



WANSHIN

WPL Series

Economical Planetary Gearbox



ATB Automation
Mechanics | Motion Control

WPL Series

Economical planetary gear



- Economical
- Maintenance-free
- Compact

ORDERING CODE

W PL 060 010 K P FG
1 2 3 4 5 6 7

1 Wanshsin mark

2 PL: Type of gearbox

3 Size: 042 060 080 090 120 160

4 Ratio: 3.....100

5 Output shaft: K Key
S Smooth

6 Backlash: P2 Standard

7 FG: Food grade grease (Optional)

PRODUCT FEATURES

- Precision spur gearing, small, compact
- Fully sealed structure to ensure that grease does not leak, maintenance-free
- Transmission efficiency up to 96%

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PERFORMANCE TABLE

Specifications	Unit	Stages	Reduction ratio (i)	WPL042	WPL060	WPL080	WPL090	WPL120	WPL160
			3	8	18	40	50	125	290
			4	12	36	90	110	230	460
			5	16	40	110	125	260	550
		(L1)	6	–	20	40	50	90	340
			7	8	20	40	50	90	340
			8	–	12	22	32	70	210
			10	5	12	22	32	70	210
			12	8	36	90	110	230	460
			15	16	40	110	125	260	550
			16	12	36	90	110	230	460
Rated output torque	Nm		20	16	40	110	125	260	550
			25	16	40	110	125	260	550
			28	12	36	90	110	230	460
			30	8	18	40	50	125	290
			35	16	40	110	125	260	550
			40	12	36	90	110	230	460
			50	16	40	110	125	260	550
			60	–	–	–	–	–	340
			70	8	20	40	50	90	340
			80	–	–	–	–	–	210
			100	–	12	22	32	70	210
Acceleration torque	Nm	1,2	3 – 100	120% of the rated torque					
Emergency stop torque	Nm	1,2	3 – 100	200% of the rated torque					
Max input speed	rpm	1,2	3 – 100	4000	4000	3500	3500	3500	2500
Backlash P2	arcmin	1	3 – 10	≤20	≤10	≤10	≤10	≤10	≤10
(standard)		2	12 – 100	≤22	≤12	≤12	≤12	≤12	≤12
Torsional rigidity	Nm/arcmin	1,2	3 – 100	0.65	1.8	4.7	4.85	11	55
Radial load	N	1,2	3 – 100	135	220	400	430	1000	4500
Axial load	N	1,2	3 – 100	165	240	420	450	1240	4800
Efficiency (%)	%	1	3 – 10	≥96%					
		2	12 – 100	≥93%					
Weight	kg	1	3 – 10	0.4	1.1	2.1	4.4	6.6	14
		2	12 – 100	0.5	1.4	3	5	8.2	17.1
Temperature	°C	1 – 2	3 – 100	-10 °C ~ 90 °C					
Protection class		1 – 2	3 – 100	IP54					
Lubrication		1 – 2	3 – 100	Full synthetic grease (optional: Food grade grease)					
Mounting direction		1 – 2	3 – 100	In any direction					
Noise	dB(A)	1 – 2	3 – 100	≤61	≤61	≤63	≤63	≤68	≤75

