

DRN Series

Hollow Rotating Platform

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.

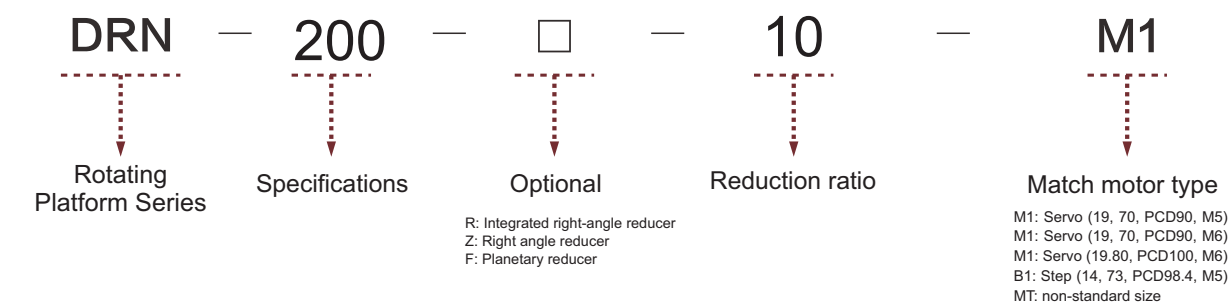
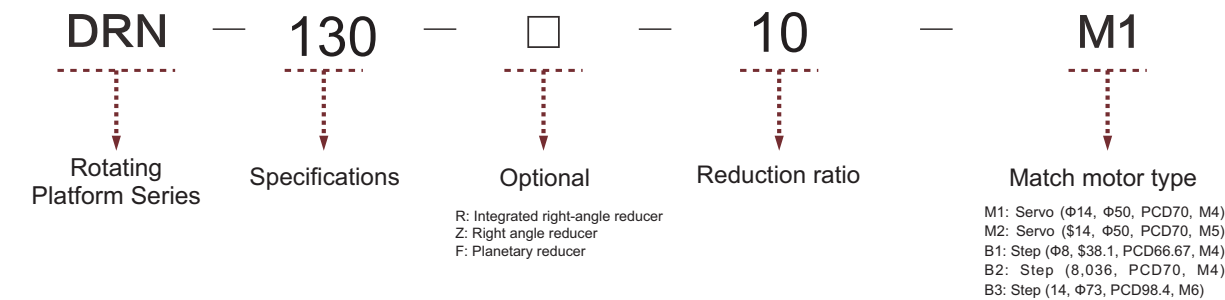
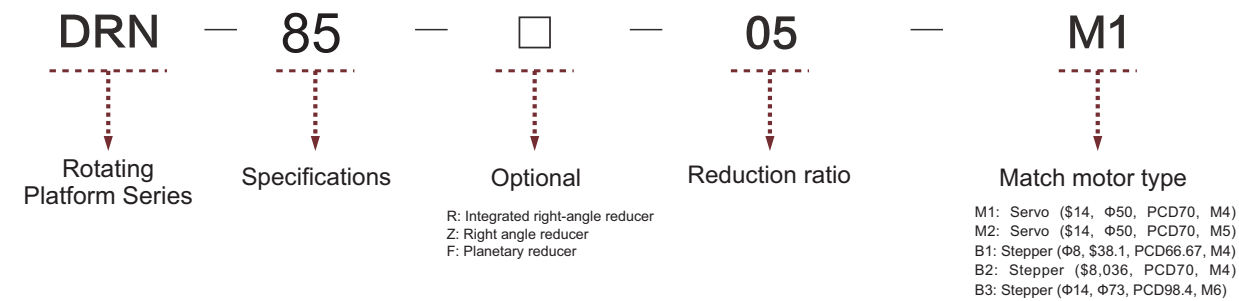
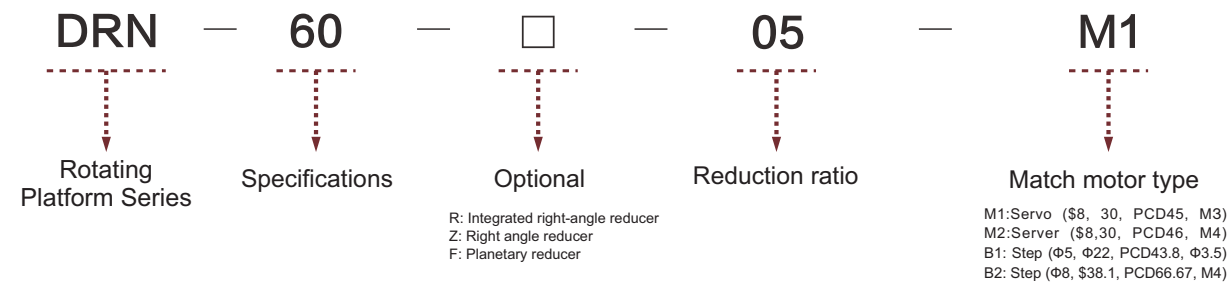


- Direct connection: Simple design enhances reliability.
- Large-caliber hollow rotating platform: simple wiring and piping.
- Positioning at any angle with high accuracy.
- Short-time positioning: Inertial load positioning can be achieved in a short period of time.
- Simple return to origin: saves you the trouble of design and parts procurement.

