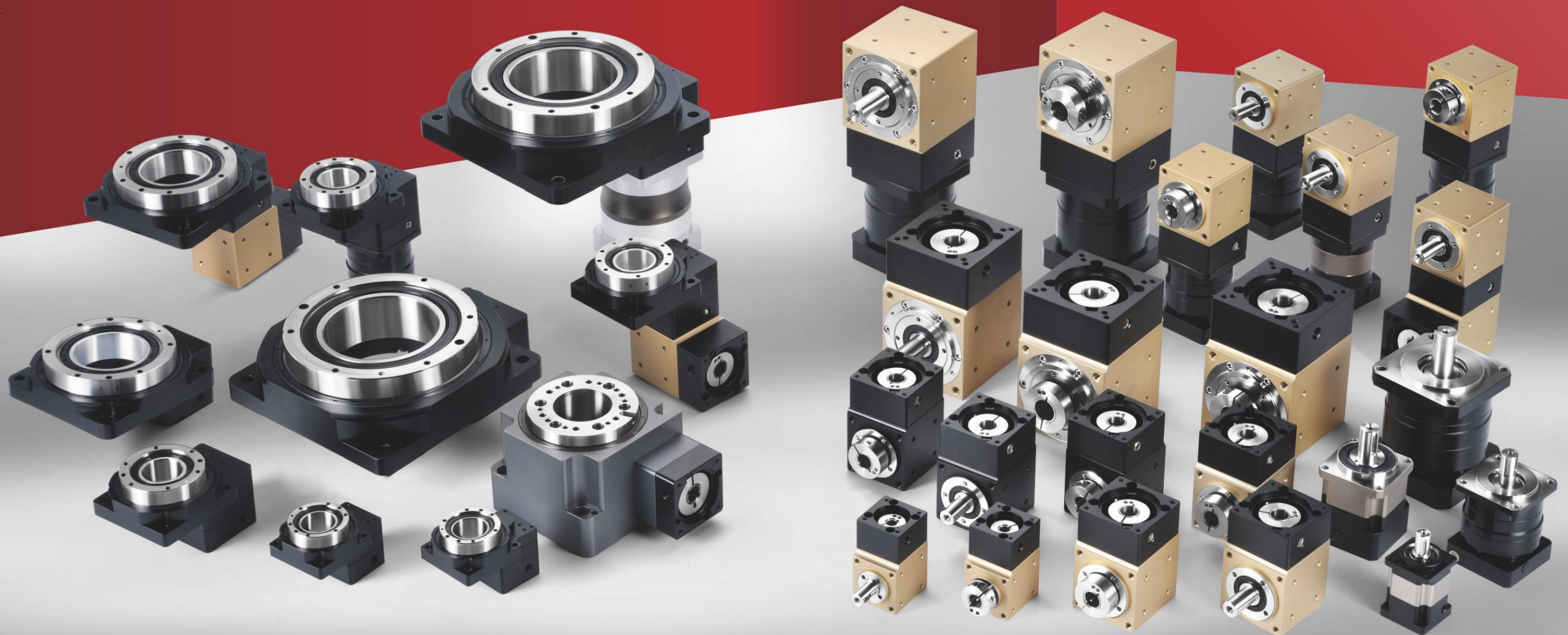


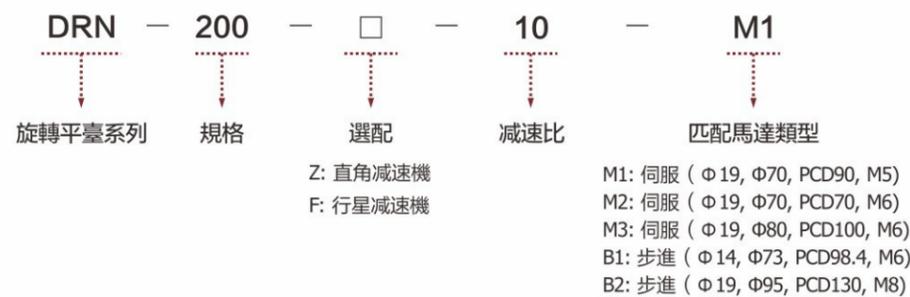
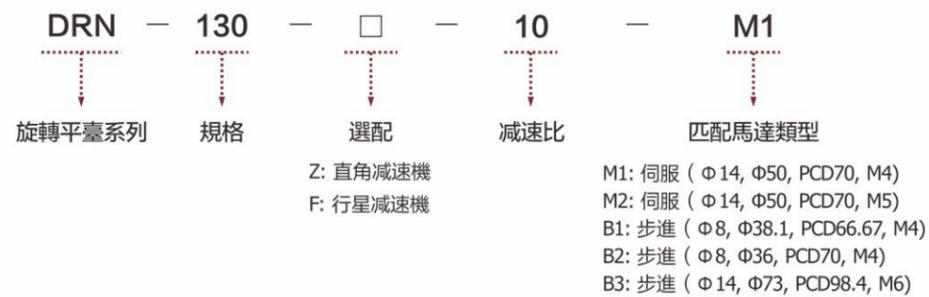
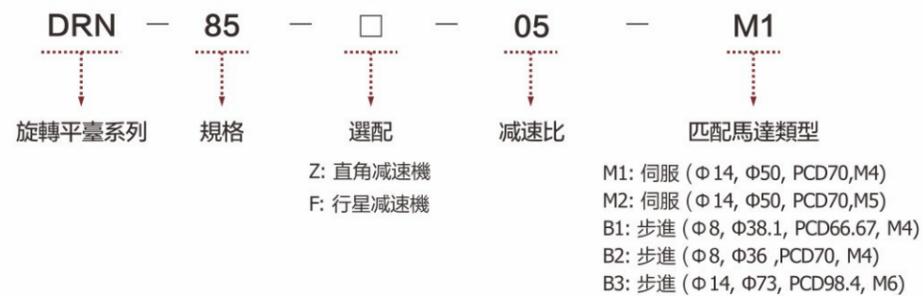
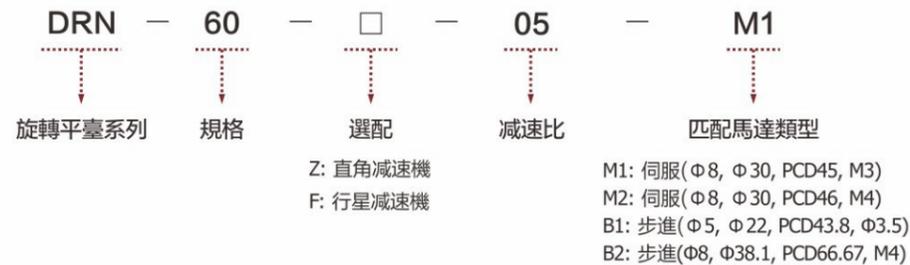
PRODUCT SHOW