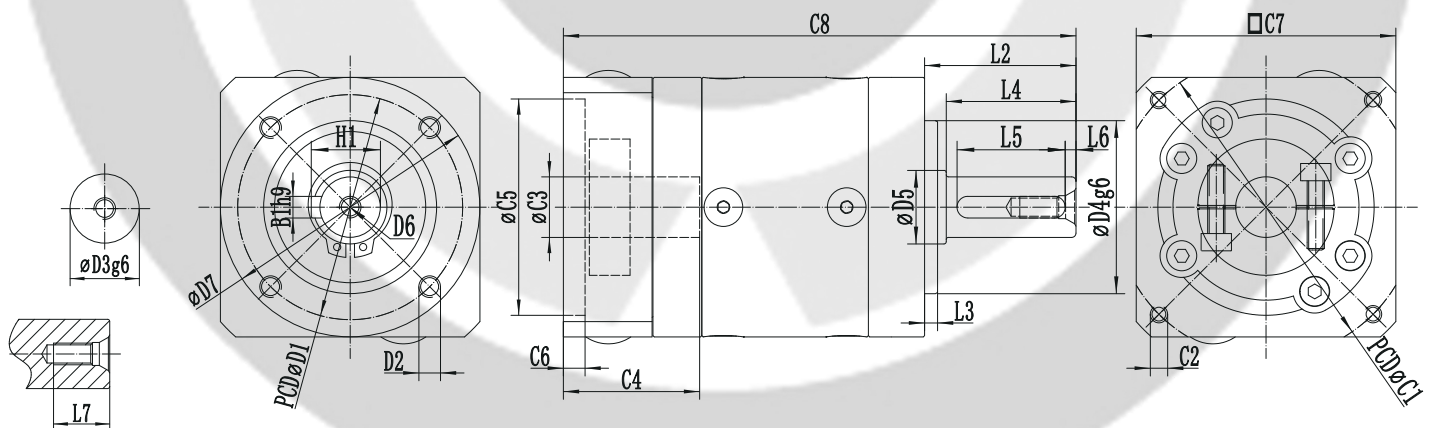
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DIMENSIONS: 1 – STAGE (L1)

Size	WPL042	WPL060	WPL080	WPL090	WPL120	WPL160
D1	34	52	70	80	100	145
D2	M4	M5	M6	M6	M10	M12
D3	10	14	20	22	25	40
D4	26	40	60	68	80	130
D5	12	17	25	30	35	55
D6	M4	M5*0.8P	M6*1.0P	M6*1.0P	M10*1.5P	M12*1.75PL
D7	42	60	80	90	115	162
L2	26	35	40	46	55	87
L3	2	3	3	5	4	5
L4	22.5	30	36	36	50	80
L5	16	25	25	32	40	70
L6	2.5	2.5	5	2	5	5
L7	10	12.5	18	18	23	25
C1*	46	70	90	90	145	200
C2*	M4	M4	M5	M5	M8	M12
C3*	5 – 8	6 – 14	14 – 19	14 – 19	19 – 24	24 – 35
C4*	26	32	41	41	60	83
C5*	30	50	70	70	110	114.3
C6*	4	4	5	5	8	10
C7*	42	60	80	80	130	180
C8*	86	118.5	153	159	204.5	268.5
B1	3	5	6	6	8	12
H1	11.2	16	22.5	24.5	28	43

*Other motor dimensions on request.



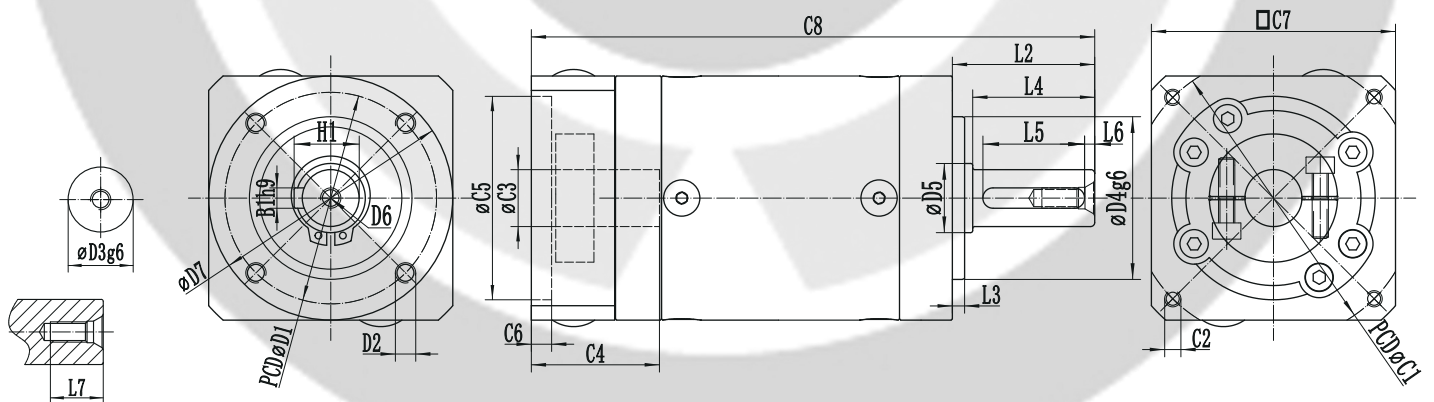
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DIMENSIONS: 2 – STAGE (L2)