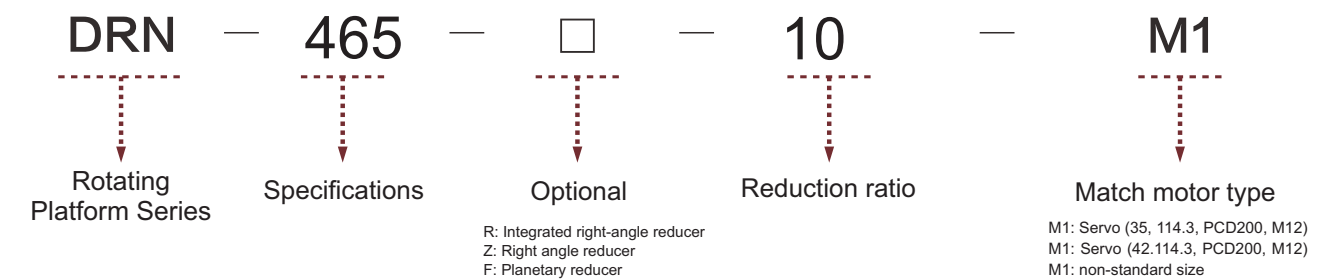
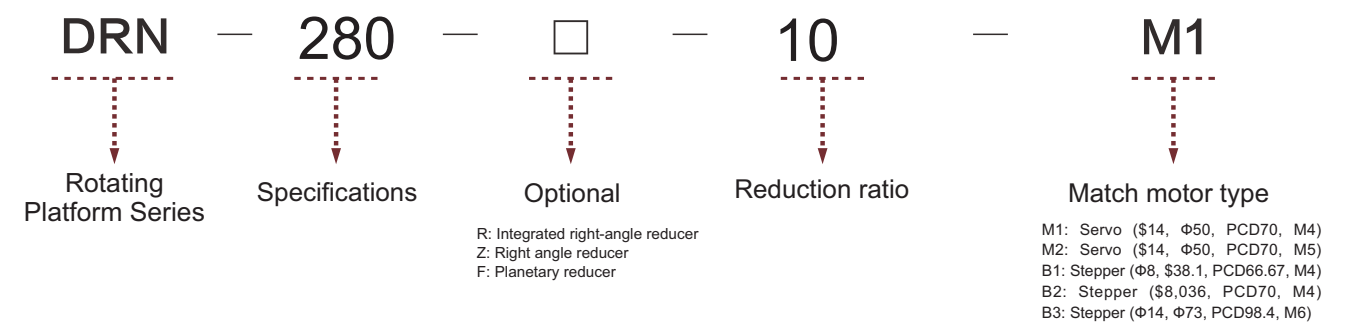


Model Identification

Rotary platform model identification



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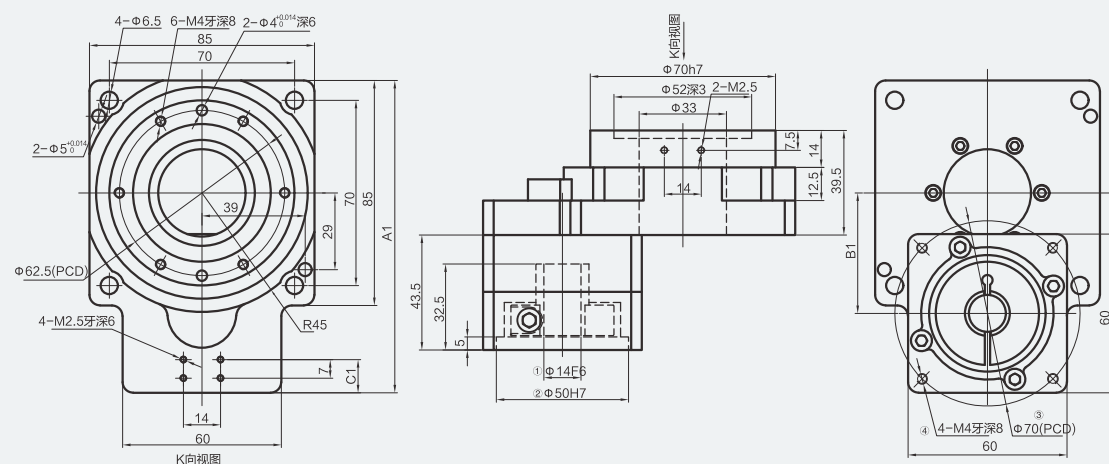
DRN