產品組合展示

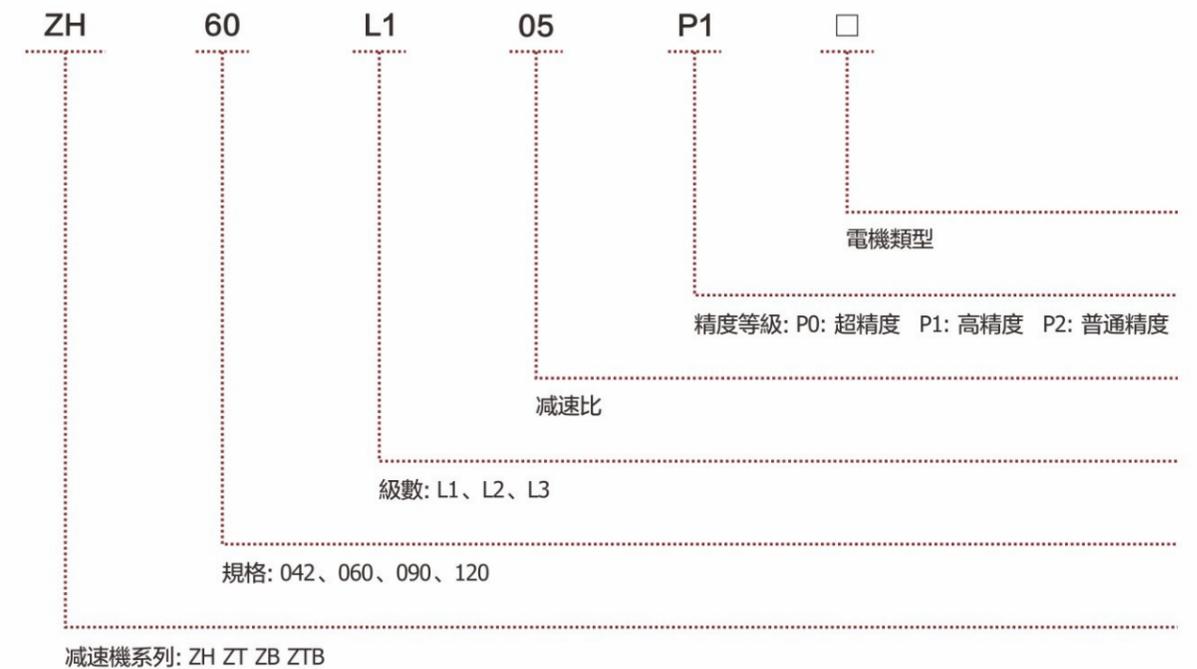
TBC
• Reducer & Motor •



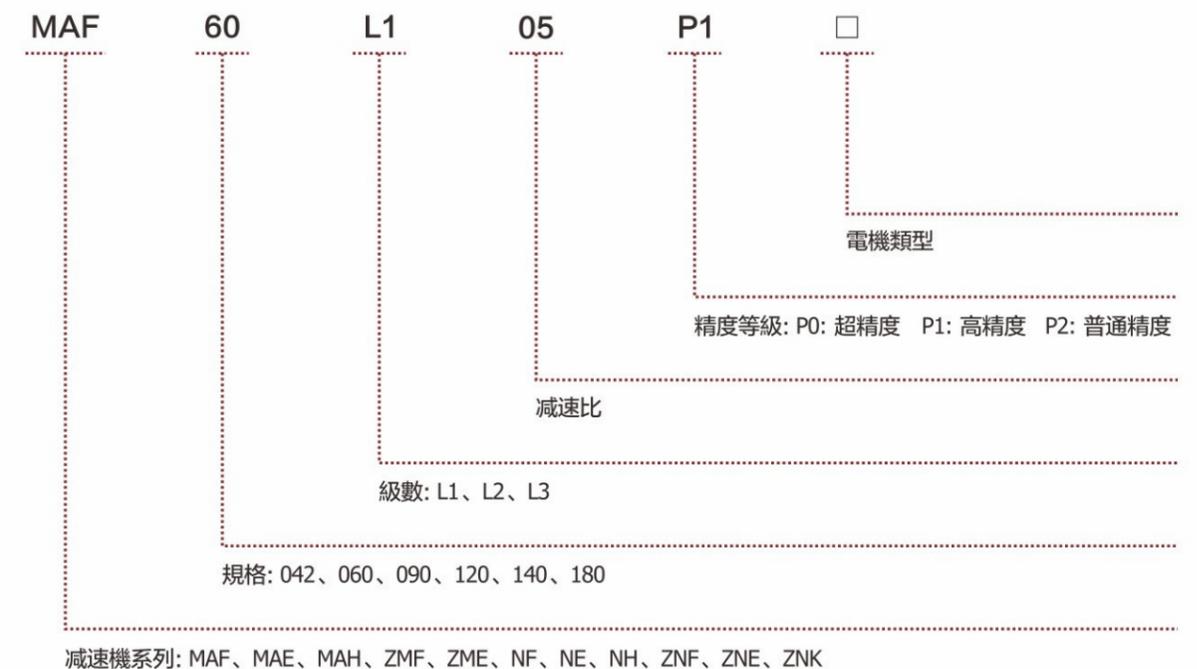
旋轉平臺型號識別



直角減速機型號識別



減速機型號識別

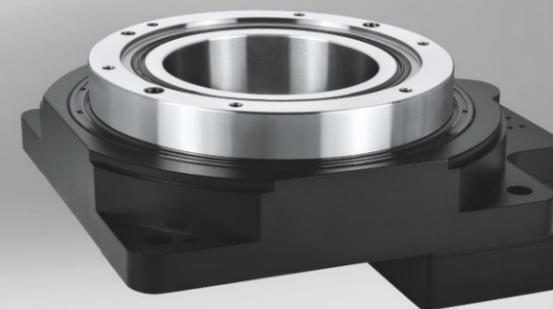
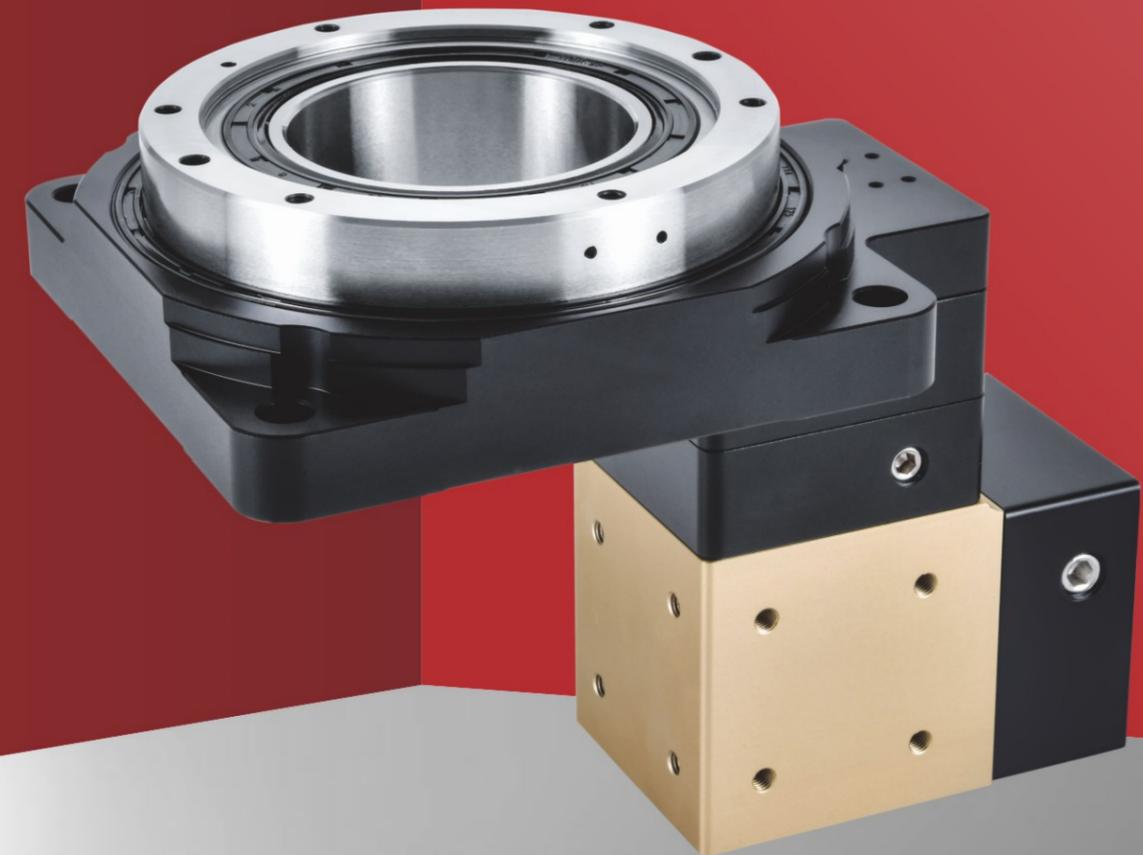
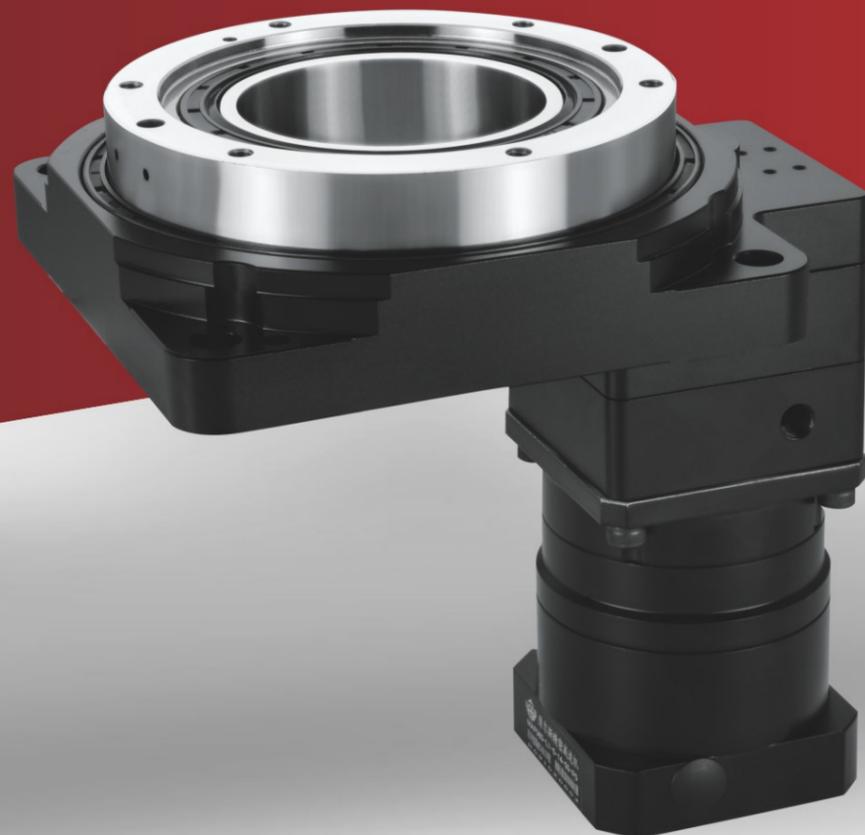


DRN Series

中空旋轉平臺 Hollow rotating platform

中空旋轉平臺是一款全新的旋轉負載裝置，可取代 DD MOTOR 與凸輪分割器；集高工作效率，高精度，高剛性，高性價比於一身，在兩者之間取得平衡。可搭配 AC 伺服馬達或步進馬達做任意角度分割，既可滿足分割器無法達到的數字控制，定位精度又可媲美 DD 馬達。

The hollow rotating platform is a brand-new rotating load device that can replace DD MOTOR and cam divider; it combines high work efficiency, high precision, high rigidity, and high cost performance to achieve a balance between the two. It can be matched with AC servo motor or stepping motor to do any angle division, which can not only meet the digital control that the divider cannot achieve, and the positioning accuracy is comparable to DD motors.



- ✓ 直接連結：簡易設計提升信賴性。
Direct connection: Simple design improves reliability.
- ✓ 大口徑中空旋轉平臺：簡潔的配線及配管。
Large-caliber hollow rotating platform: simple wiring and piping.
- ✓ 任意角度定位，定位精準高。
Positioning at any angle, high positioning accuracy.
- ✓ 短時間定位：可在短時間內實現慣性負載的定位。
Short-time positioning: Inertial load positioning can be realized in a short time.
- ✓ 簡單原點回歸：省却設計與零件採購的麻煩。
Simple return to origin: save the trouble of design and parts procurement.

DRN中空旋轉平臺

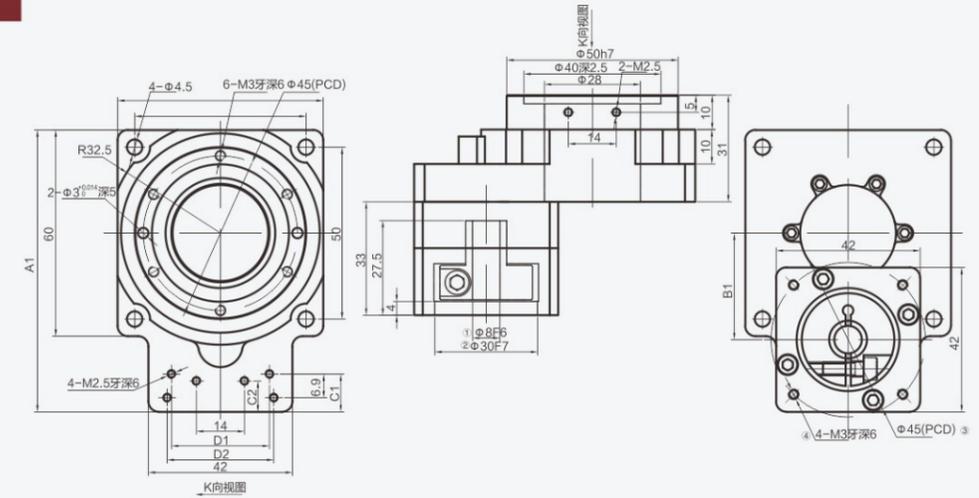
技術參數

型號 Model	單位 Unit	DRN60	DRN60-Z						DRN60-F						
匹配馬達尺寸 Matching motor	W	50W/100W AC伺服馬達/Servo motor 42mm/57mm 步進馬達/Stepper motor													
軸承結構 Bearing type		交叉滾子軸承/Cross roller bearing													
減速比 Ratios	i	5	10	10	15	20	25	50	15	20	25	35	40	50	
容許扭矩 Maybe torque	N.m	12	7.5	12						12					
容許慣性扭矩 Active torque	N.m	24	15	24						24					
容許輸出轉數 May contribute	r/min	200													
最大傾覆力矩 Max.Overturning torque	N.m	142													
最大徑向力 Max.radial force	N	1930													
最大軸向力 Max.axial force	N	1930													
坑扭剛性 Torsional stiffness	Nm/arcmin	2.5													
定位精度 Positioning accuracy	arc-min	± 0.5		± 0.5						± 0.5					
重復定位精度 Repeat positioning	arc-sec	≤10		≤15						≤15					
旋轉平臺端面跳動 Platform runout	mm	≤0.01													
旋轉平臺徑向跳動 Radial runout	mm	≤0.01													
旋轉平臺同心度 Platform concentricity	mm	≤0.01													
旋轉平臺平行度 Platform parallelism	mm	≤0.01													
壽命 Life	h	>20000													
工作溫度 Operating temperature	°C	-25 ~ +90°C													
潤滑方式 Lubricating		合成油脂潤滑/Synthetic grease lubrication													
防護等級 Protection grade	IP	IP65													
安裝方式 Installation		任意角度/Any angle													
重量 Weight	kg	0.53	0.53	1.1						0.91					

* 以上技術參數僅供參考，實際根據客戶提供的數據，會出具相關的技術參數及尺寸。

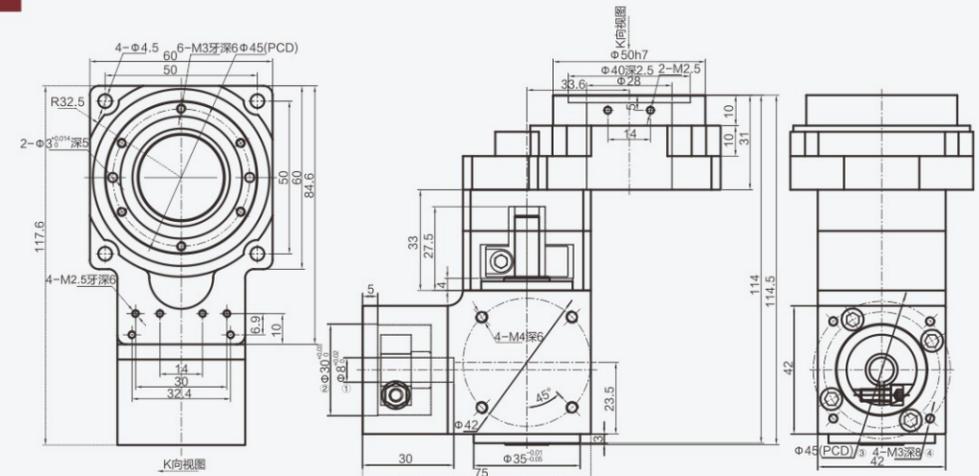
尺寸圖紙

DRN60

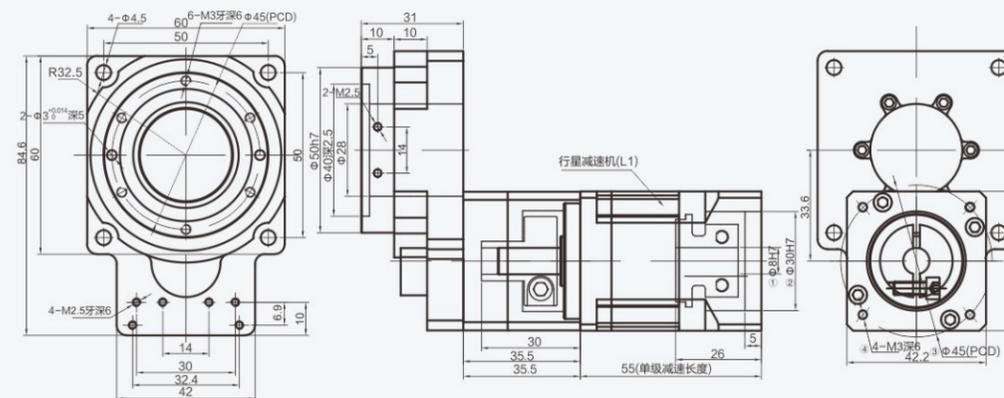


尺寸 Size	A1	B1	C1	C2	D1	D2
DRN60-05	84.6	33.6	10	10	30	32.4
DRN60-10	82	31	11	9	28.6	31.1

DRN60-Z



DRN60-F



DRN中空旋轉平臺

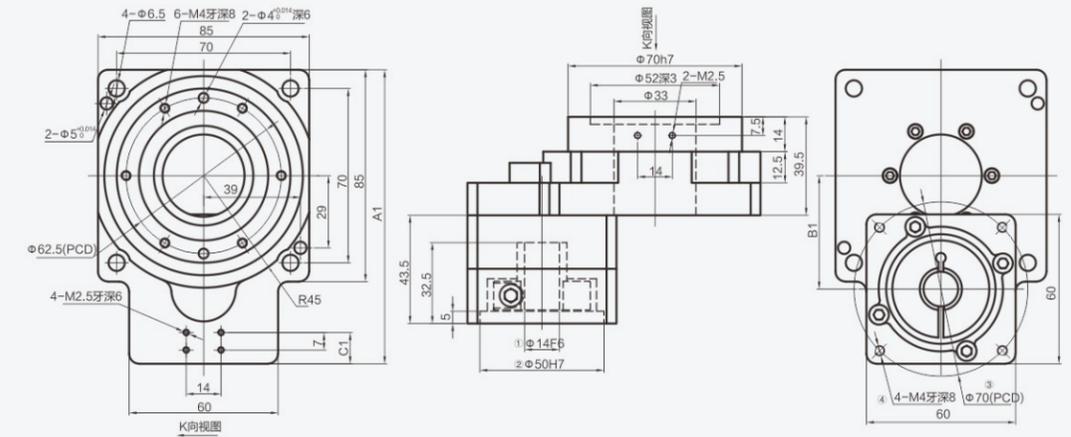
技術參數

型號 Model	單位 Unit	DRN85		DRN85-Z				DRN85-F				
匹配馬達尺寸 Matching motor	W	200W、400W AC伺服馬達/Servo motor		57mm、60mm、86mm 步進馬達/Stepper motor								
軸承結構 Bearing type		交叉滾子軸承/Cross roller bearing										
減速比 Ratios	i	5	10	10	15	20	25	15	20	25	35	50
容許扭矩 Maybe torque	N.m	41	27	41				41				
容許慣性扭矩 Active torque	N.m	82	54	82				82				
容許輸出轉數 May contribute	r/min	200										
最大傾覆力矩 Max.Overturning torque	N.m	380										
最大徑向力 Max.radial force	N	4800										
最大軸向力 Max.axial force	N	4800										
坑扭剛性 Torsional stiffness	Nm/arcmin	5.9										
定位精度 Positioning accuracy	arc-min	±0.5		±0.5				±0.5				
重復定位精度 Repeat positioning	arc-sec	≤10		≤15				≤15				
旋轉平臺端面跳動 Platform runout	mm	≤0.01										
旋轉平臺徑向跳動 Radial runout	mm	≤0.01										
旋轉平臺同心度 Platform concentricity	mm	≤0.01										
旋轉平臺平行度 Platform parallelism	mm	≤0.01										
壽命 Life	h	>20000										
工作溫度 Operating temperature	°C	-25 ~ +90°C										
潤滑方式 Lubricating		合成油脂潤滑/Synthetic grease lubrication										
防護等級 Protection grade	IP	IP65										
安裝方式 Installation		任意角度/Any angle										
重量 Weight	kg	1.42	1.4	2.66				2.43				

