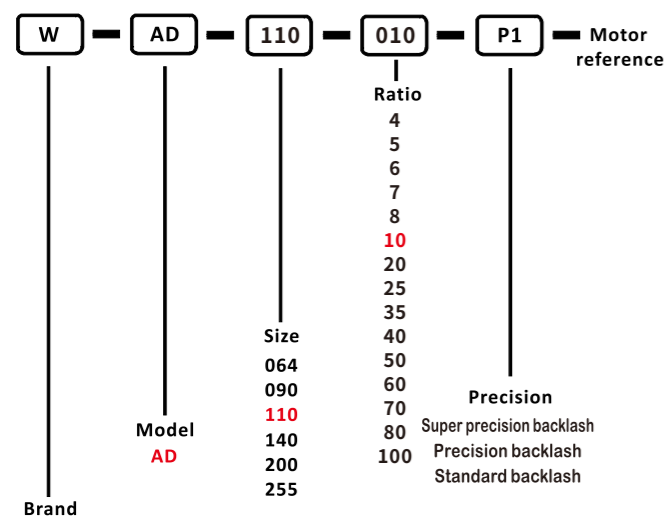


## SELECTION



## GENERAL NOTICES

- Type, model and torque
- Ratio or output speed
- Working conditions and connection methods
- Quantity and installed machine name
- Input mode and input speed
- Motor brand model or flange and motor shaft size

## PLANETARY GEARBOX

### Performance

Specification	Unit	Stage	Ratio	WAD064	WAD090	WAD110	WAD140	WAD200	WAD255		
Rated output torque $T_{2N}$	Nm	1	4	48	130	270	560	1100	1700		
			5	60	160	330	650	1200	2000		
			6	50	140	300	550	1100	1800		
			7	50	140	300	550	1100	1800		
			8	40	100	230	450	900	1500		
		10	40	100	230	450	900	1500			
		2	20	48	130	270	560	1100	1700		
			25	60	160	330	650	1200	2000		
			35	50	140	300	550	1100	1800		
			40	48	130	270	560	1100	1700		
50	60		160	330	650	1200	2000				
Emergency stop torque $T_{2NOT}$	Nm	1,2	4 ~ 100	Triple rated output torque							
			Rated input speed $n_{1N}$	rpm	4 ~ 100	5000	4000	4000	3000	3000	2000
			Maximum input speed $n_{1B}$		4 ~ 100	10000	8000	8000	6000	6000	4000
Super precision backlash $P_0$	arcmin	1	4 ~ 10	≤1.5	≤1.5	≤1.5	≤1.5	≤1.5	≤1.5		
		2	20 ~ 100	≤3	≤3	≤3	≤3	≤3	≤3		
Precision backlash $P_1$	arcmin	1	4 ~ 10	≤3	≤3	≤3	≤3	≤3	≤3		
		2	20 ~ 100	≤5	≤5	≤5	≤5	≤5	≤5		
Standard backlash $P_2$	arcmin	1	4 ~ 10	≤5	≤5	≤5	≤5	≤5	≤5		
		2	20 ~ 100	≤8	≤8	≤8	≤8	≤8	≤8		
Torsional rigidity	Nm/arcmin	1,2	4 ~ 100	13	31	82	151	440	1006		
Maximum bending torque $M_{2KB}$	Nm	1,2	4 ~ 100	125	235	430	1300	3064	5900		
Allowable axial force $F_{2aB}$	N	1,2	4 ~ 100	1050	2850	2990	10590	16660	29430		
Lifespan	hr	1,2	4 ~ 100	20000							
Efficiency	%	1	4 ~ 10	≥97%							
		2	20 ~ 100	≥94%							
Weight	kg	1	4 ~ 10	1.1	2.9	5.4	11.9	31.6	56.1		
		2	20 ~ 100	1.7	4.2	8	15.9	36.9	70.4		
Use of temperature	°C	1,2	4 ~ 100	-20°C~+40°C							
Lubricating		1,2	Synthetic lubricating grease								
IP Grade		1,2	4 ~ 100	IP65							
Installation direction		1,2	4 ~ 100	In any direction							
Noise level ( $n_1=3000\text{rpm}$ , off load)	dB(A)	1,2	4 ~ 100	≤58	≤60	≤63	≤65	≤67	≤70		