Technical Parameters

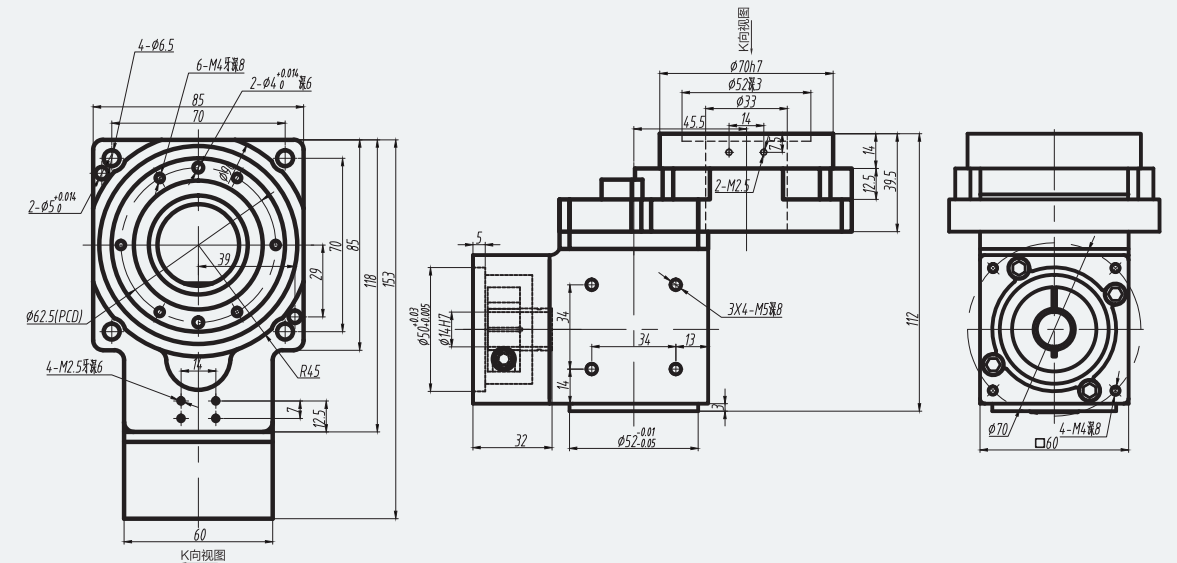
The above technical parameters are for reference only. Actual technical parameters and dimensions will be provided based on the data provided by the customer.

DRN85



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

DRN85-R



Technical drawing of the L1 planetary gearbox showing front, side, and rear views with dimensions in mm.

Front View Dimensions:

- Top flange: 4- $\phi 6.5$ 6-M4牙深8, 2- $\phi 5^{H7/k6}$ 深6
- Inner bore: $\phi 39$
- Outer bore: $\phi 62.5$ (PCD)
- Bottom flange: 4-M2.5牙深6
- Mounting feet: 2- $\phi 5^{H7/k6}$ 深6
- Dimensions: 85, 70, 118, 29, 70, 12.5, 60, 14, R45

Side View Dimensions:

- Top flange: 39.5, 14, 12.5, 7.5
- Internal features: 2-M2.5, $\phi 52$ 深3, $\phi 33$, 14
- Bottom flange: 38.5, 49.5, 77.5, 31.5, 6
- Internal features: $\phi 70$ H7, $\phi 52$ 深3, $\phi 74$ H6, $\phi 50$ H7

Rear View Dimensions:

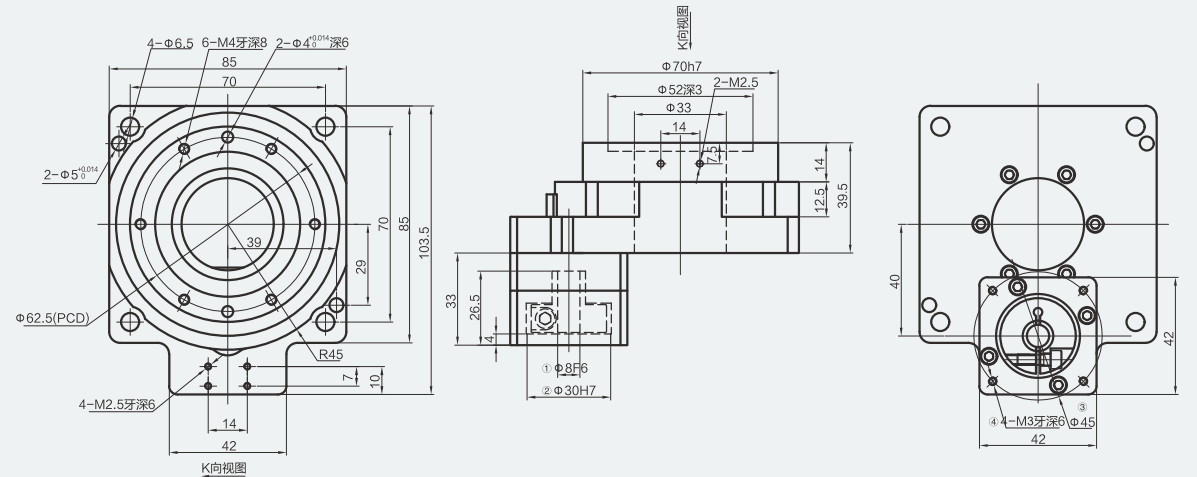
- Top flange: 4- $\phi 6.5$ 6-M4牙深8, 2- $\phi 5^{H7/k6}$ 深6
- Inner bore: $\phi 39$
- Outer bore: $\phi 62.5$ (PCD)
- Bottom flange: 4-M2.5牙深6
- Mounting feet: 2- $\phi 5^{H7/k6}$ 深6
- Dimensions: 85, 70, 118, 29, 70, 12.5, 60, 14, R45

