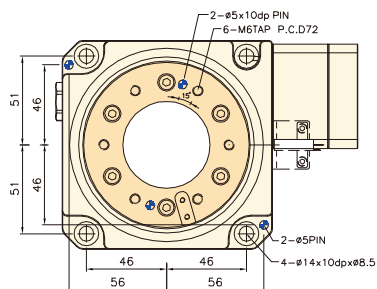


特別需求 Special request

- ▲ 盤面同心度，可製作 ≤ 0.002 mm 精度，請各別洽談
- ▲ 盤面旋轉振幅，可製作 ≤ 0.002 mm 精度，請各別洽談
- ▲ 盤面平行度，可製作 ≤ 0.002 mm 精度，請各別洽談

The customization of ≤ 0.002mm rotation amplitude / ≤ 0.002mm parallelism is also available. For special needs, please contact with us.

- HD100
- HD150
- HD200



型號識別

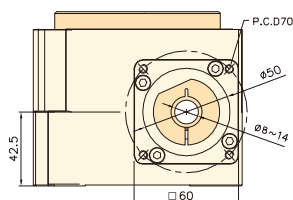
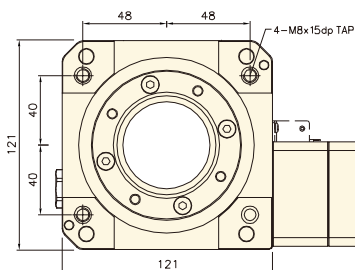
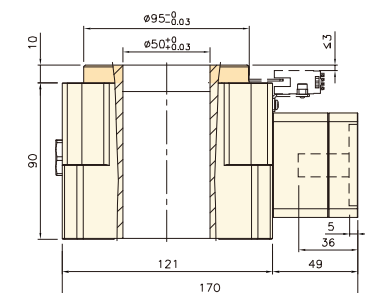
HD100-30V1	HD100-30T1
HD100-30V2	HD100-30T2
	HD100-30T3
	HD100-30T4
	HD100-30T5

馬達規格識別

V1: Ø 14-PCD70-M4	T1: Ø 8-PCD66.67-M4
V2: Ø 14-PCD70-M5	T2: Ø 8-PCD70.71-M4
	T3: Ø 10-PCD70.71-M4
	T4: Ø 6.35-PCD66.67-M4
	T5: Ø 8-PCD70.71-M5

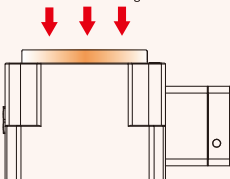
400W伺服馬達

60型步進馬達



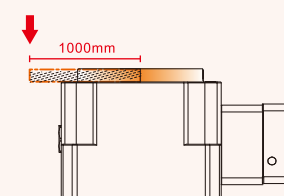
HD100

容許盤面載重250kg
Max. tableload 250kg



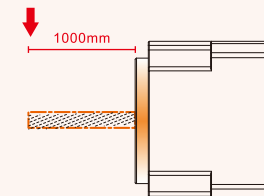
軸向載重
Axial load

200N



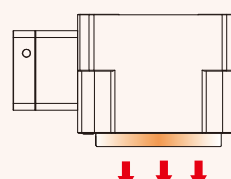
盤面平行度變形量 $\leq 0.002\text{mm}$
Table parallelism deformation $\leq 0.002\text{mm}$

300N



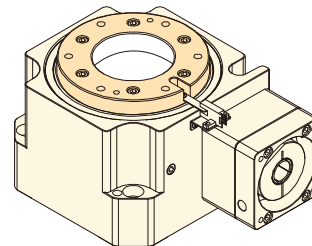
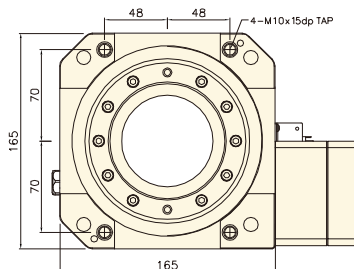
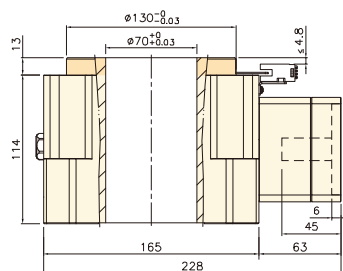
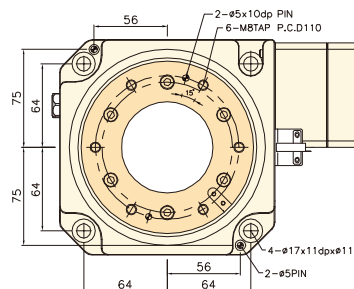
盤面平行度變形量 $\leq 0.002\text{mm}$
Table parallelism deformation $\leq 0.002\text{mm}$