* 以上技術參數僅供參考，實際根據客戶提供的數據，會出具相關的技術參數及尺寸。

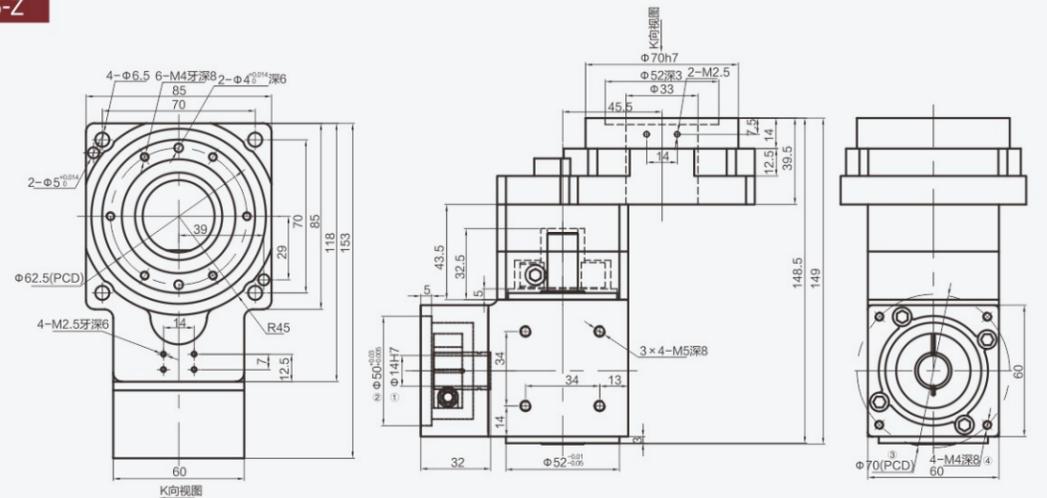
尺寸圖紙

DRN85

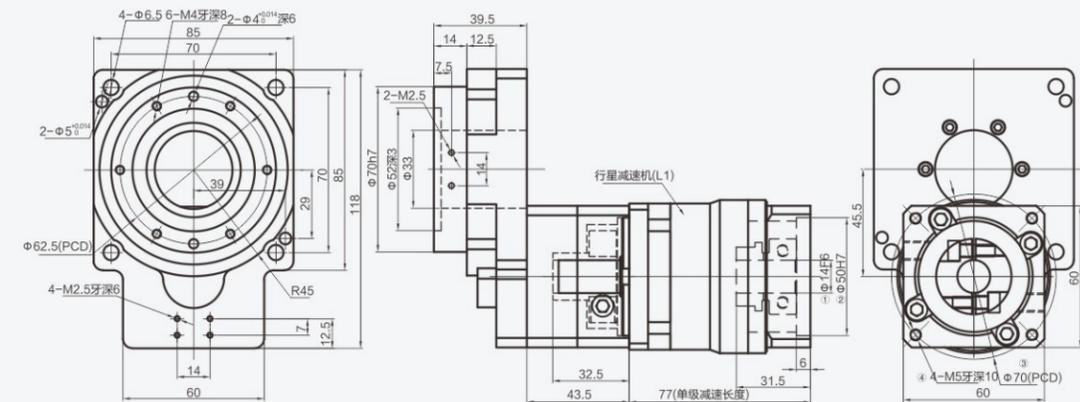


尺寸 Size	A1	B1	C1
DRN85-05	118	45.5	12.5
DRN85-10	114.3	41.8	11.3

DRN85-Z



DRN85-F



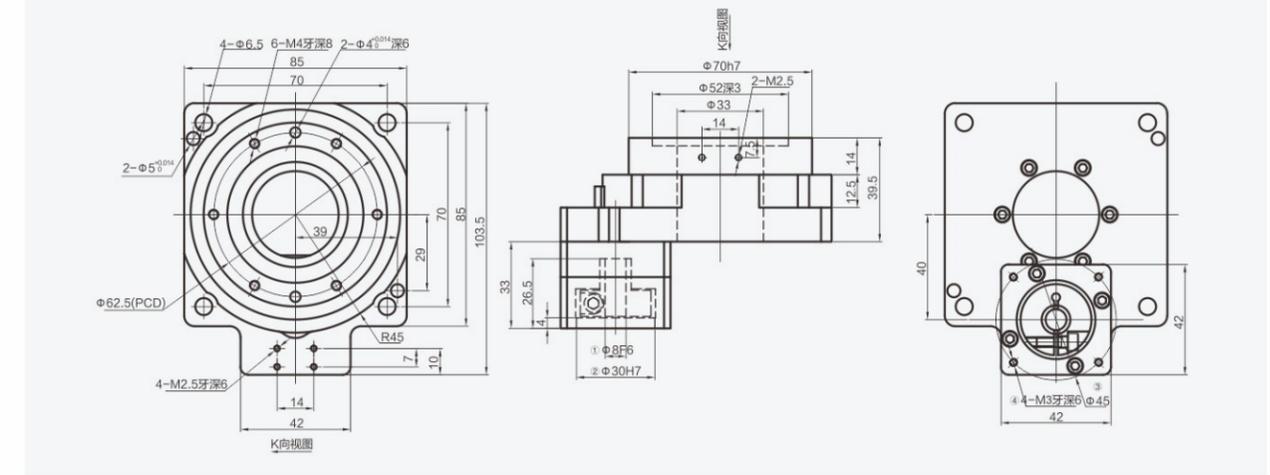
技術參數

型號 Model	單位 Unit	DRN85	DRN85-Z				DRN85-F			
匹配馬達尺寸 Matching motor	W	50W、100W AC伺服馬達/Servo motor							42mm、57mm 步進馬達/Stepper motor	
軸承結構 Bearing type		交叉滾子軸承/Cross roller bearing								
減速比 Ratios	i	15	30	45	75	45	60	75		
容許扭矩 Maybe torque	N.m	20		20			20			
容許慣性扭矩 Active torque	N.m	40		40			40			
容許輸出轉數 May contribute	r/min	200								
最大傾覆力矩 Max.overturning torque	N.m	380								
最大徑向力 Max.radial force	N	4800								
最大軸向力 Max.axial force	N	4800								
坑扭剛性 Torsional stiffness	Nm/arcmin	5.9								
定位精度 Positioning accuracy	arc-min	±0.5	±0.5				±0.5			
重復定位精度 Repeat positioning	arc-sec	≤10	≤15				≤15			
旋轉平臺端面跳動 Platform runout	mm	≤0.01								
旋轉平臺徑向跳動 Radial runout	mm	≤0.01								
旋轉平臺同心度 Platform concentricity	mm	≤0.01								
旋轉平臺平行度 Platform parallelism	mm	≤0.01								
壽命 Life	h	>20000								
工作溫度 Operating temperature	°C	-25 ~ +90°C								
潤滑方式 Lubricating		合成油脂潤滑/Synthetic grease lubrication								
防護等級 Protection grade	IP	IP65								
安裝方式 Installation		任意角度/Any angle								
重量 Weight	kg	1.2	1.69				1.5			

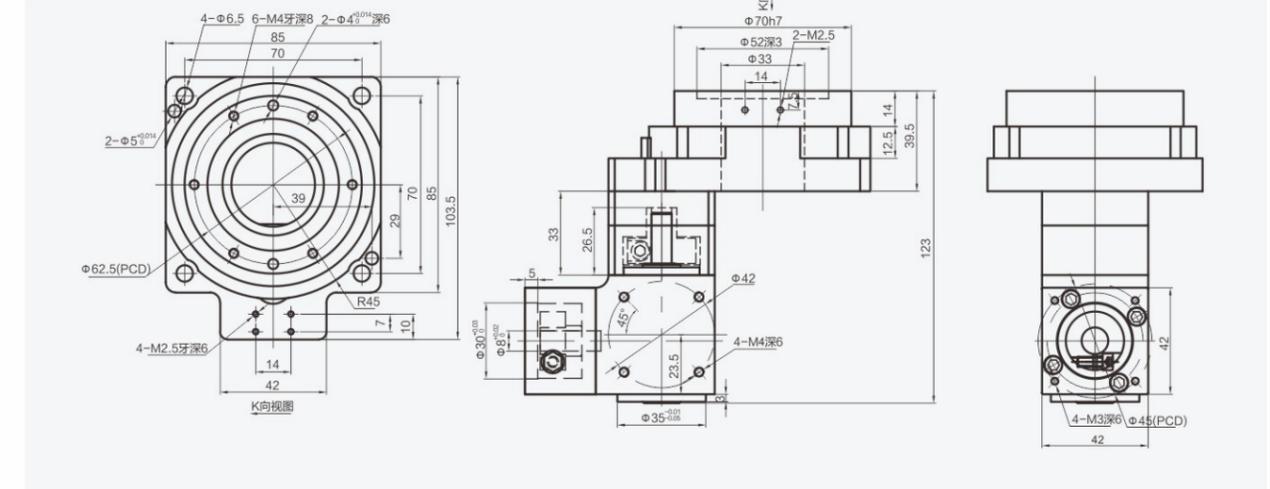
* 以上技術參數僅供參考，實際根據客戶提供的數據，會出具相關的技術參數及尺寸。

尺寸圖紙

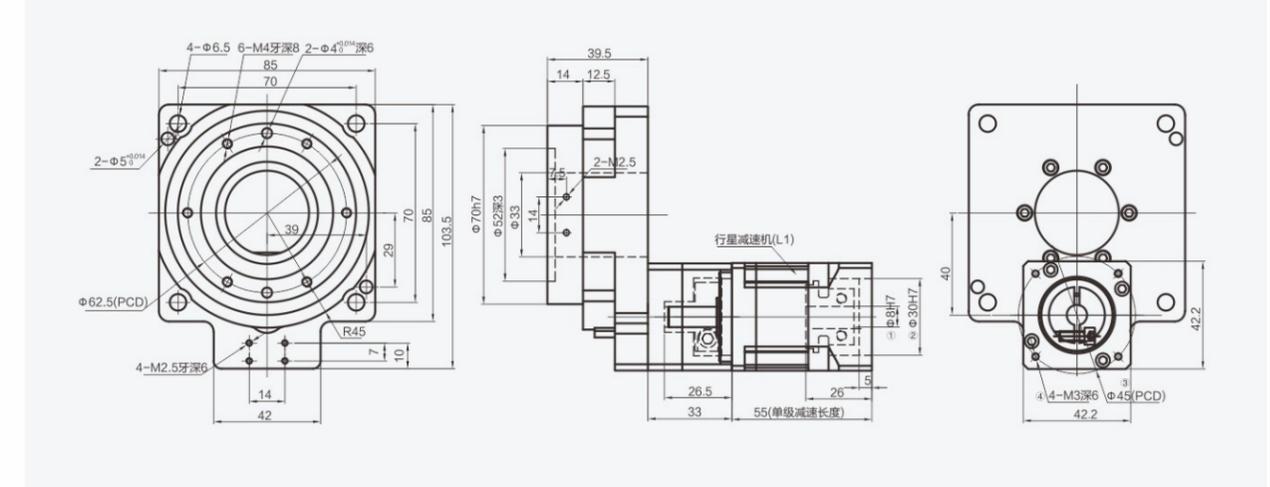
DRN85



DRN85-Z



DRN85-F



DRN中空旋轉平臺

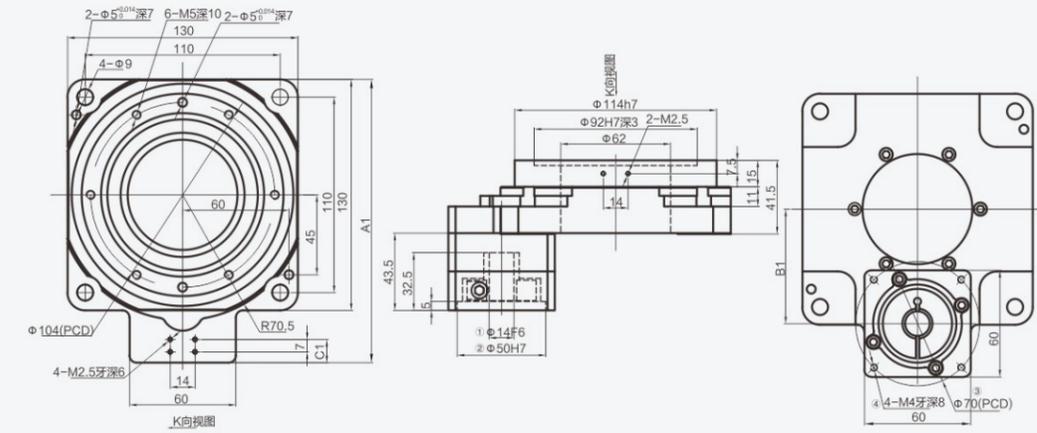
技術參數

型號 Model	單位 Unit	DRN130		DRN130-Z			DRN130-F				
匹配馬達尺寸 Matching motor	W	200W、400W AC伺服馬達/Servo motor		57mm、60mm、86mm 步進馬達/Stepper motor							
軸承結構 Bearing type		交叉滾子軸承/Cross roller bearing									
減速比 Ratios	i	10	18	20	30	50	30	40	50	70	100
容許扭矩 Maybe torque	N.m	60	37	60			60				
容許慣性扭矩 Active torque	N.m	120	74	120			120				
容許輸出轉數 May contribute	r/min	200									
最大傾覆力矩 Max.Overturning torque	N.m	1200									
最大徑向力 Max.radial force	N	8400									
最大軸向力 Max.axial force	N	8400									
坑扭剛性 Torsional stiffness	Nm/arcmin	16									
定位精度 Positioning accuracy	arc-min	±0.5		±0.5			±0.5				
重復定位精度 Repeat positioning	arc-sec	≤10		≤15			≤15				
旋轉平臺端面跳動 Platform runout	mm	≤0.01									
旋轉平臺徑向跳動 Radial runout	mm	≤0.01									
旋轉平臺同心度 Platform concentricity	mm	≤0.01									
旋轉平臺平行度 Platform parallelism	mm	≤0.01									
壽命 Life	h	>20000									
工作溫度 Operating temperature	℃	-25~+90℃									
潤滑方式 Lubricating		合成油脂潤滑/Synthetic grease lubrication									
防護等級 Protection grade	IP	IP65									
安裝方式 Installation		任意角度/Any angle									
重量 Weight	kg	2.61	2.6	3.86			3.61				