Technical Parameters

Model	Unit	DRN85	DRN85-R/Z				DRN85-F		
Matching Motor	W	50W, 100W AC servo motor				42mm, 57mm, Stepper motor			
Bearing Type		Cross Roller Bearing							
Ratios	i	15	30	45	75	45	60	75	
Rated Torque	N.m	20	20			20			
Max Torque	N.m	40	40			40			
Rated Speed	r/min	200							
Max.Overturning Torque	N.m	380							
Max.Radial force	N	4800							
Max.Axial force	N	4800							
Torsional Stiffness	Nm/arcmin	5.9							
Positioning Accuracy	arc-min	± 0.5	± 0.5			± 0.5			
Repeat Positioning	arc-sec	≤10	≤15			≤15			
Platform Runout	mm	≤0.01							
Radial Runout	mm	≤0.01							
Platform Concentricity	mm	≤0.01							
Platform Parallellism	mm	≤0.01							
Life	h	>20000							
Opeating Temperature	℃	-25 ~ +90℃							
Lubricating		Synthetic grease lubrication							
Protection Grade	IP	Ip65							
Installation		Any angle							
Weight	kg	1.2	1.69			1.5			

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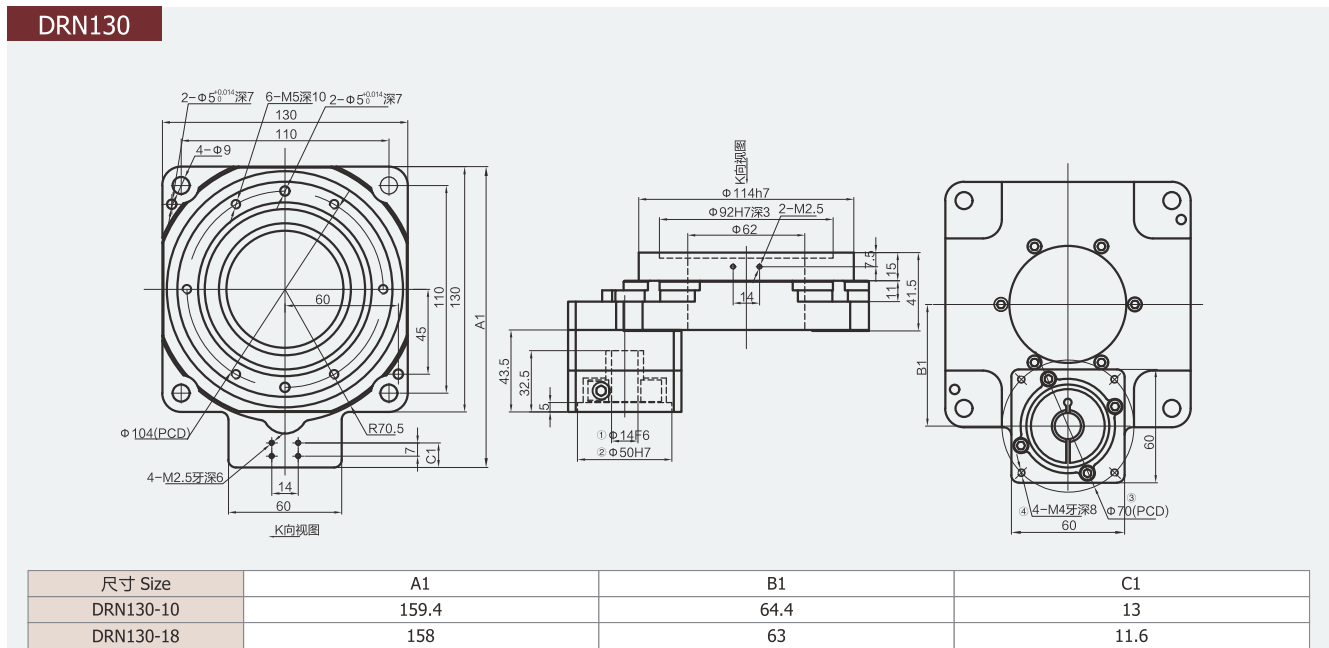
DRN Hollow Rotary Platform

