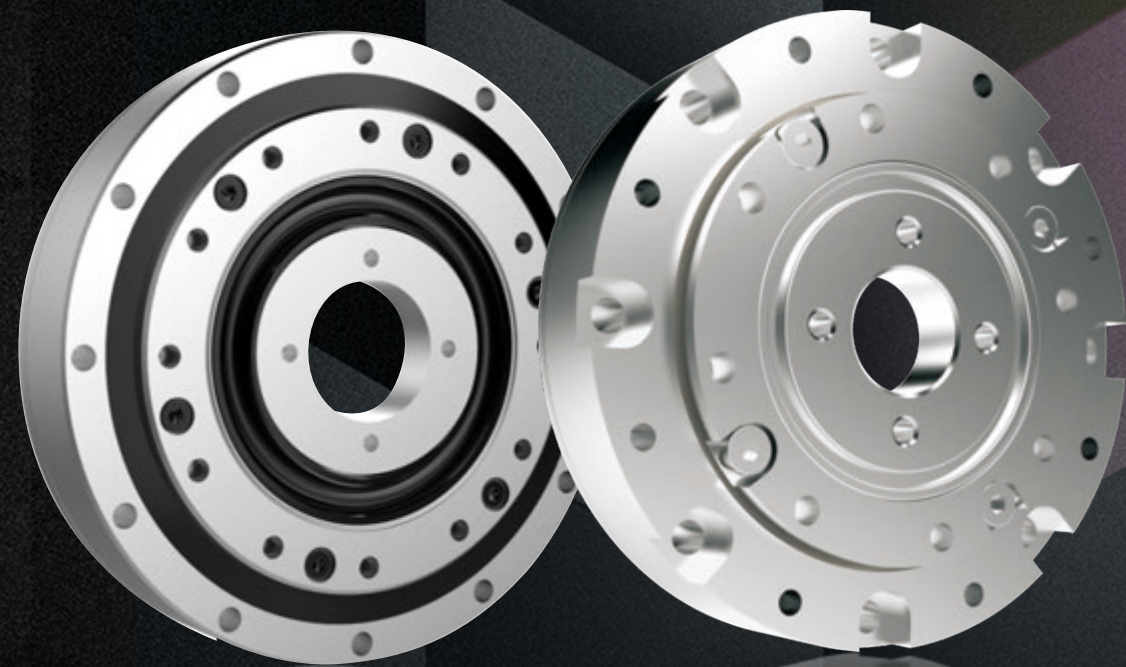


SHD

Harmonic Drive Series



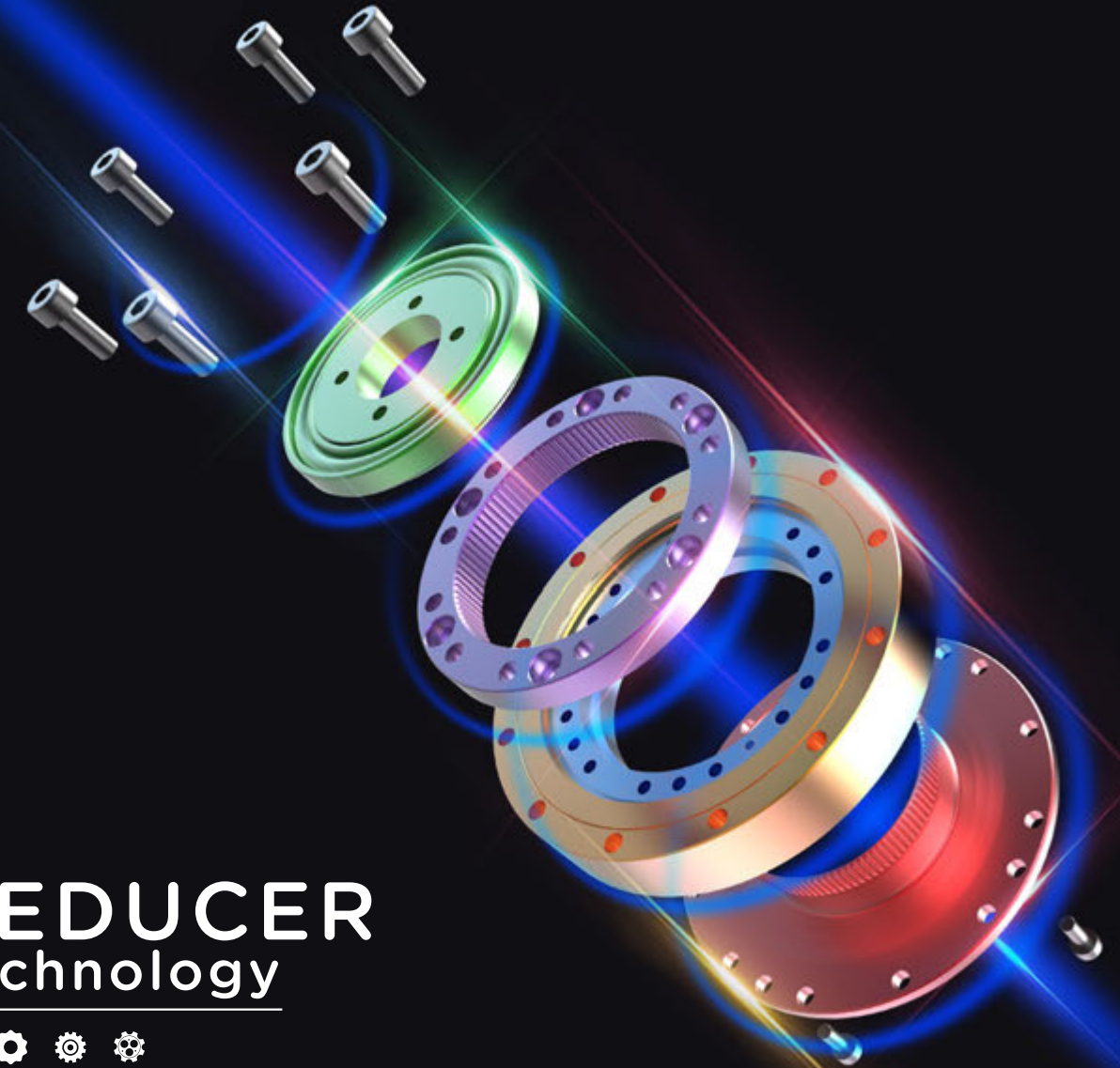
SHD
Joint Special Use Series



SHD Series



INNOVATIVE
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HARMONIC
THE FUTURE

SHD

Special for Joint