* 以上技術參數僅供參考，實際根據客戶提供的數據，會出具相關的技術參數及尺寸。

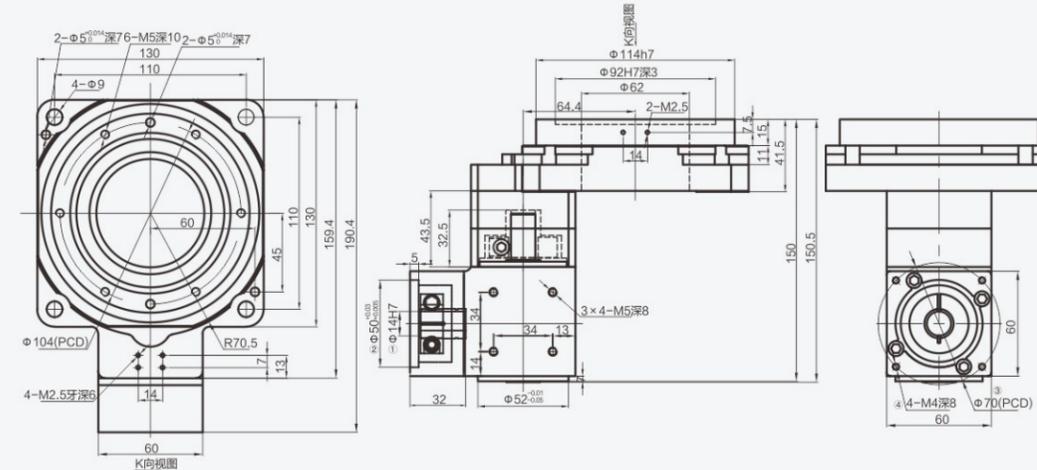
尺寸圖紙

DRN130

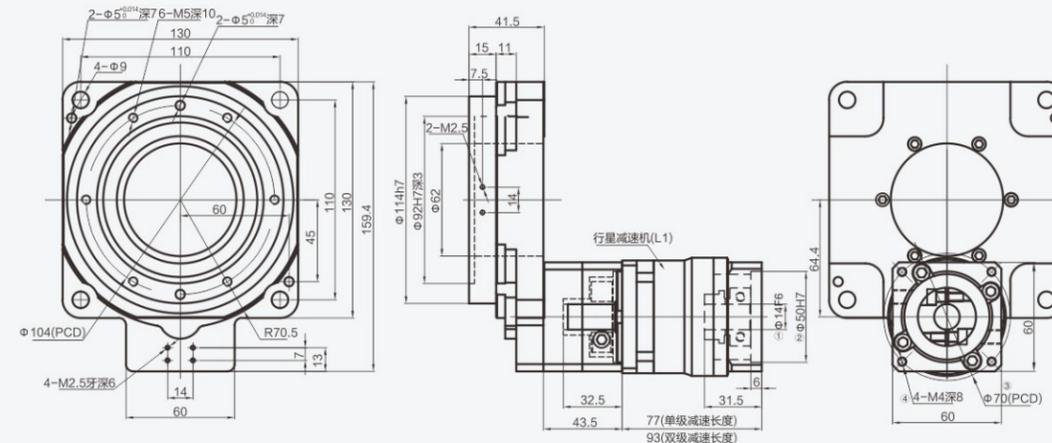


尺寸 Size	A1	B1	C1
DRN130-10	159.4	64.4	13
DRN130-18	158	63	11.6

DRN130-Z



DRN130-F



DRN中空旋轉平臺

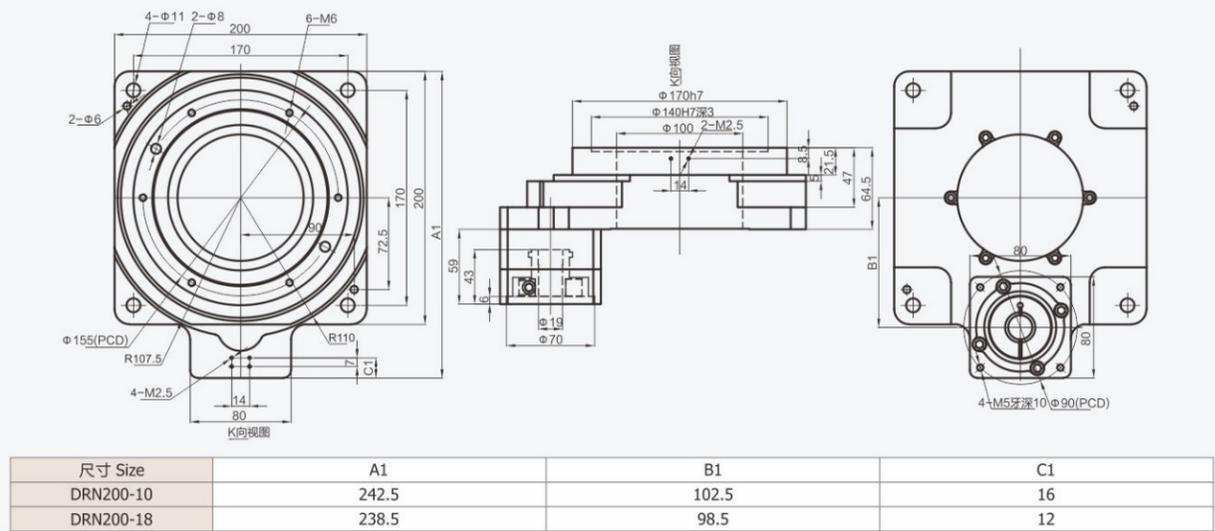
技術參數

型號 Model	單位 Unit	DRN200		DRN200-Z		DRN200-F					
匹配馬達尺寸 Matching motor	W	750W、1KW AC伺服馬達/Servo motor		86mm、110mm、步進馬達/Stepper motor							
軸承結構 Bearing type		交叉滾子軸承/Cross roller bearing									
減速比 Ratios	i	10	18	20	30	50	30	40	50	70	100
容許扭矩 Maybe torque	N.m	115	68	115		115					
容許慣性扭矩 Active torque	N.m	230	136	230		230					
容許輸出轉數 May contribute	r/min	200									
最大傾覆力矩 Max.overturning torque	N.m	2600									
最大徑向力 Max.radial force	N	12500									
最大軸向力 Max.axial force	N	12500									
坑扭剛性 Torsional stiffness	Nm/arcmin	28.6									
定位精度 Positioning accuracy	arc-min	±0.5		±0.5		±0.5					
重復定位精度 Repeat positioning	arc-sec	≤10		≤15		≤15					
旋轉平臺端面跳動 Platform runout	mm	≤0.01									
旋轉平臺徑向跳動 Radial runout	mm	≤0.01									
旋轉平臺同心度 Platform concentricity	mm	≤0.01									
旋轉平臺平行度 Platform parallelism	mm	≤0.01									
壽命 Life	h	>20000									
工作溫度 Operating temperature	℃	-25 ~ +90℃									
潤滑方式 Lubricating		合成油脂潤滑/Synthetic grease lubrication									
防護等級 Protection grade	IP	IP65									
安裝方式 Installation		任意角度/Any angle									
重量 Weight	kg	8.95	8.91	12.67		11.61					

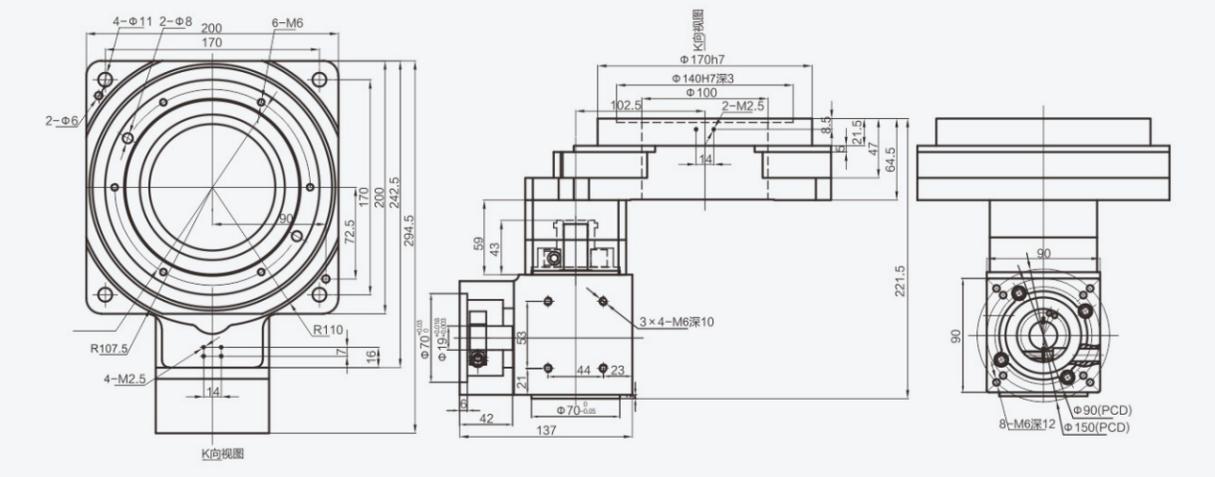
* 以上技術參數僅供參考，實際根據客戶提供的數據，會出具相關的技術參數及尺寸。

尺寸圖紙

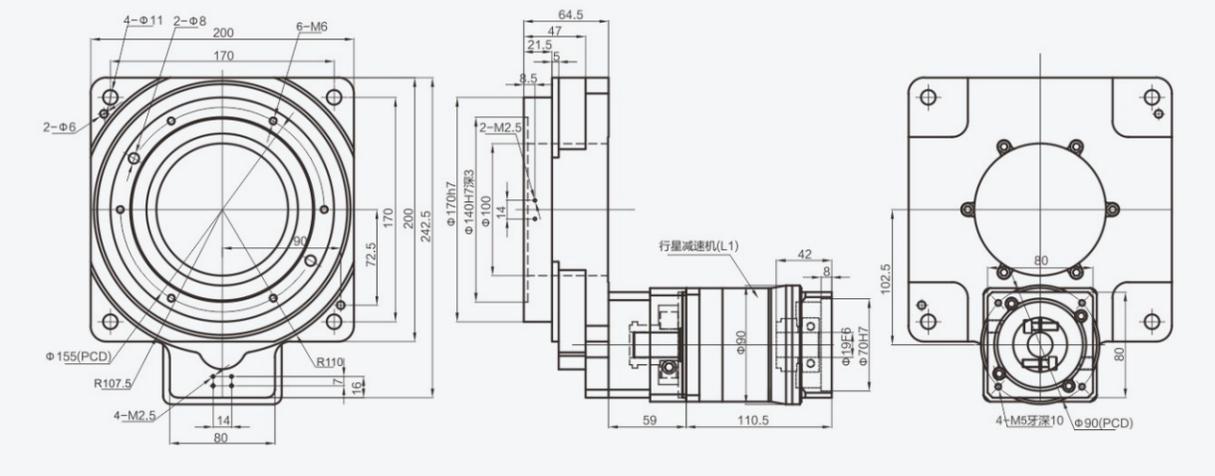
DRN200



DRN200-Z



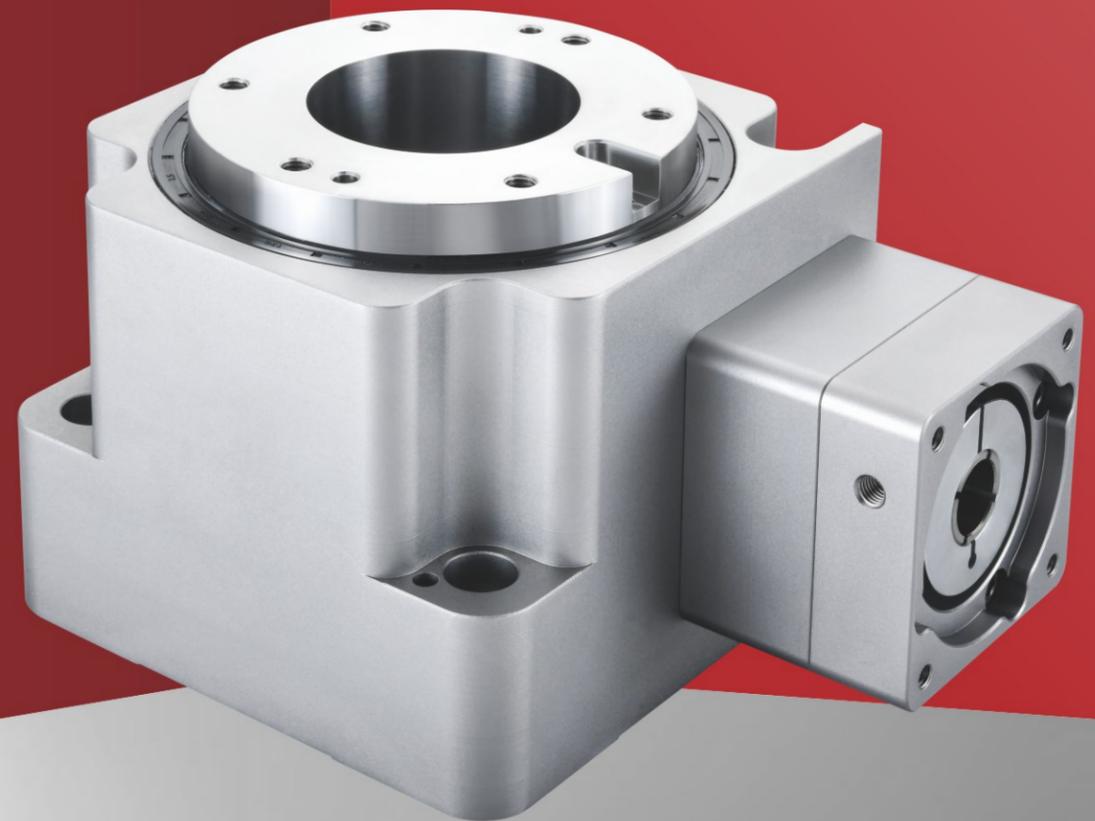
DRN200-F



ZRG Series

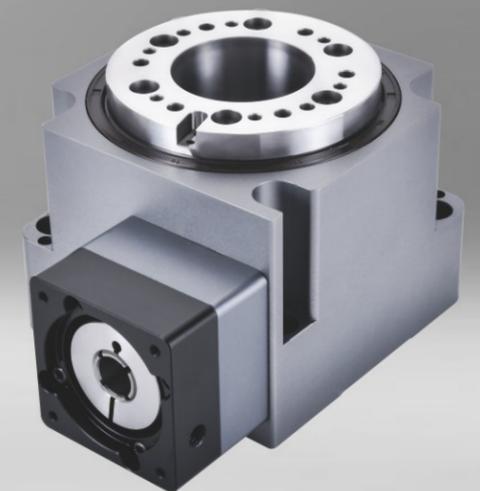
海波齒中空旋轉平臺 Hypotooth hollow rotating platform