Technical Parameters

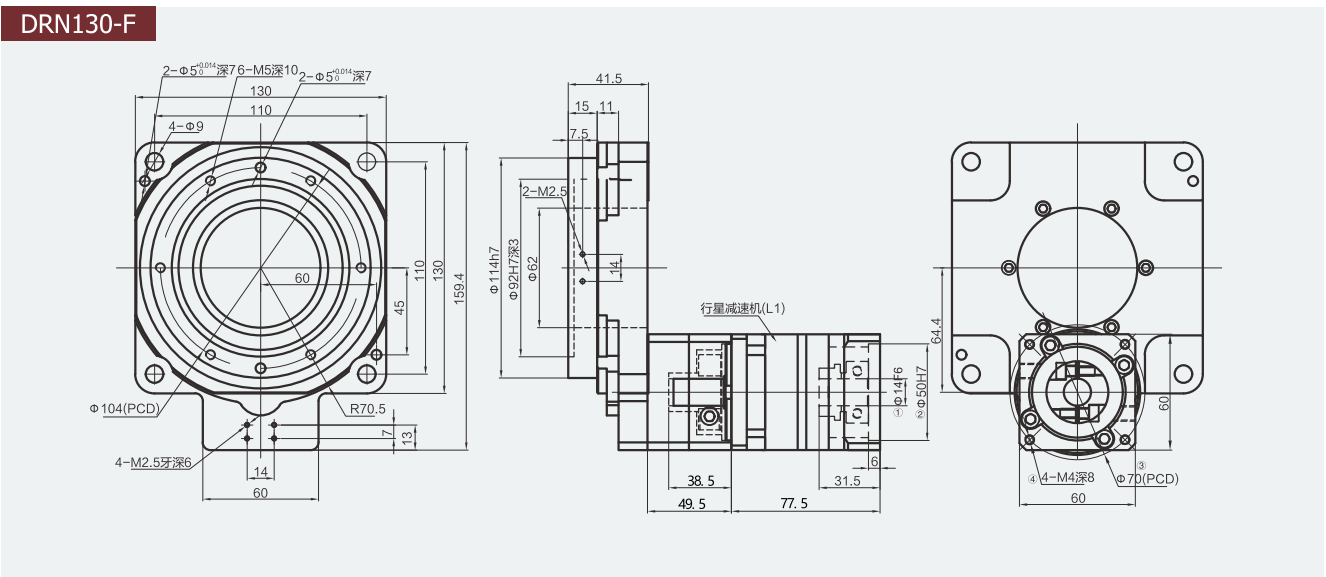
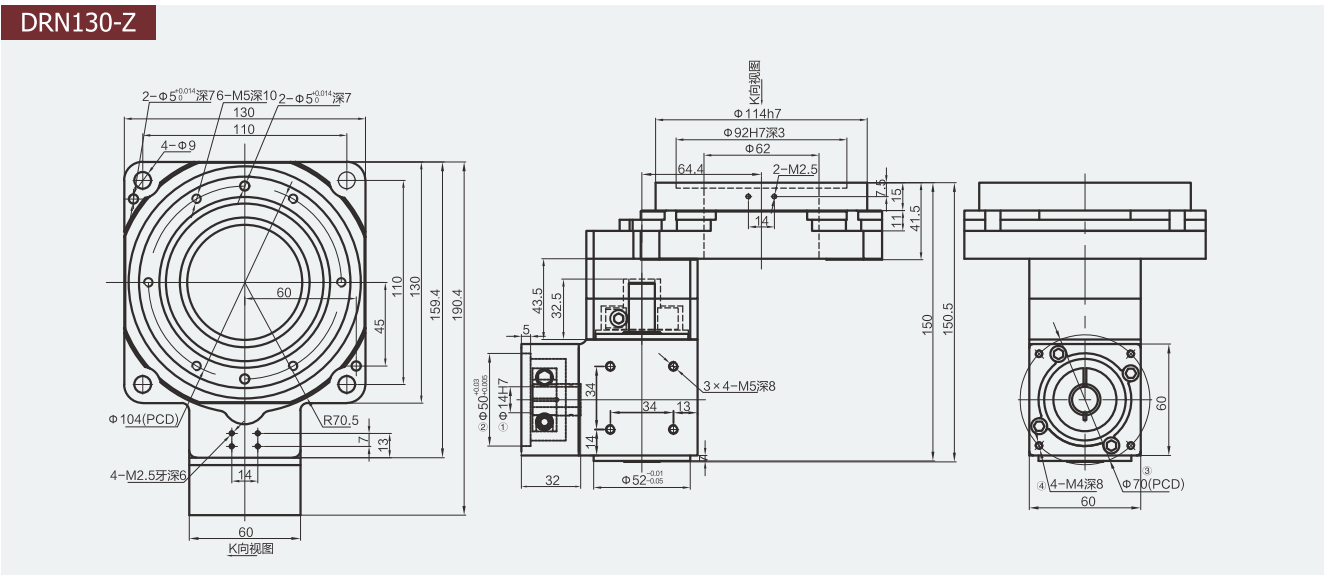
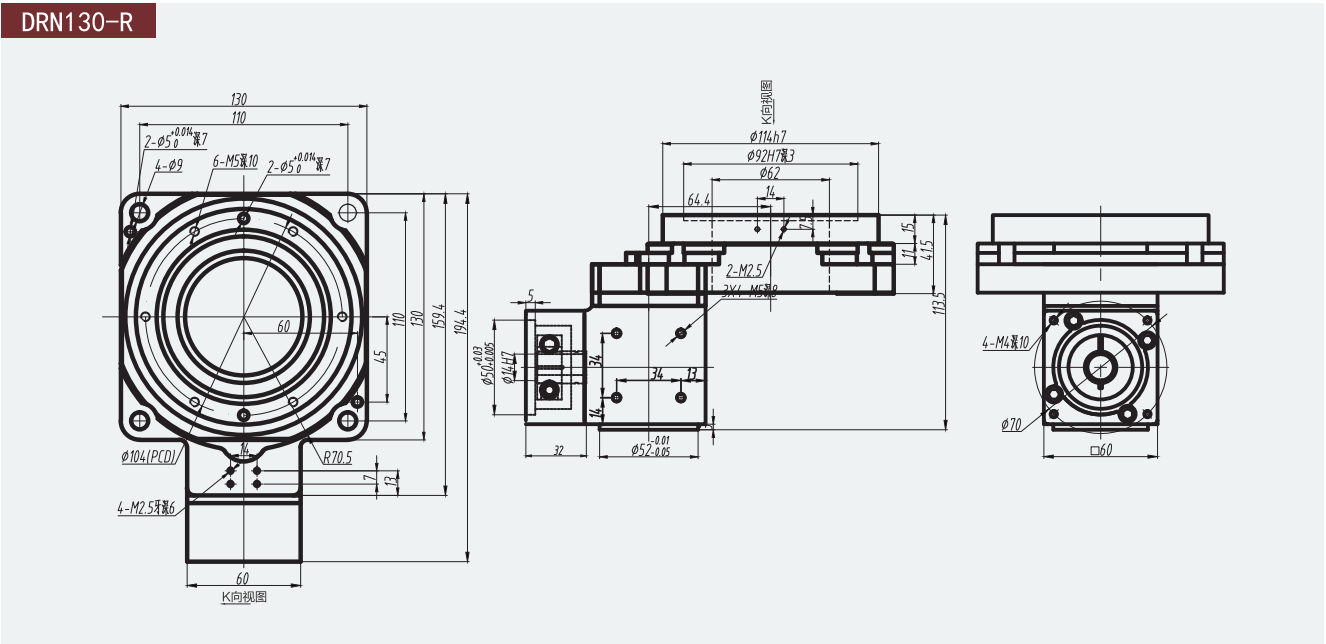
Model	Unit	DRN130		DRN130-R/Z			DRN130-F					
Matching Motor	W	200W, 400W AC servo motor					57mm, 60mm, 86mm Stepper motor					
Bearing Type		Cross Roller Bearing										
Ratios	i	10	18	20	30	50	30	40	50	70	100	
Rated Torque	N.m	60	37	60			60					
Max Torque	N.m	120	74	120			120					
Rated Speed	r/min	200										
Max.Overturning Torque	N.m	1200										
Max.Radial force	N	8400										
Max.Axial force	N	8400										
Torsional Stiffness	Nm/arcmin	16										
Positioning Accuracy	arc-min	± 0.5		± 0.5			± 0.5					
Repeat Positioning	arc-sec	≤10		≤15			≤15					
Platform Runout	mm	≤0.01										
Radial Runout	mm	≤0.01										
Platform Concentricity	mm	≤0.01										
Platform Parallellism	mm	≤0.01										
Life	h	>20000										
Opeating Temperature	℃	-25~+90℃										
Lubricating		Synthetic grease lubrication										
Protection Grade	IP	Ip65										
Installation		Any angle										
Weight	kg	2.61	2.6	3.86			3.61					