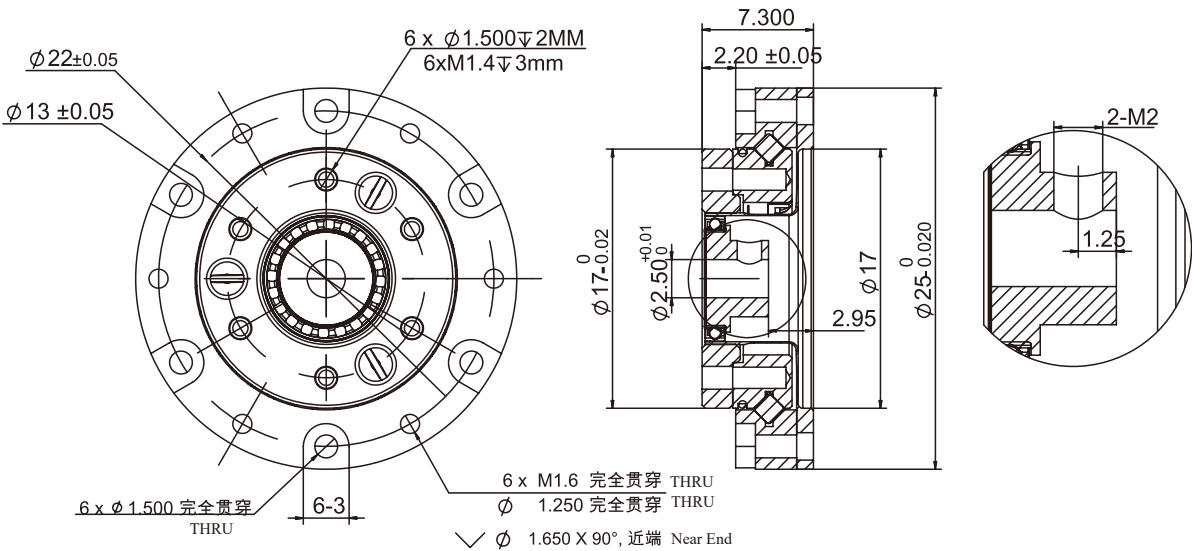


I Product Features

Ultrathin Hollow Structure	Compact Structure	High Torque Capacity	High Rigidity	Excellent positioning accuracy and rotation accuracy	Wrist Joints Special for Robot
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SHD-03-xxx