# ROTATIONAL INERTIA OF REDUCER

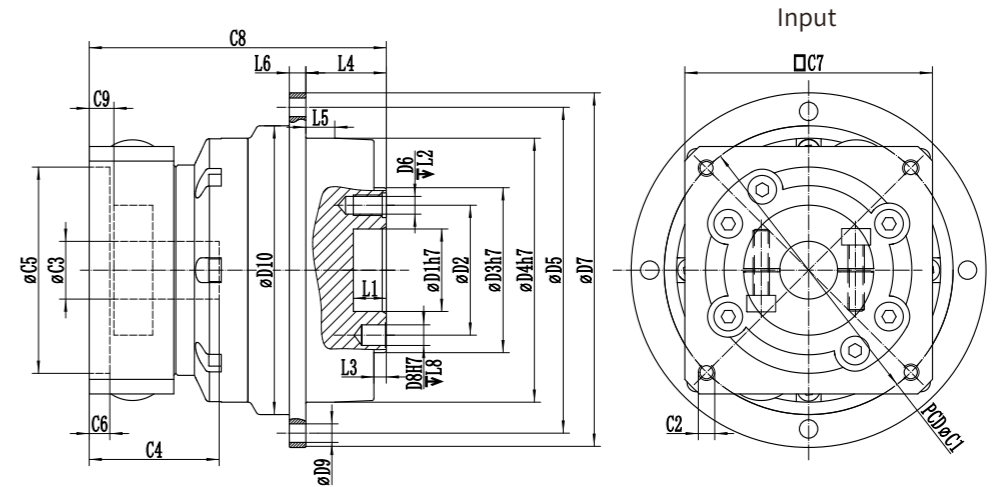
## Rotational inertia

Specification	Unit	Stage	Ratio	WAD064	WAD090	WAD110	WAD140	WAD200	WAD255		
Rotational inertia J1	kg · cm <sup>2</sup>	1	4	0.14	0.51	2.87	7.54	25.03	58.31		
			5	0.13	0.47	2.71	7.42	23.29	53.27		
			6	0.13	0.45	2.61	7.14	22.48	50.97		
			7	0.13	0.45	2.67	7.14	22.48	50.97		
			8	0.13	0.44	2.57	7.03	22.51	50.56		
			10	0.13	0.44	2.57	7.03	22.51	50.56		
		2	20	0.03	0.13	0.47	2.71	7.42	23.29		
			25	0.03	0.13	0.47	2.71	7.42	23.29		
			35	0.03	0.13	0.47	2.71	7.42	23.29		
			40	0.03	0.13	0.44	2.57	7.03	22.51		
			50	0.03	0.13	0.44	2.57	7.03	22.51		
			60	0.03	0.13	0.44	2.57	7.03	22.51		
			70	0.03	0.13	0.44	2.57	7.03	22.51		
			80	0.03	0.13	0.44	2.57	7.03	22.51		
					100	0.03	0.13	0.44	2.57	7.03	22.51

1. Ratio (  $i=N_{in}/N_{out}$  )

2. Maximum acceleration torque  $T_{2B} = 60\%$  of  $T_{2NOT}$

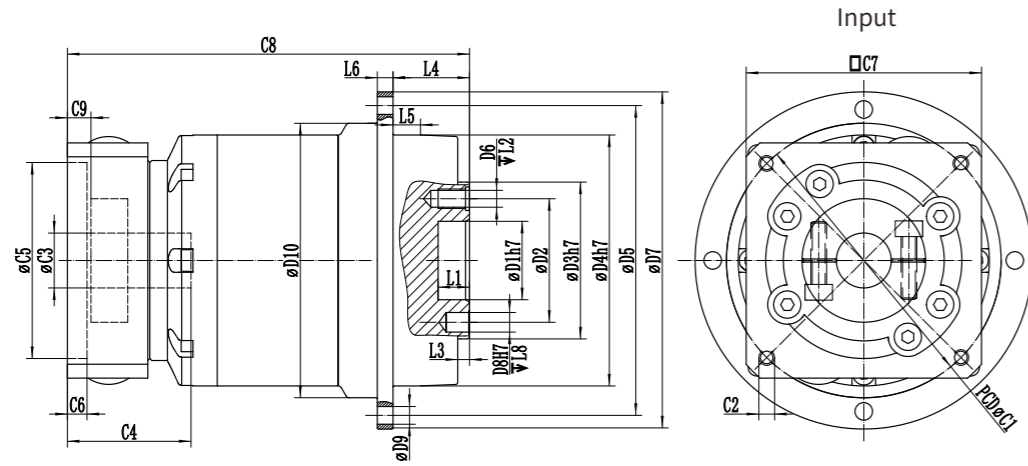
3. Output speed 100rpm, acting on the center of the output shaft