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Dimensional Drawings



Dimensional Drawings



DRN Hollow Rotary Platform

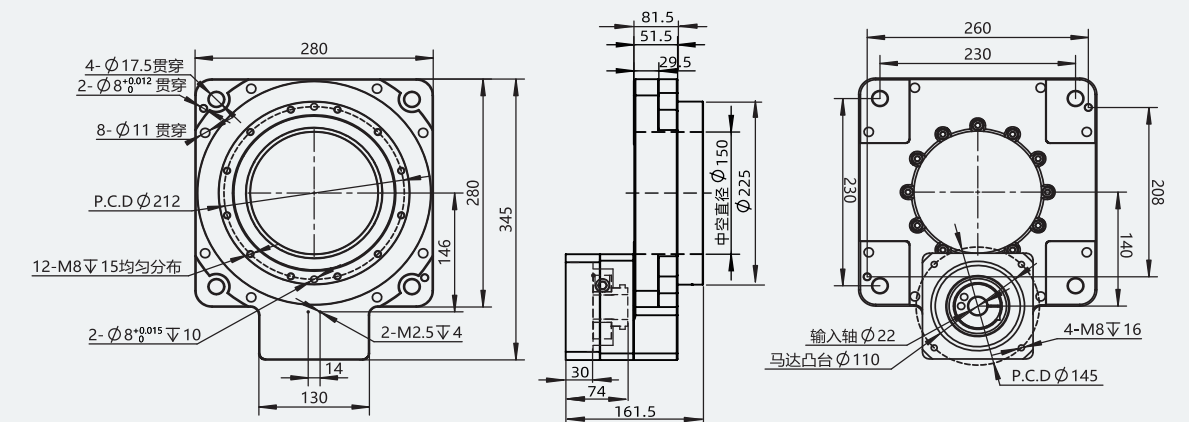
Technical Parameters

Model	Unit	DRN280		DRN280-Z			DRN280-F				
Matching Motor	W	1KW-2KW AC servo motor					110-130mm, Servo motor				
Bearing Type		Cross Roller Bearing									
Ratios	i	10	18	30/40	50	70/100	30	40	50	70	100
Rated Torque	N.m	150	125	150			150				
Max Torque	N.m	300	250	300			300				
Rated Speed	r/min	200									
Max.Overturning Torque	N.m	125									
Max.Radial force	N	16500									
Max.Axial force	N	16500									
Torsional Stiffness	Nm/arcmin	39									
Positioning Accuracy	arc-min	± 0.5		± 0.5			± 0.5				
Repeat Positioning	arc-sec	≤10		≤15			≤15				
Platform Runout	mm	≤0.01									
Radial Runout	mm	≤0.01									
Platform Concentricity	mm	≤0.01									
Platform Parallelism	mm	≤0.01									
Life	h	>20000									
Opeating Temperature	℃	-25 ~ +90℃									
Lubricating		Synthetic grease lubrication									
Protection Grade	IP	Ip65									
Installation		Any angle									
Weight	kg	19. 6	19	33			26. 5				

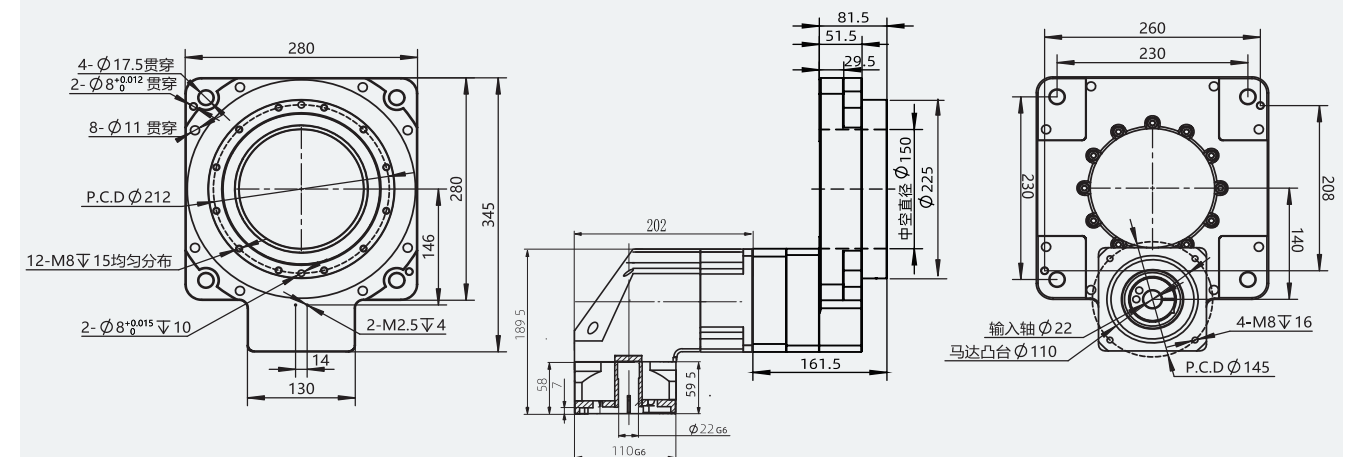
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Dimensional Drawings