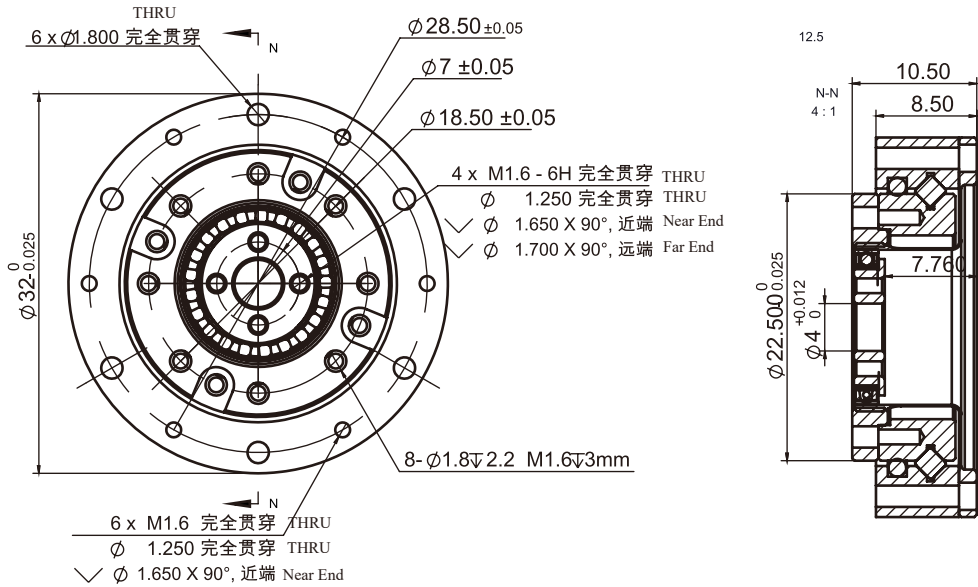
Series Harmonic Drives



Items Model	Ratio	Rated Torque in Input 2000r/min	Allowable Peak Torque When Start Stop	Max Value of Average Loading Torque	Instantaneous Allowable Max Torque	Allowable Highest Input Speed	Allowable Average Input Speed	Moment of Inertia (1/4GD ²)
		Nm	Nm	Nm	Nm	r/min	r/min	kgcm ²
3	30	0.08	0.15	0.12	0.25	10000	6500	7.0×10 ⁻⁴
	50	0.13	0.24	0.16	0.50			
	80	0.16	0.34	0.18	0.60			
	100	0.20	0.40	0.20	0.70			