## DIMENSION SINGLE SECTION

Dimension(single stage, Ratio i=4~10)

Dimension	WAD064	WAD090	WAD110	WAD140	WAD200	WAD255
D1 H7	20	31.5	40	50	80	100
D2	31.5	50	63	80	125	140
D3 h7	40	63	80	100	160	180
D4 h7	64	90	110	140	200	255
D5	79	109	135	168	233	280
D6	7×M5×0.8P	7×M6×1P	11×M6×1P	11×M8×1.25P	11×M10×1.5P	12×M16×2.0P
D7	86	118	145	179	247	300
D8 H7	5	6	6	8	10	12
D9	8×4.5	8×5.5	8×5.5	12×6.6	12×9	16×13.5
D10	70	95	125	152	212	255
L1	8	12	12	12	16	20
L2	8	13.5	13.5	17	22.5	30.5
L3	3	6	6	6	8	12
L4	19.5	30	29	38	50	66
L5	7	10	10	14.6	15	20
L6	4	7	8	10	12	18
L7	7.7	7.5	10	12	15	20
L8	6	7	7	7	10	10
C1	70 90	90 145	145 200	200	200	235
C2	M4 M5	M5 M8	M8 M12	M12*1.75P	M12*1.75P	M12*1.75P
C3	≤14 ≤19	≤19 ≤24	≤24 ≤35	≤35/≤42	≤42	≤42/≤55
C4	31.5 41	41 59	60 81	81	114	117
C5	50 70	70 110	110 114.3	114.3	114.3	200
C6	5 5	6 14	14 19	19	24	20
C7	60 80	80 130	130 180	180	180	220
C8	76 89	102 120	127.5 149.5	173.5	225.5	268.5
C9	6 9	9.5 21.5	19.5 25	22	30	36



## DIMENSION DOUBLE SECTION

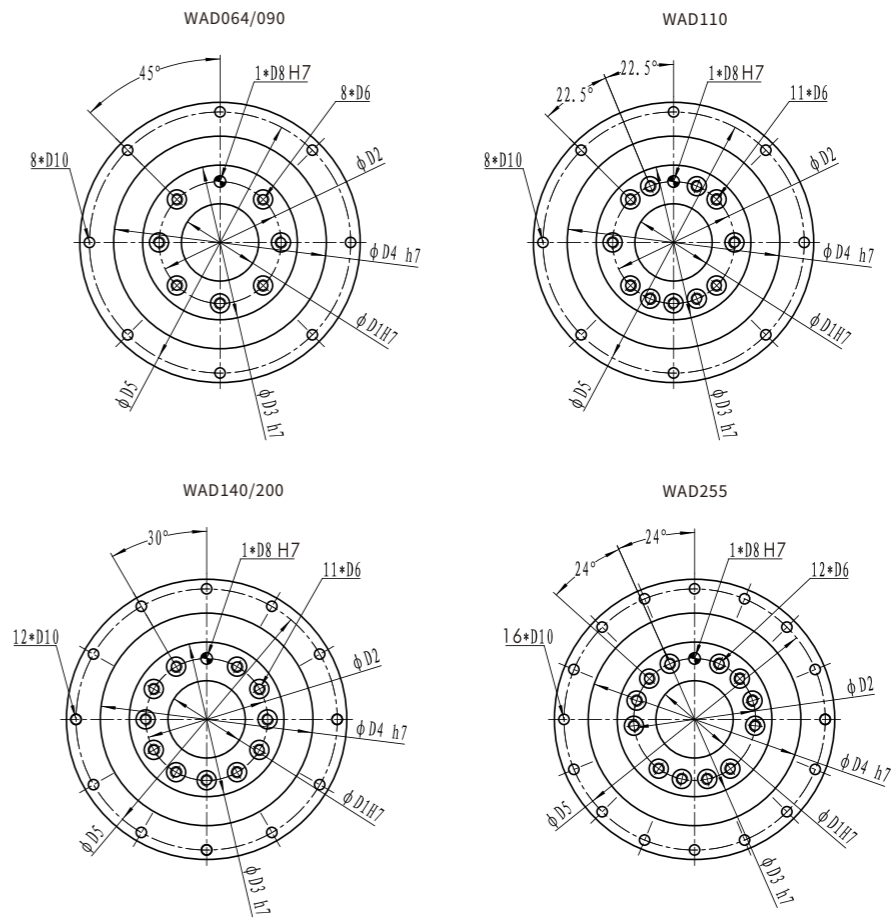
Dimension(double stage,Ratio i=20~100)