- ✓ 高精度、高效率、高減速比、高轉矩、低磨耗的優點
- ✓ 滑動方式旋轉，傳動精度可達30角秒
- ✓ 傳動效率高達96%
- ✓ 齒輪幾何公差 $\leq 0.002\text{mm}$
- ✓ JISO級標準
- ✓ 適用於大盤徑、大慣量，需要快速定位的旋轉設計



TBC
Reducer & Motor

- ✓ The advantages of high precision, high efficiency, high reduction ratio, high torque, and low wear
- ✓ Rotation in sliding mode, transmission accuracy can reach 30 arc seconds
- ✓ Transmission efficiency up to 96%
- ✓ Gear geometric PR $\leq 0.002\text{mm}$
- ✓ JISO standard
- ✓ Suitable for large disk diameter, large inertia, and fast positioning rotation design



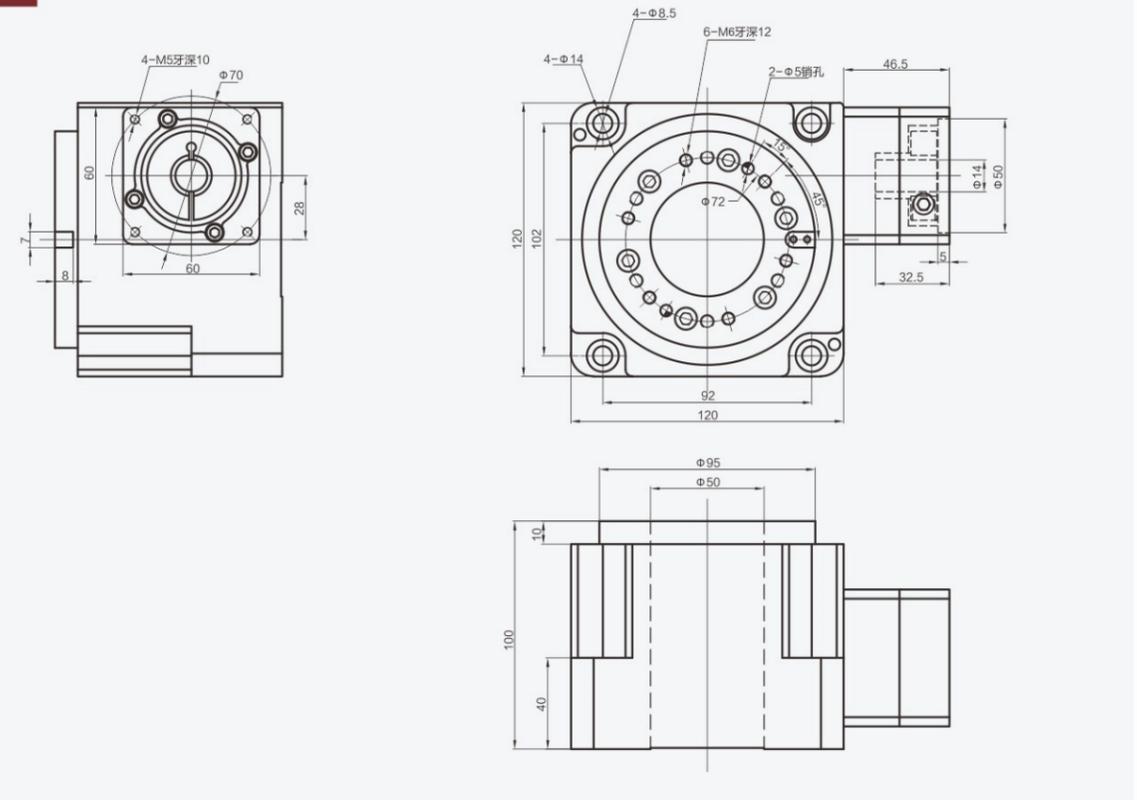
技術參數

型號 Model	單位 Unit	ZRG120	ZRG165	ZRG240
匹配馬達尺寸 Matching motor	W	400W AC伺服馬達 57mm/86mm 步進馬達	750W/1KW AC伺服馬達 86mm/110mm 步進馬達	1KW-5KW AC伺服馬達 110mm/130mm 步進馬達
軸承結構 Bearing type		圓錐滾子軸承 Tapered Roller Bearings		
減速比 Ratios	i	30	30	30
容許扭矩 Maybe torque	N.m	120	230	480
容許慣性扭矩 Active torque	N.m	240	460	960
容許輸出轉數 May contribute	r/min		200	
最大傾覆力矩 Max.overturning torque	N.m	240	460	960
最大徑向力 Max.radial force	N	9000	18000	29000
最大軸向力 Max.axial force	N	9000	18000	29000
坑扭剛性 Torsional stiffness	Nm/arcmin	48	76	135
定位精度 Positioning accuracy	arc-min		± 0.5	
重複定位精度 Repeat positioning	arc-sec		≤10	
旋轉平臺端面跳動 Platform runout	mm		≤0.01	
旋轉平臺徑向跳動 Radial runout	mm		≤0.01	
旋轉平臺同心度 Platform concentricity	mm		≤0.01	
旋轉平臺平行度 Platform parallelism	mm		≤0.01	
壽命 Life	h		>20000	
工作溫度 Operating temperature	°C		-25 ~ +90°C	
潤滑方式 Lubricating		合成油脂潤滑/Synthetic grease lubrication		
防護等級 Protection grade	IP		IP65	
安裝方式 Installation		任意角度/Any angle		
重量 Weight	kg	5.15	13.5	

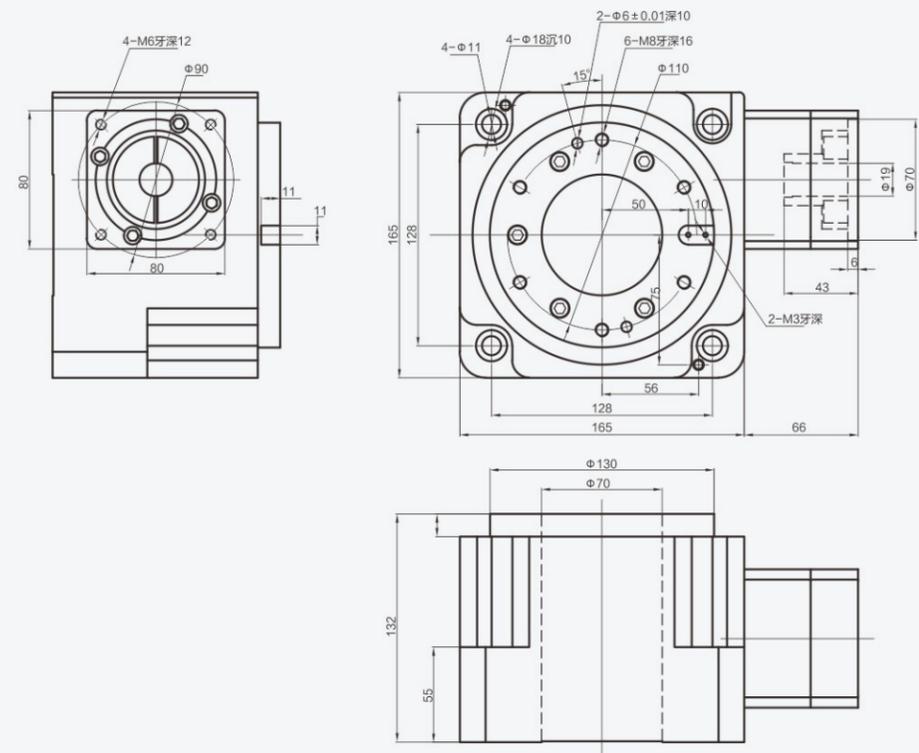
* 以上技術參數僅供參考，實際根據客戶提供的數據，會出具相關的技術參數及尺寸。

尺寸圖紙

ZRG120



ZRG165



ZH,ZT,ZB,ZTB Series

精密直角減速機

Precision right angle reducer

體積小、省空間

使用螺旋式傘齒輪，馬達的安裝可實現90度轉向，節省安裝空間。

Using spiral bevel gears, the installation of the motor can achieve 90-degree steering, saving installation space.

高精度、低噪音、高剛性

精密型背隙小於1弧分，定位精確；傳動齒輪經精密研製，達到精密傳動，低噪音、高剛性質量要求。

The precision backlash is less than 1 arc minute, and the positioning is accurate; the transmission gear is precisely developed to meet the quality requirements of precision transmission, low noise, and high rigidity.



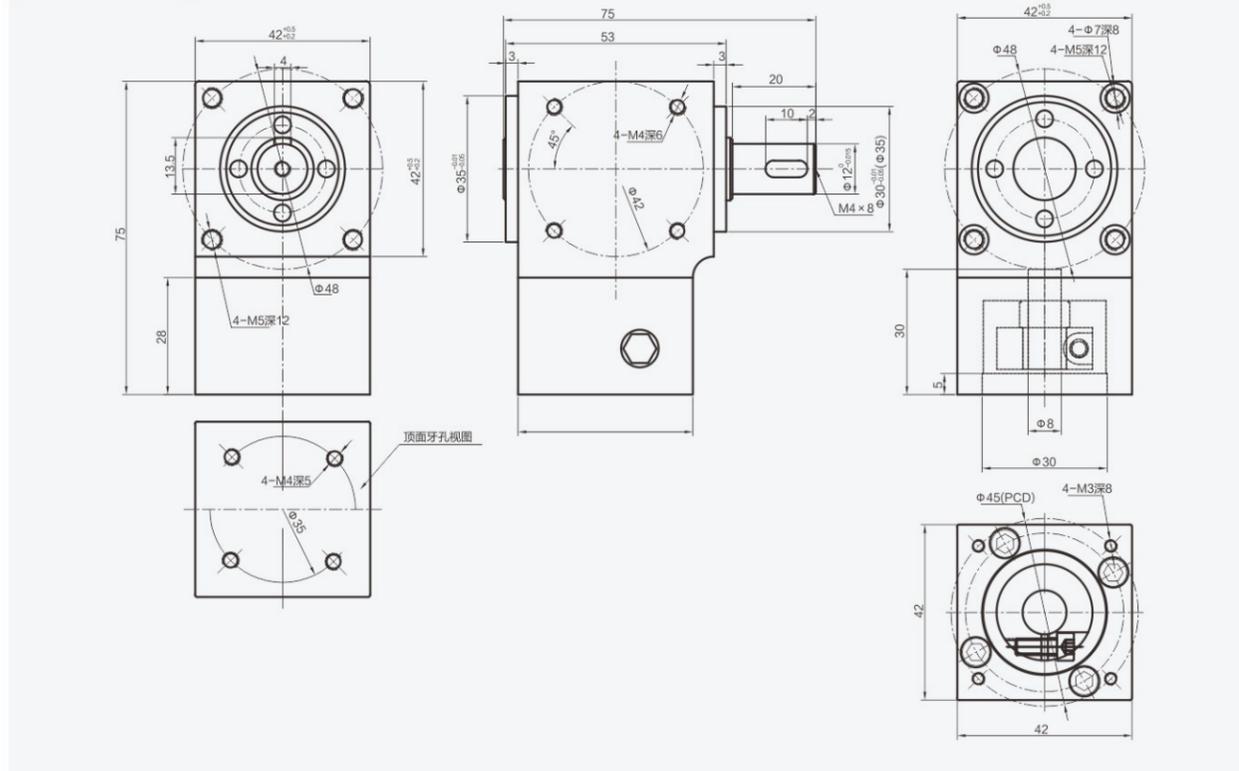
技術參數

型號 Model	單位 Unit	ZH042 ZT042 ZB042 ZTB042	ZH060 ZT060 ZB060 ZTB060	ZH090 ZT090 ZB090 ZTB090	ZH120 ZT120 ZB120 ZTB120	減速比 Ratios	級數 Stages	
額定輸出扭矩TN Rated output torque	Nm	23	35	60	120	2	1級	
		20	30	55	-	3		
		18	25	50	100	5		
		23	35	60	120	10	2級	
		20	30	55	-	12		
		20	30	55	100	15		
		23	35	60	120	20		
		18	25	50	100	25		
		20	30	55	-	30		
		20	30	55	100	35		
18	25	50	100	50				
最大輸出扭矩T2N Max. output torque T2N	Nm	2.5倍額定輸出扭矩/2.5 times rated output torque						
額定輸入轉速 Rated input speed	rpm	1500						
最大輸入轉速 Max. output speed	rpm	3000						
最大容許徑向力② Max.radial force	N	350	560	1050	1800			
最大容許軸向力② Max.axial force	N	160	230	550	1100			
轉動慣量 Moment of inertia	Kgcm ²	0.03	0.08	0.09				
回程間隙 Backlash	arcmin	P0 < 1		P1 < 3			1級	
		P0 < 2		P1 < 5			2級	
噪音 Noise	dB	≤ 58	≤ 58	≤ 60	≤ 62			
滿載效率 Efficiency	%	1級: 97% 2級: 95%						
壽命 Life	h	> 20000						
工作溫度 Operating temperature		-25°C ~ +90°C						
潤滑方式 Lubricating		合成油脂潤滑/Synthetic grease lubrication						
旋轉方向 Direction of rotation		輸入、輸出同向/Same direction						
防護等級 Protection grade		IP65						
安裝方式 Installation		任意/Any						
重量 Weight	kg	0.49	1.25	3.93	8.5		1級	
		0.89	2.27	6.68	12.2		2級	