SHD-05-xxx

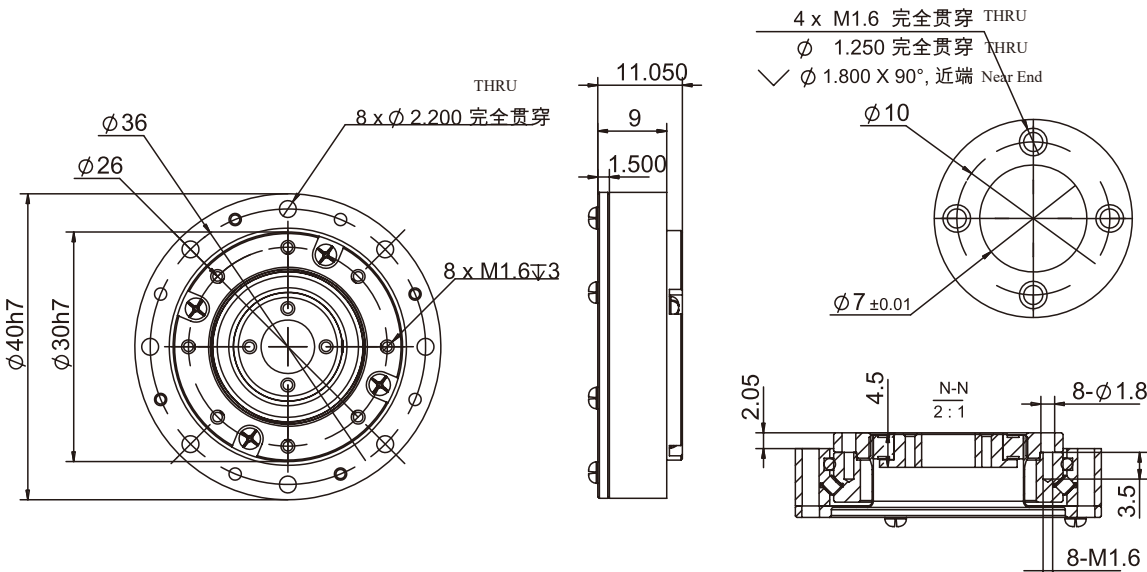
Series Harmonic Drives



Items Model	Ratio	Rated Torque in Input 2000r/min	Allowable Peak Torque When Start Stop	Max Value of Average Loading Torque	Instantaneous Allowable Max Torque	Allowable Highest Input Speed	Allowable Average Input Speed	Moment of Inertia (1/4GD ²)
		Nm	Nm	Nm	Nm	r/min	r/min	kgcm ²
5	30	0.30	0.60	0.45	1.10	10000	6500	2.5×10 ⁻⁴
	50	0.44	1.10	0.60	2.00			
	80	0.72	1.50	1.00	2.80			
	100	0.80	1.65	1.20	3.20			