軸向載重
Axial load



容許盤面吊重200kg
Max. tablehanging weight 200kg

- ☐ HD100
- ☒ HD150
- ☐ HD200



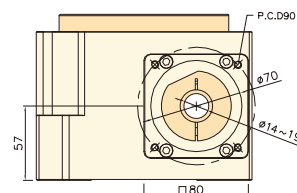
・ 原點Sensor規格(選配) OMRON EE-SX672

型號識別

HD150-30V1	HD150-30T1
HD150-30V2	HD150-30T2

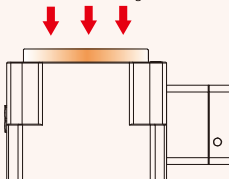
馬達規格識別

V1: $\phi 19$ -PCD90-M5	T1: $\phi 14$ -PCD98.4-M5
V2: $\phi 19$ -PCD90-M6	T2: $\phi 14$ -PCD98.4-M6
750W伺服馬達	86型步進馬達



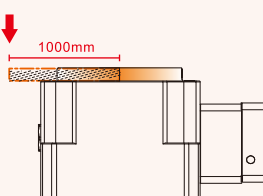
HD150

容許盤面載重600kg
Max. tableload 600kg



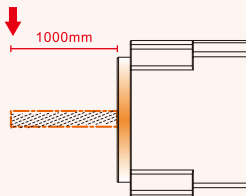
軸向載重
Axial load

550N



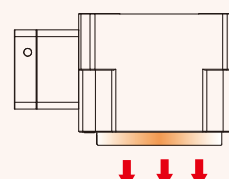
盤面平行度變形量 ≤ 0.002 mm
Table parallelism deformation ≤ 0.002 mm

800N



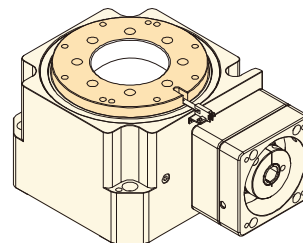
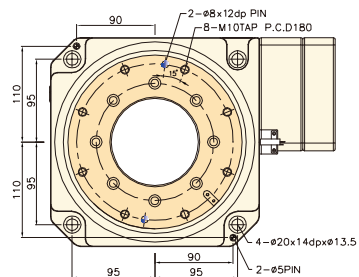
盤面平行度變形量 ≤ 0.002 mm
Table parallelism deformation ≤ 0.002 mm

軸向載重
Axial load



容許盤面吊重500kg
Max. tablehanging weight 500kg

- HD100
- HD150
- HD200



・原點Sensor規格(選配) OMRON EE-SX672

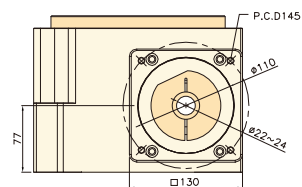
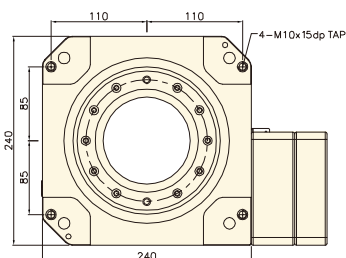
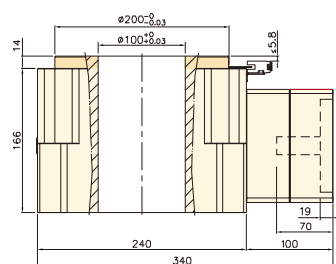
型號識別

HD200-30V1
HD200-30V2

馬達規格識別

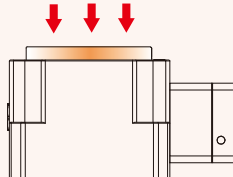
V1: Ø22-PCD145-M8
V2: Ø24-PCD145-M8

1000W伺服馬達



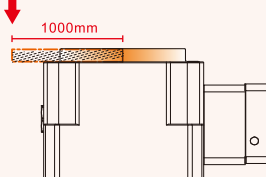
HD200

容許盤面載重1100kg
Max. tableload 1100kg



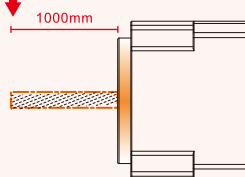
軸向載重
Axial load

1500N



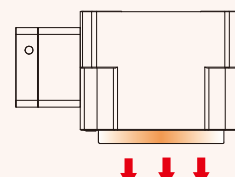
盤面平行度變形量 $\leq 0.002\text{mm}$
Table parallelism deformation $\leq 0.002\text{mm}$

2300N



盤面平行度變形量 $\leq 0.002\text{mm}$
Table parallelism deformation $\leq 0.002\text{mm}$

軸向載重
Axial load



容許盤面吊重900kg
Max. tablehanging weight 900kg