* 以上技術參數僅供參考，實際根據客戶提供的數據，會出具相關的技術參數及尺寸。

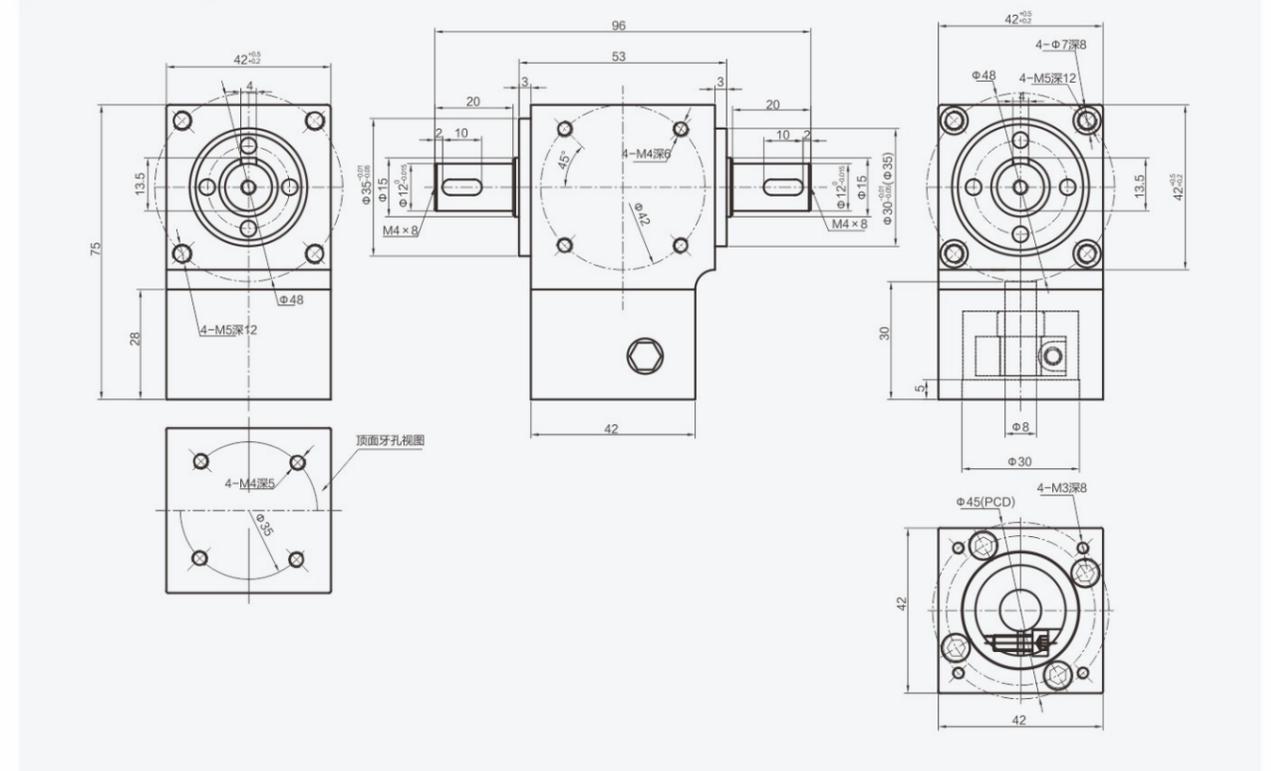
尺寸圖紙

ZH042-L1

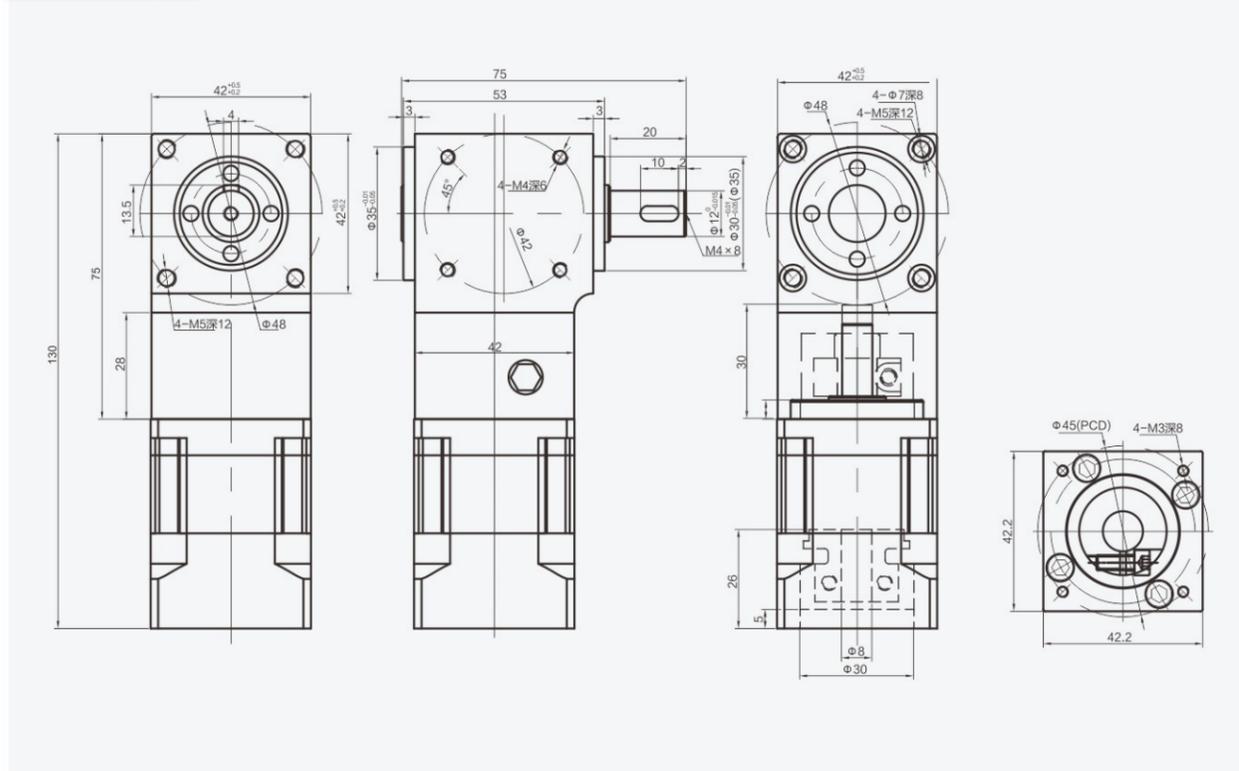


尺寸圖紙

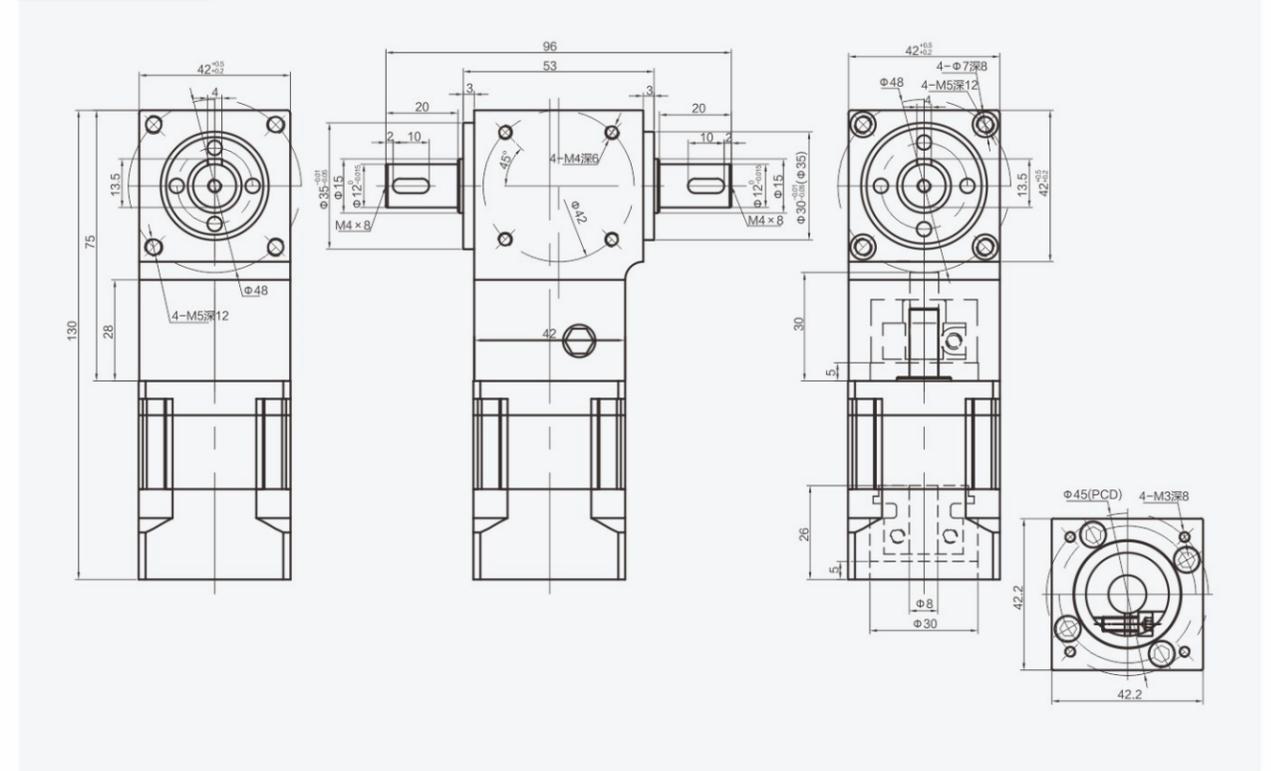
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ZH042-L2