SHD-08-xxx

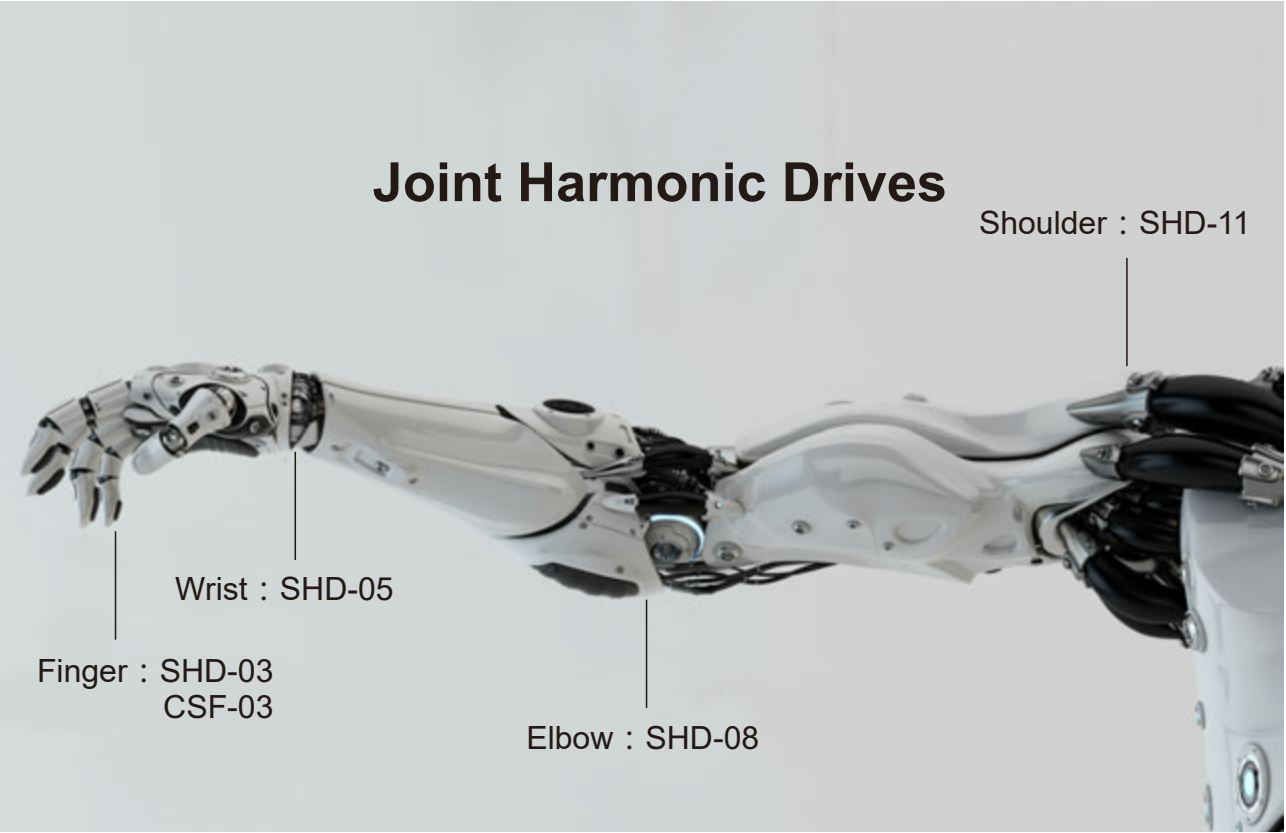
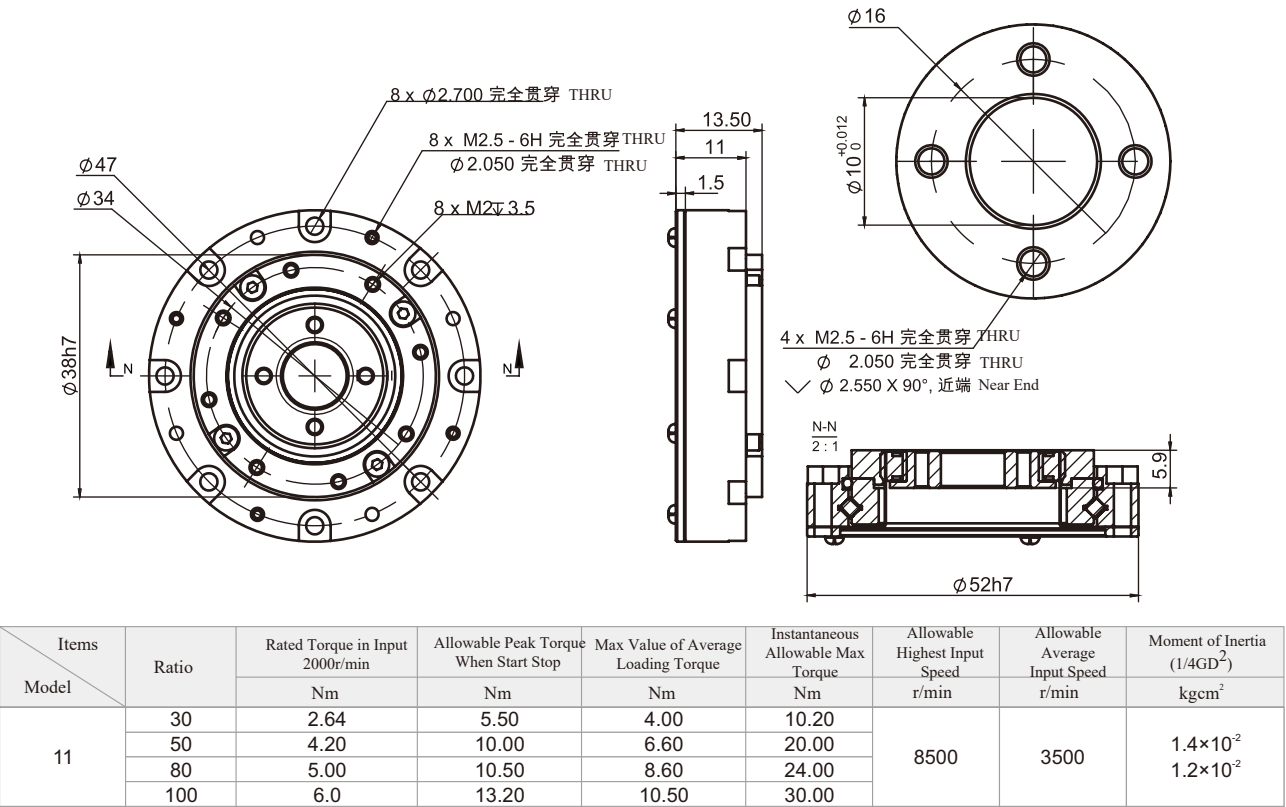
Series Harmonic Drives



Items Model	Ratio	Rated Torque in Input 2000r/min	Allowable Peak Torque When Start Stop	Max Value of Average Loading Torque	Instantaneous Allowable Max Torque	Allowable Highest Input Speed	Allowable Average Input Speed	Moment of Inertia (1/4GD ²)
		Nm	Nm	Nm	Nm	r/min	r/min	kgcm ²
8	30	1.00	2.10	1.65	3.95	8500	3500	3.2×10 ⁻³
	50	1.95	3.95	2.75	7.95			
	80	2.50	4.80	3.50	9.00			
	100	2.85	5.50	3.95	10.8			