Size	WPL042	WPL060	WPL080	WPL090	WPL120	WPL160
D1	34	52	70	80	100	145
D2	M4	M5	M6	M6	M10	M12
D3	10	14	20	22	25	40
D4	26	40	60	68	80	130
D5	12	17	25	30	35	55
D6	M4	M5*0.8P	M6*1.0P	M6*1.0P	M10*1.5P	M12*1.75P
D7	42	60	80	80	90	115
L2	26	35	40	46	55	87
L3	2	3	3	5	4	5
L4	22.5	30	36	36	50	80
L5	16	25	25	32	40	70
L6	2.5	2.5	5	2	5	5
L7	10	12.5	18	18	23	25
L12	–	22	24.5	24.5	33.5	46
C1*	46	70	90	90	145	200
C2*	M4	M4	M5	M5	M8	M12
C3*	5 – 8	6 – 14	14 – 19	14 – 19	16 – 24	19 – 35
C4*	26	32	41	41	60	81
C5*	30	50	70	70	110	114.3
C6*	4	3.5	5	5	8	6
C7*	42	60	94	94	130	180
C8*	104	137.5	177.5	183.5	237	327.4
B1	3	5	6	6	8	12
H1	11.2	16	22.5	24.5	28	43

*Other motor dimensions on request.



Wanshsin

Delivery program

WVRB



WAE



WAB



WVRBR



WAER



WABR



WAD



WPF



WPL



WADR



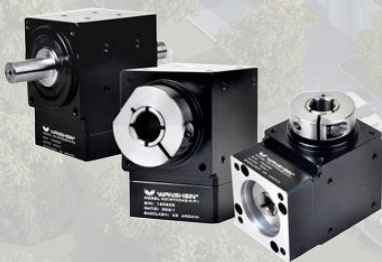
WPFR



WPLR



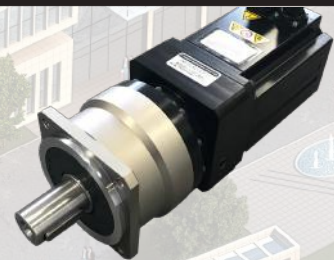
WR



WTN



MOTOR ASSEMBLY







Wanshsin and ATB Automation

Wanshsin Seikou with headquarter in Changsha City (Hunan) is a large group integrating R&D, production and sales of precision reducers. There are two fully owned subsidiaries, located in Guangdong and Shangdong. The company was established in Taiwan in 1990s and moved in 2009 to China to meet the rapid growth.


Since 2014 Wanshsin Seikou is located in Changsha City and constructed a high-standard modern industrial park. It covers an area of 70.000 square meters with a total investment of 40 million Euro.

Wanshsin Seikou integrates advanced technologies of Germany in combination with characteristics of Taiwan: sense and simplicity. The company always adheres to the electrical and mechanical cutting-edge technologies of Germany, elegant production process, establishes strategic cooperation partnership with a number of German research laboratories to develop new products and to optimize the product structure.

Since 2017 ATB Automation is the distributor for the precision gearboxes and responsible for customers in the Benelux. ATB Automation offers their customers quick deliveries and advices in the selection of the gearboxes. ATB Automation can also deliver the Wanshsin products in a complete solution of servo systems with several brands of servo motors, drives and linear systems.

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