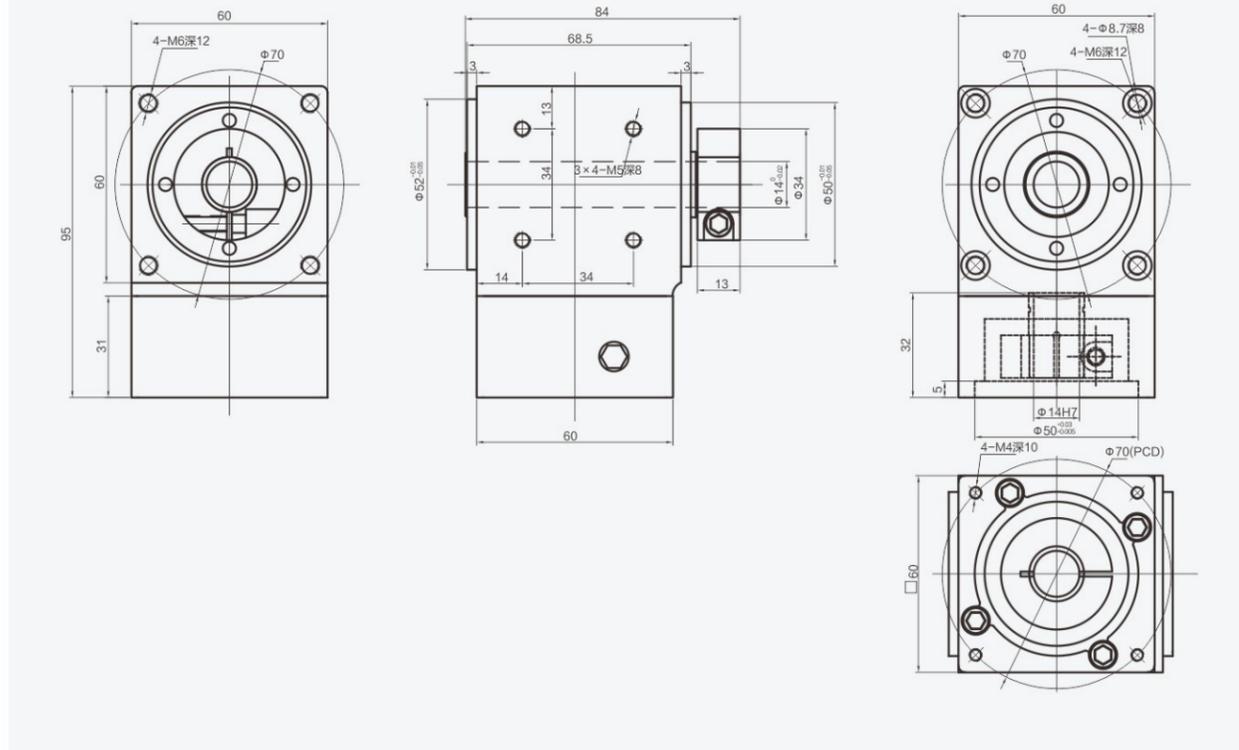


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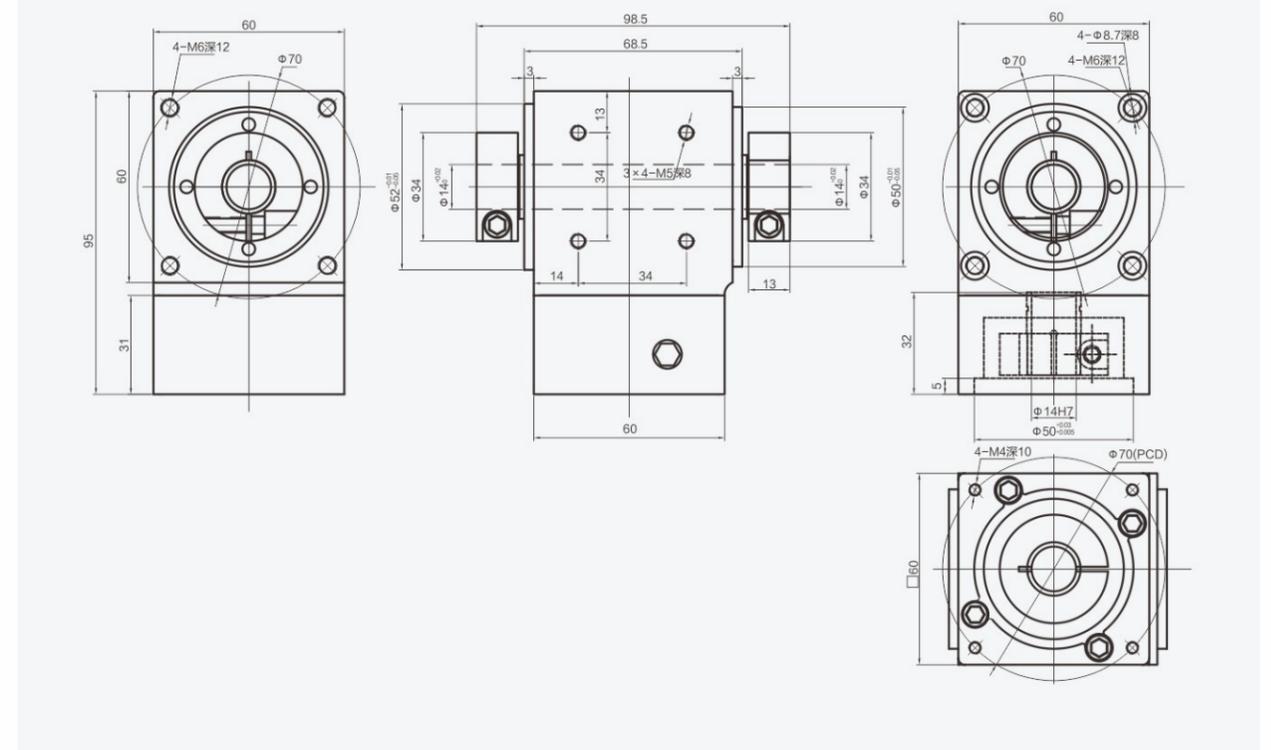
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ZB060-L1

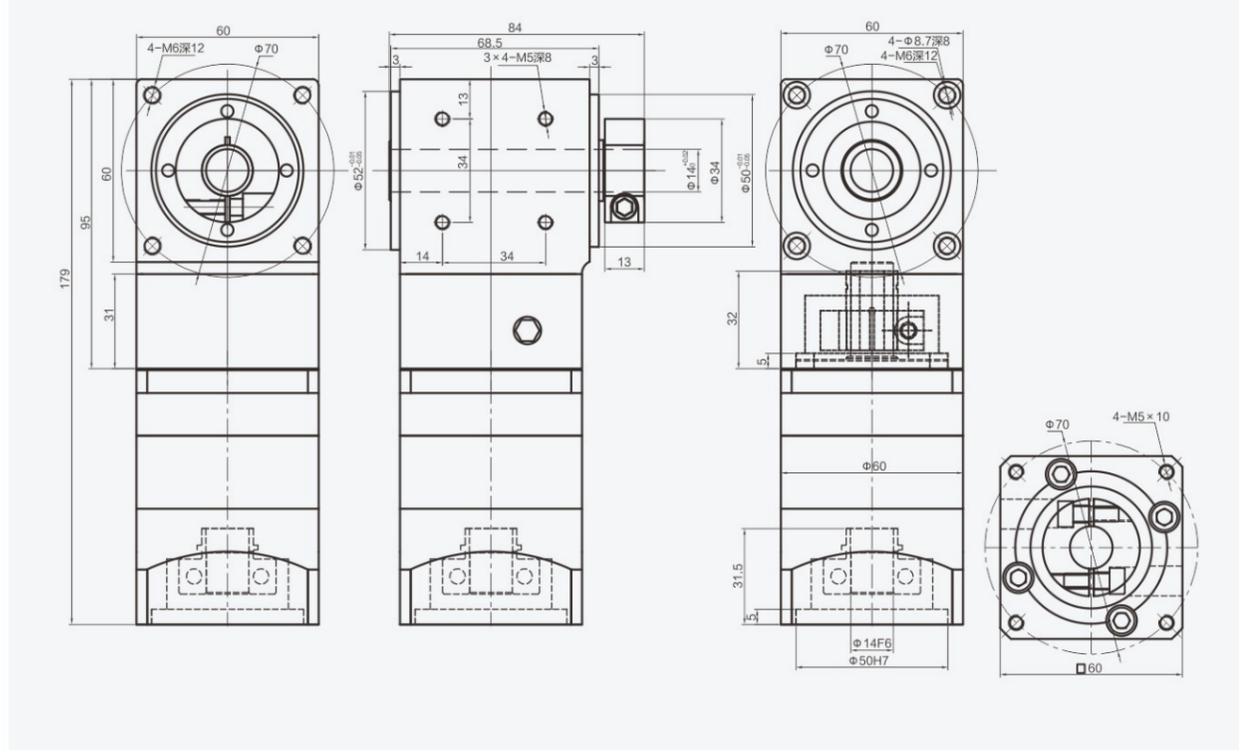


尺寸圖紙

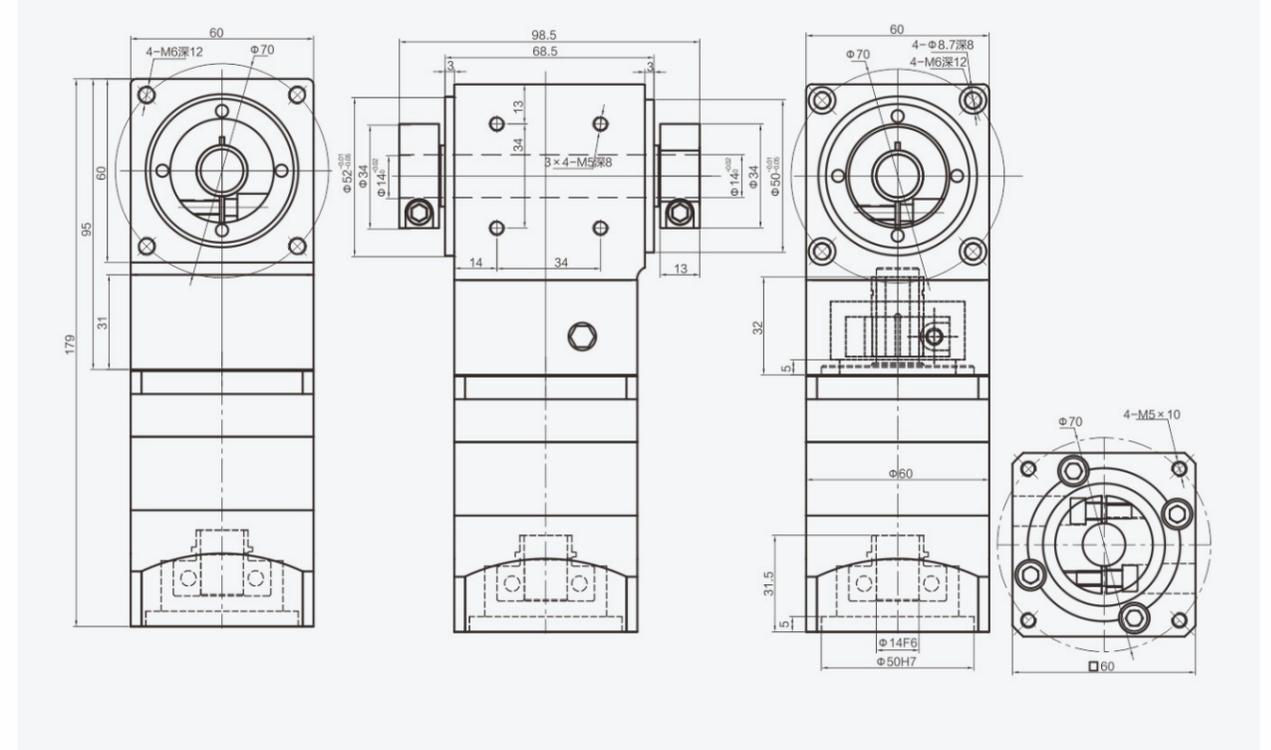
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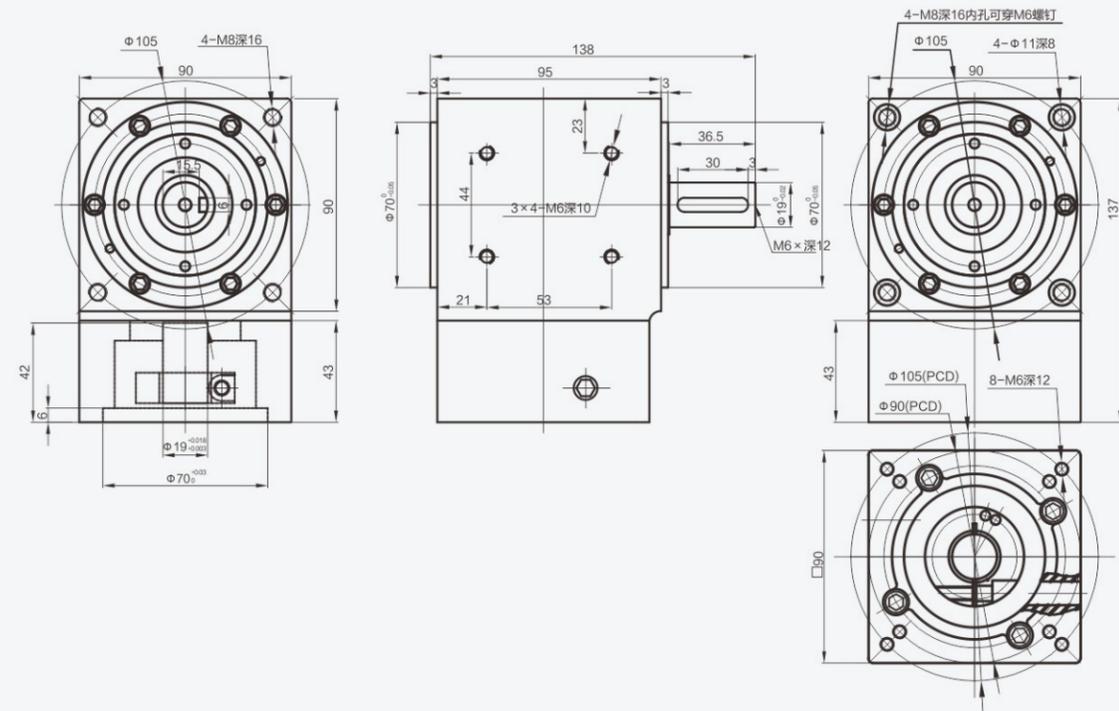


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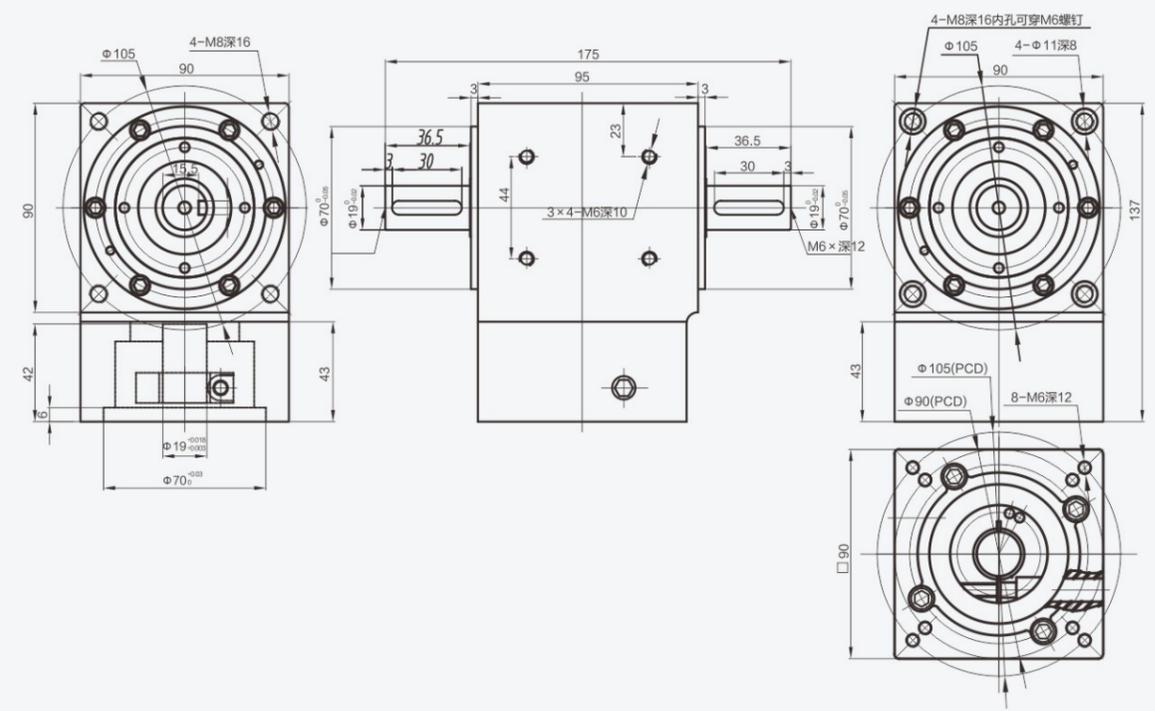
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ZH090-L1