SHD-11-xxx

Series Harmonic Drives



SHD

Regular Type

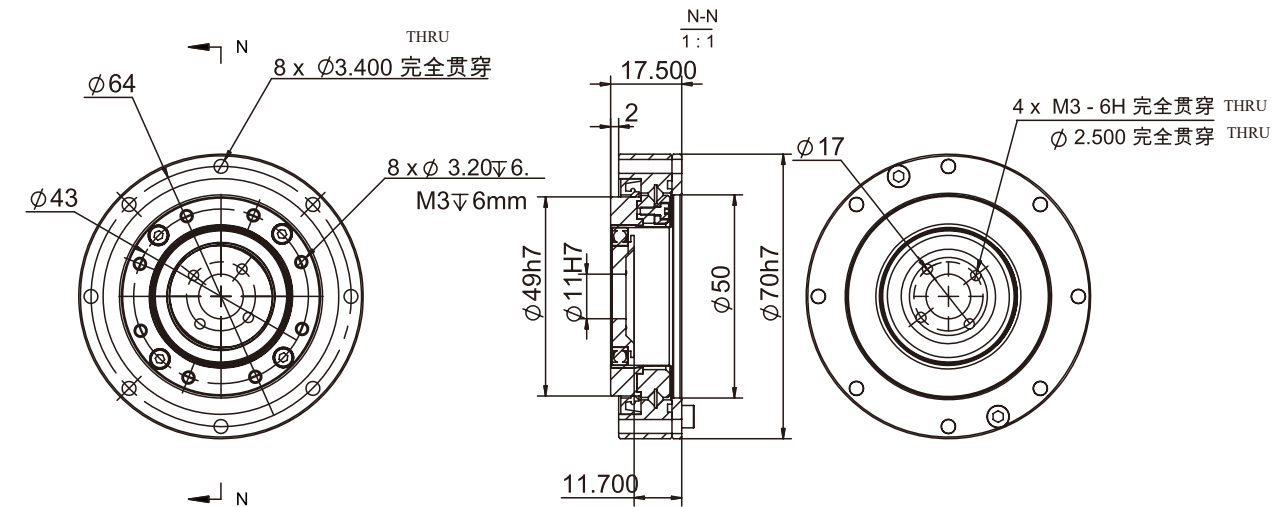


I Product Features

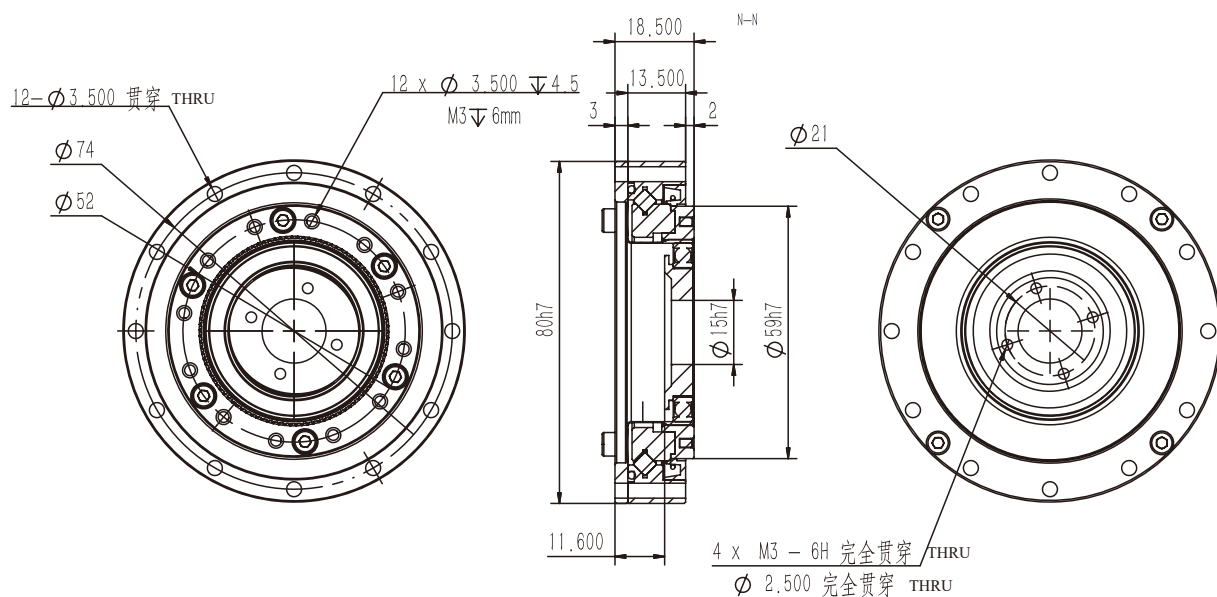
Ultrathin Hollow Structure	Compact Structure	High Torque Capacity	High Rigidity	Excellent positioning accuracy and rotation accuracy
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SHD-14