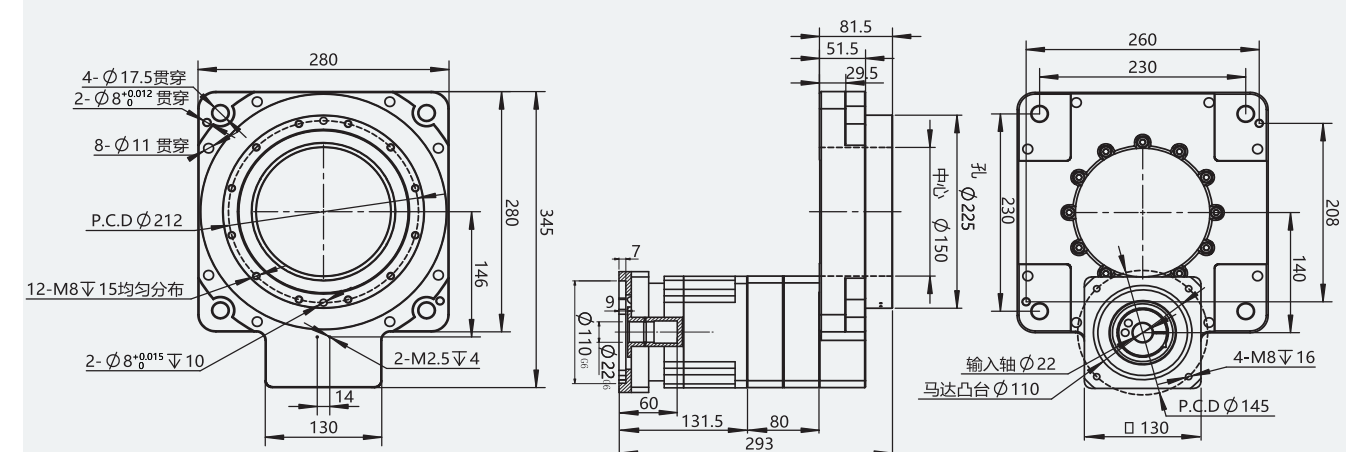
DRN280



DRN280-Z



DRN280-F



DRN Hollow Rotary Platform

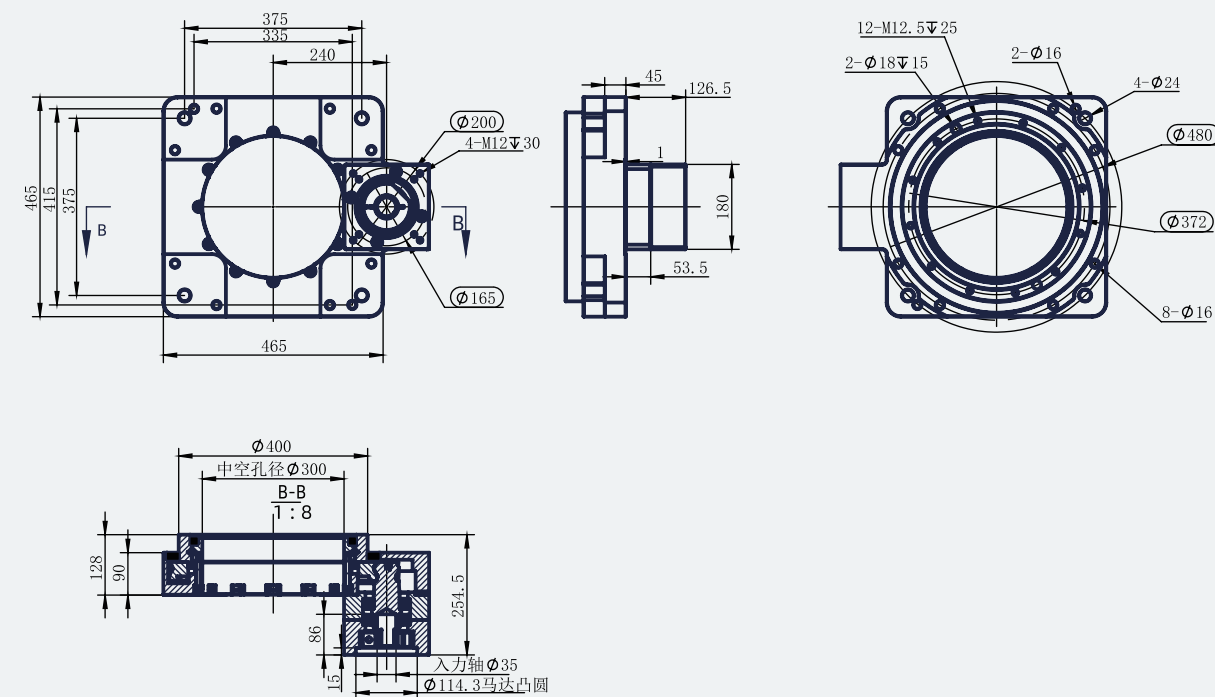
Technical Parameters

Model	Unit	DRN465		DRN465-Z			DRN465-F				
Matching Motor	W	2KW-5KW AC servo motor									
Bearing Type		Cross Roller Bearing									
Ratios	i	10	—	—	—	—	30	40	50	70	100
Maybe Torque	N.m	456	—	—			466				
ActiveTorque	N.m	767	—	—			767				
May Contribute	r/min	200									
Max.Overturning Torque	N.m	300									
Max.Radial force	N	18600									
Max.Axial force	N	18600									
Torsional Stiffness	Nm/arcmin	65									
Positioning Accuracy	arc-min	± 0.5		± 0.5			± 0.5				
Repeat Positioning	arc-sec	≤10		≤15			≤15				
Platform Runout	mm	≤0.01									
Radial Runout	mm	≤0.01									
Platform Concentricity	mm	≤0.01									
Platform Parallellism	mm	≤0.01									
Life	h	>20000									
Opeating Temperature	℃	-25 ~ +90℃									
Lubricating		Synthetic grease lubrication									
Protection Grade	IP	Ip65									
Installation		Any angle									
Weight	kg	52									

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Dimensional Drawings

DRN465



DRN465-F