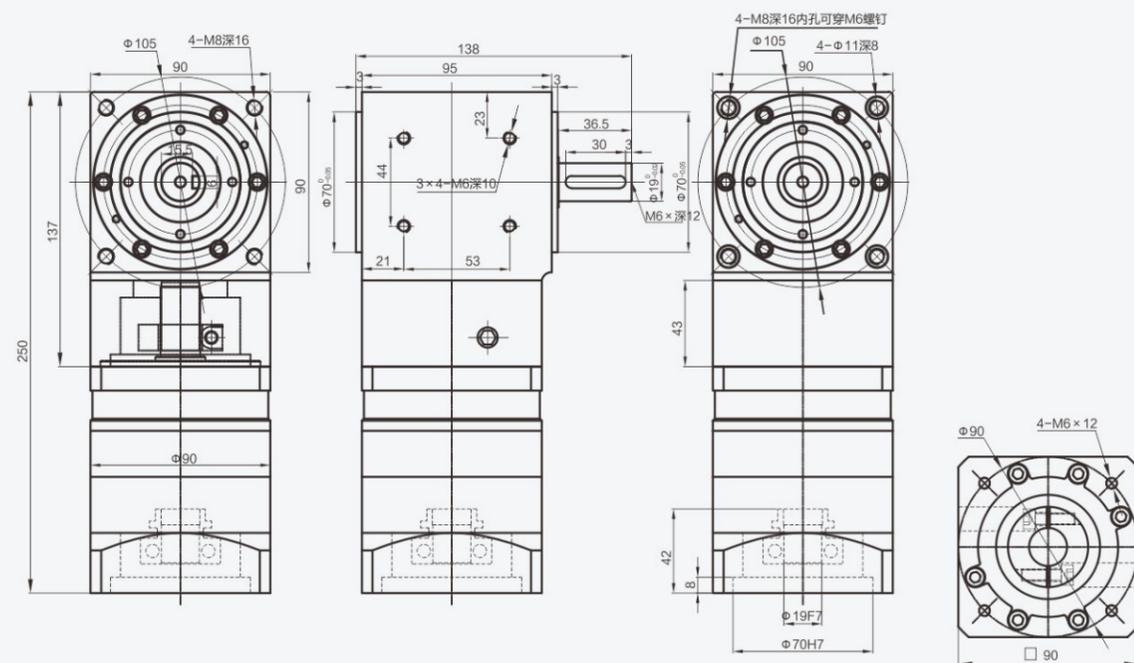


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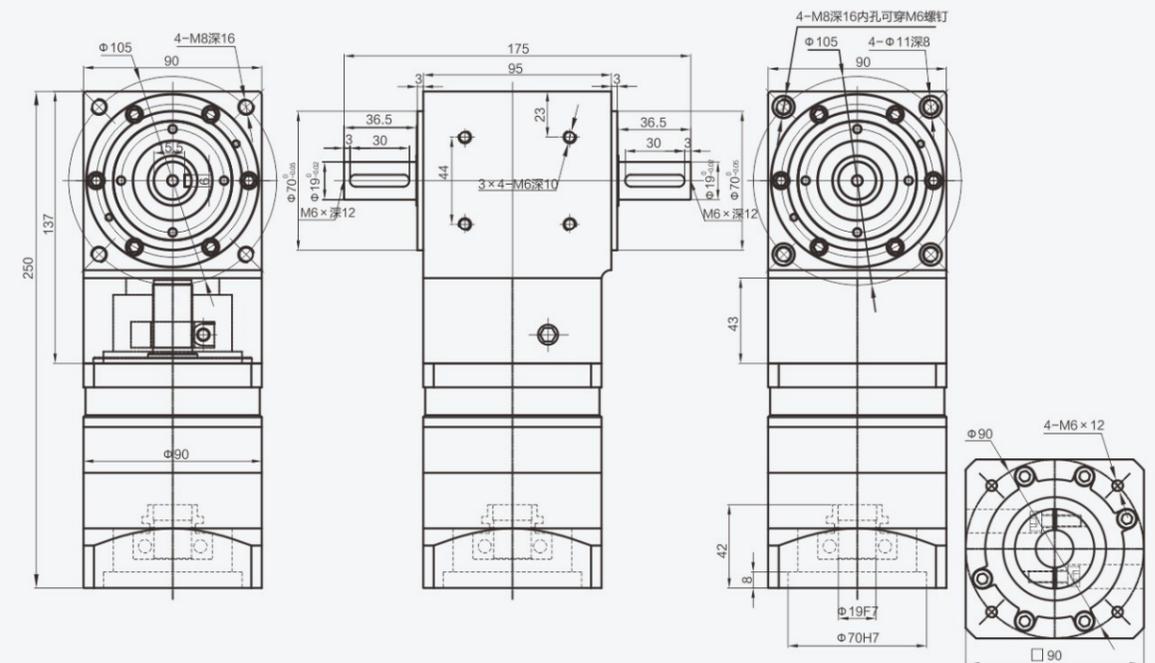
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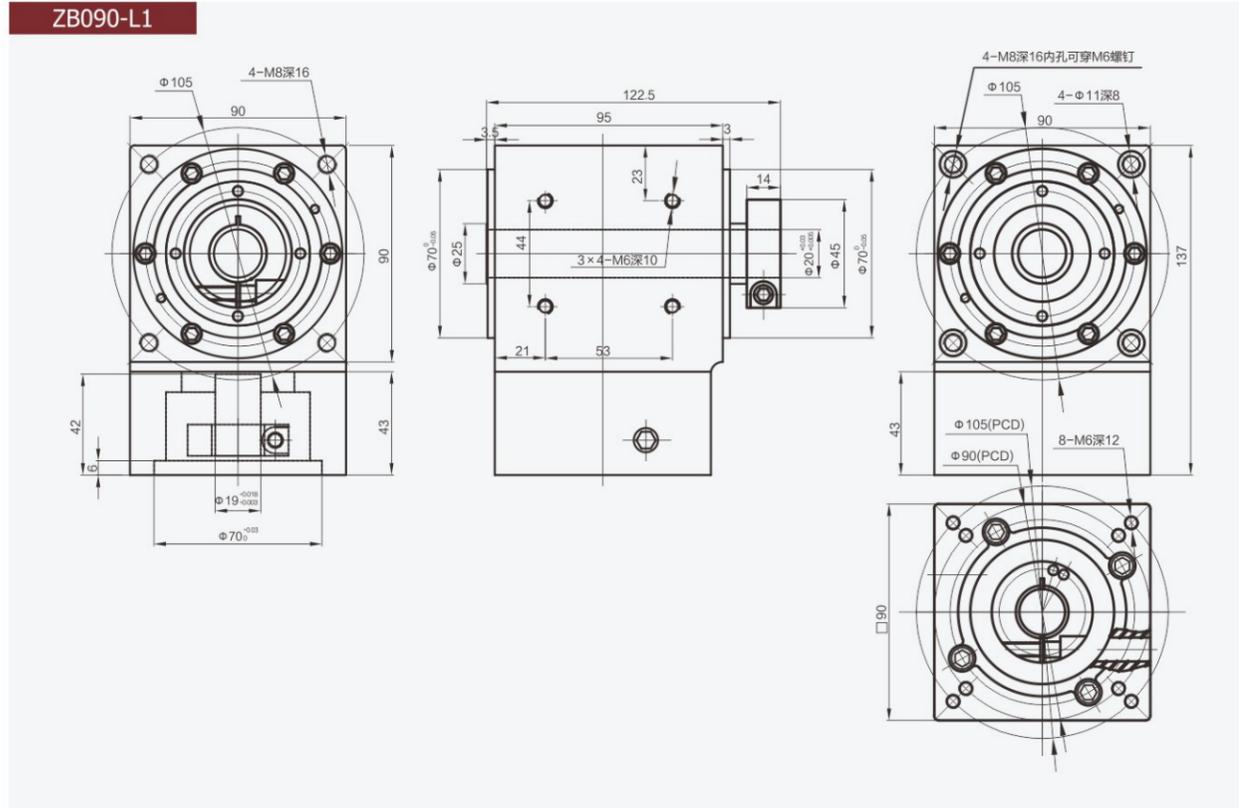


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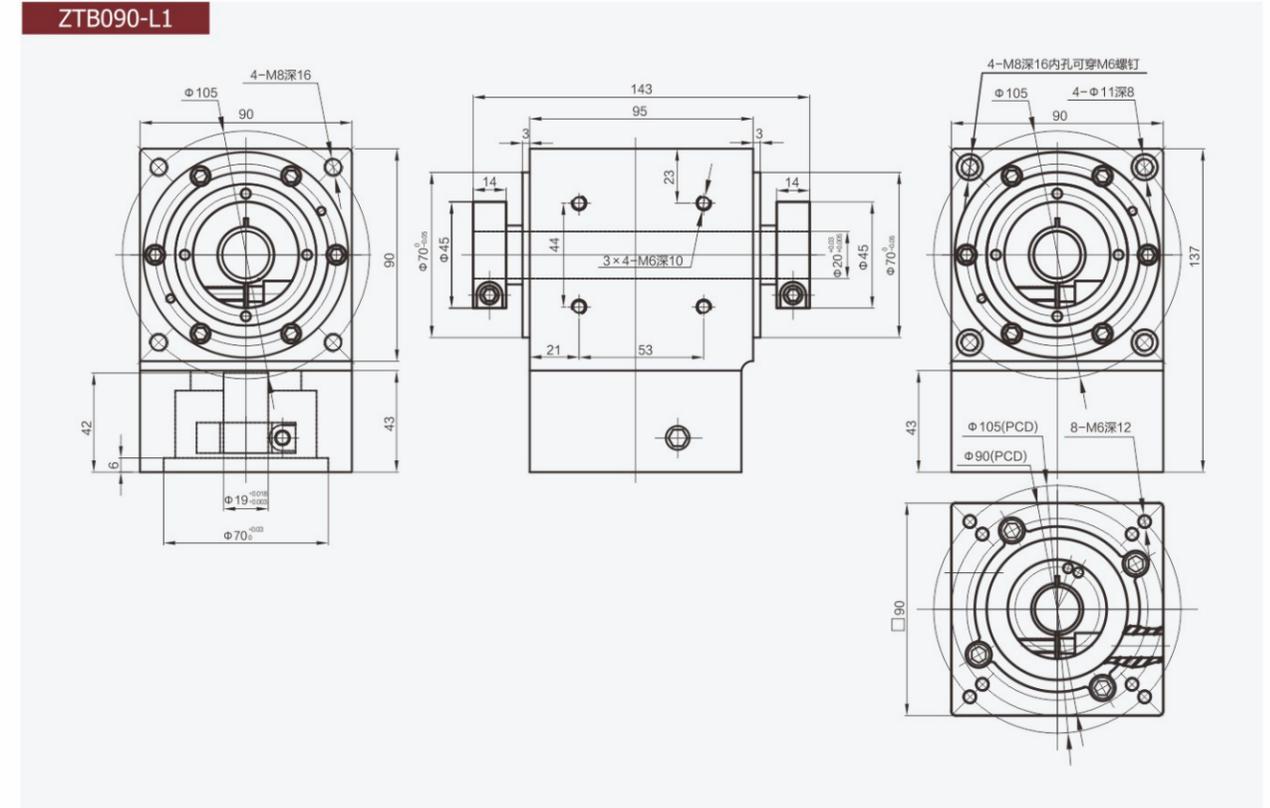
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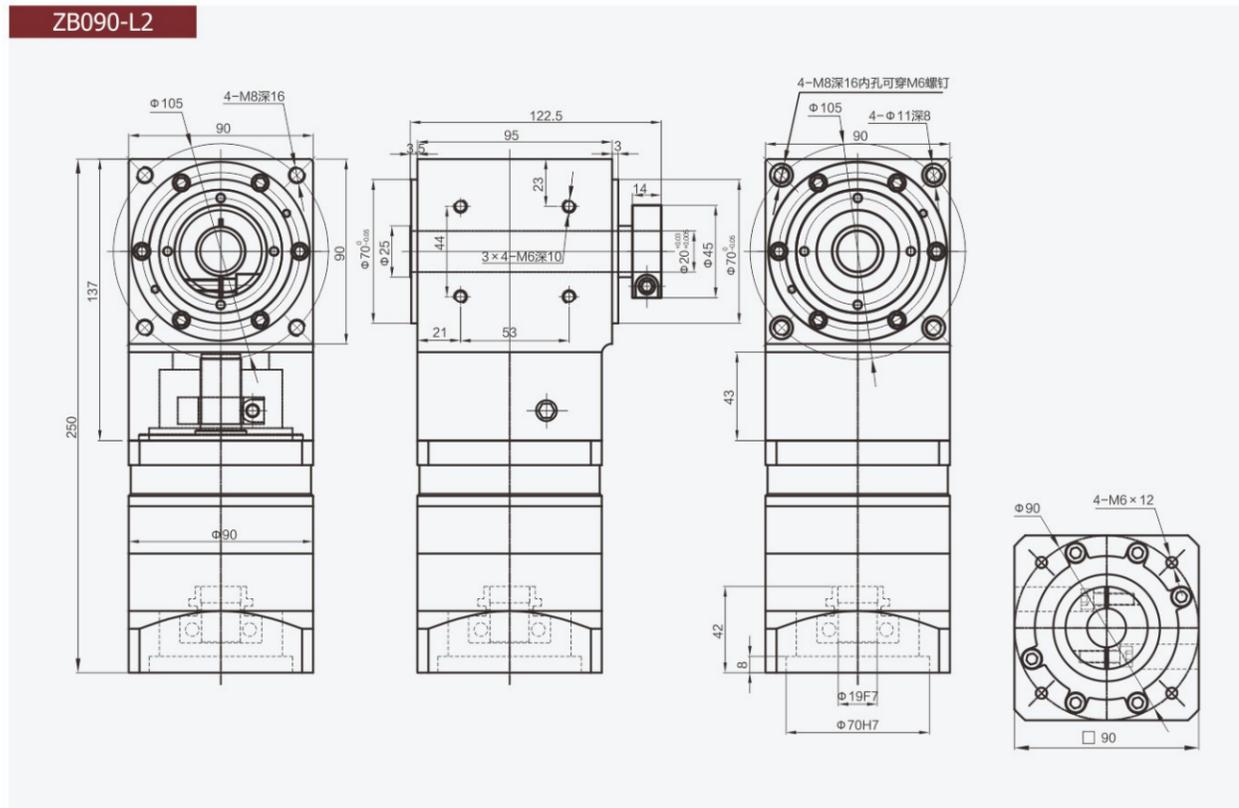


尺寸圖紙

ZTB090-L1



ZB090-L2



ZTB090-L2