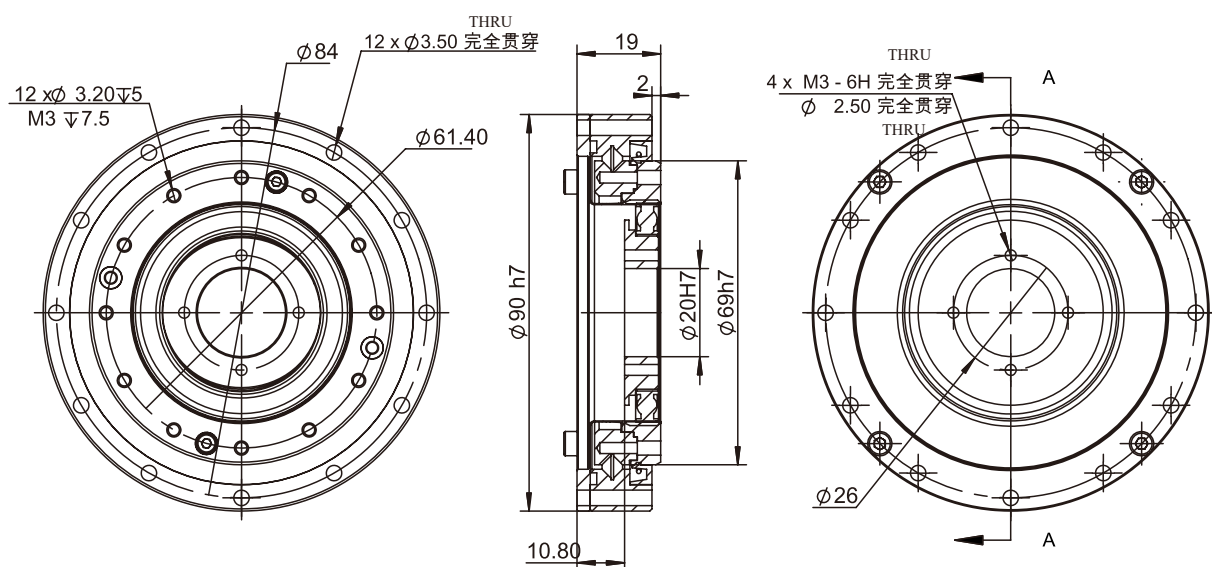
Series Harmonic Drives



Items Model	Ratio	Rated Torque in Input 2000r/min	Allowable Peak Torque When Start Stop	Max Value of Average Loading Torque	Instantaneous Allowable Max Torque	Allowable Highest Input Speed	Allowable Average Input Speed	Moment of Inertia (1/4GD ²) kgcm ²
		Nm	Nm	Nm	Nm	r/min	r/min	
14	30	3.00	8.7	6.20	15.00	8500	3500	3.4×10 ⁻¹
	50	4.50	13.00	6.80	25.00			3.3×10 ⁻¹
	80	6.00	15.00	9.50	38.00			
	100	7.40	19.00	10.80	40.00			

SHD-17**Series Harmonic Drives**

Items Model	Ratio	Rated Torque in Input 2000r/min	Allowable Peak Torque When Start Stop	Max Value of Average Loading Torque	Instantaneous Allowable Max Torque	Allowable Highest Input Speed	Allowable Average Input Speed
		Nm	Nm	Nm	Nm	r/min	r/min
17	50	11.00	23.00	18.00	48.00	7000	3500
	100	16.00	37.00	27.00	71.00		

SHD-20**Series Harmonic Drives**

Items Model	Ratio	Rated Torque in Input 2000r/min	Allowable Peak Torque When Start Stop	Max Value of Average Loading Torque	Instantaneous Allowable Max Torque	Allowable Highest Input Speed	Allowable Average Input Speed
		Nm	Nm	Nm	Nm	r/min	r/min
20	50	17.00	39.00	24.00	69.00	6000	3500
	100	28.00	57.00	34.00	95.00		
	120	28.00	61.00	34.00	95.00		