Dimension	WAD064		WAD090		WAD110		WAD140		WAD200		WAD255	
D1 H7	20		31.5		40		50		80		100	
D2	31.5		50		63		80		125		140	
D3 h7	40		63		80		100		160		180	
D4 h7	64		90		110		140		200		255	
D5	79		109		135		168		233		280	
D6	7×M5×0.8P		7×M6×1P		11×M6×1P		11×M8×1.25P		11×M10×1.5P		12×M16×2.0P	
D7	86		118		145		179		247		300	
D8 H7	5		6		6		8		10		12	
D9	8×4.5		8×5.5		8×5.5		12×6.6		12×9		16×13.5	
D10	70		95		125		152		212		255	
L1	8		12		12		12		16		20	
L2	8		13.5		13.5		17		22.5		20	
L3	3		6		6		6		8		12	
L4	19.5		30		29		38		50		66	
L5	7		10		10		14.6		15		20	
L6	4		7		8		10		12		18	
L7	7.7		7.5		10		12		15		20	
L8	6		7		7		7		10		10	
C1	70	90	70	90	145	90	145	145	200	200	200	200
C2	M4	M5	M4	M5	M8	M5	M8	M8*1.25P	M12*1.75P	M12*1.75P	M12*1.75P	M12*1.75P
C3	≤14	≤19	≤14	≤19	≤24	≤19	≤24	≤24/≤28	≤35	≤35	≤35	≤42
C4	31.5	41	31.5	41	59	41	60	66	80	80	80	114
C5	50	70	50	70	110	70	110	110	114.3	114.3	114.3	114.3
C6	5	5	5	6	14	6	14	19	9	9	9	30
C7	60	80	60	80	130	80	130	180	180	180	180	180
C8	108	121	123	139.5	157.5	142	172.5	234.5	260	260	260	364
C9	6	9	9.5	21.5	19.5	25	25	22	30	30	30	36

## DIMENSION

### OUTPUT SHAFT DISK SURFACE

Output Shaft Disk Dimension



Dimension	WAD064	WAD090	WAD110	WAD140	WAD200	WAD255
D1 H7	20	31.5	40	50	80	100
D2	31.5	50	63	80	125	140
D3 h7	40	63	80	100	160	180
D4 h7	64	90	110	140	200	255
D5	79	109	135	168	233	280
D6	M5*0.8P	M6*1.0P	M6*1.0P	M8*1.25P	M10*1.5P	M16*2.0P
D8 H7	5	6	6	8	10	12
D10	4.5	5.5	5.5	6.8	9	13.5



## WANSHSIN Seikou(Hunan)Co., Ltd.



WANSHSIN is a professional gearbox, gear motor and inverter manufacturer and intelligent automation complete solution provider, integrating R&D, production, sales and service. The products cover the light and heavy industry, are widely used in new energy, robots, automobile manufacturing, warehousing, logistics, food industry and other industries. WANSHSIN has gradually become a reliable long-term partner of those leading enterprises of relevant industries.

### Enterprise Honor

2019	2020	2022
<ul style="list-style-type: none"> <li>National high-tech enterprise</li> </ul>	<ul style="list-style-type: none"> <li>Ministry of Industry and Information Technology of the People's Republic of China "specialized, special and new" key small giant enterprise</li> <li>Hunan Enterprise Technology Center</li> </ul>	<ul style="list-style-type: none"> <li>2022 Hunan Reducer Engineering Technology Research Center</li> <li>2022 The 2nd Ningxiang Mayor Quality Award(Organization)</li> </ul>

## Core Competitiveness



### Leading R&D Capability

Three major R&D centers have been established to lead the industry's high-quality development with innovation.

### Excellent Quality

We are the pioneer in introducing and launching the advanced automotive industry quality control standards pre-planning of product quality and have equipped with a large number of imported international advanced inspection/testing equipment to ensure product quality.

### Advanced Manufacturing

We have hundreds of domestic advanced processing equipment with a total value of more than 100 million yuan, and our capacity is in a leading position in China.

### Fast Delivery

Sufficient spare parts in warehouse to ensure very short lead time.