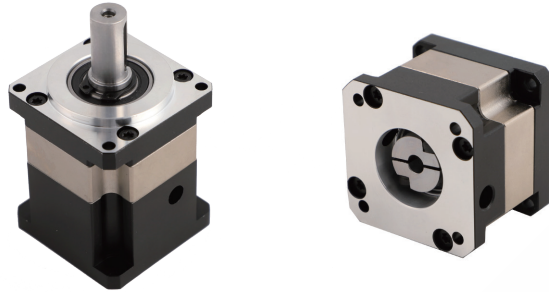
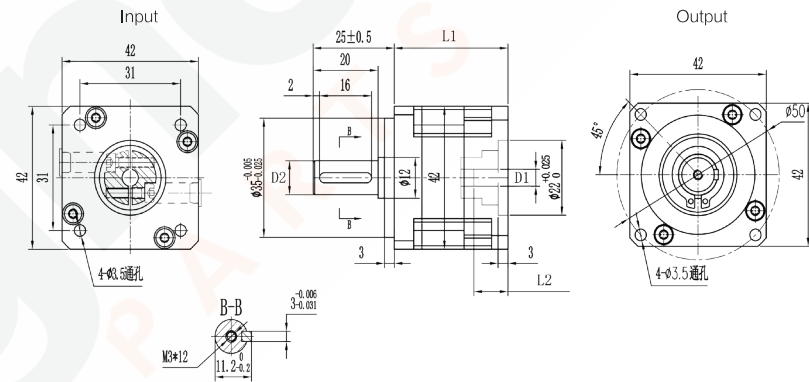


WAGNEY Planetary Gearboxes

PLF42



Drawing



Instructions for order and purchase of planetary gearbox

HPS **42** - **L1-L2-L3** - **SW** - **13** - **R8**
 ① ② ③ ④ ⑤ ⑥

- ① Square mounting flange series
- ② The outer dimension of planetary gearbox is 42mm
- ③ **Reduction ratio**
 L1-Single stage:04,05,07,010
 L2-Double stage:016,020,025,028,030,035,040,050,070
- ④ SW: Adapted motor shaft length is 25.5mm
- ⑤ 13: Reducer output shaft diameter 13mm
- ⑥ R8: The input shaft is φ 8. The conventional input shaft size of this model is φ 5.

Dimension Table

Product Type	42		42-SW		42-SW13		42-SW-R8	
Number of stage	L1	L2	L1	L2	L1	L2	L1	L2
L1 Total length without output shaft (mm)	35	46	50	61	50	61	50	61
L2 Adapted motor shaft length (mm)	10.5		25.5		25.5		25.5	
D1 Adapted motor shaft diameter (Φ)	5		5		5		8	
D2 Output shaft diameter (Φ)	10		10		13		10	

42 standard series reducer different models, only the above 5 sizes will change. The output shaft size, input size, installation size, etc. of the reducer can be customized according to the actual use of customers.

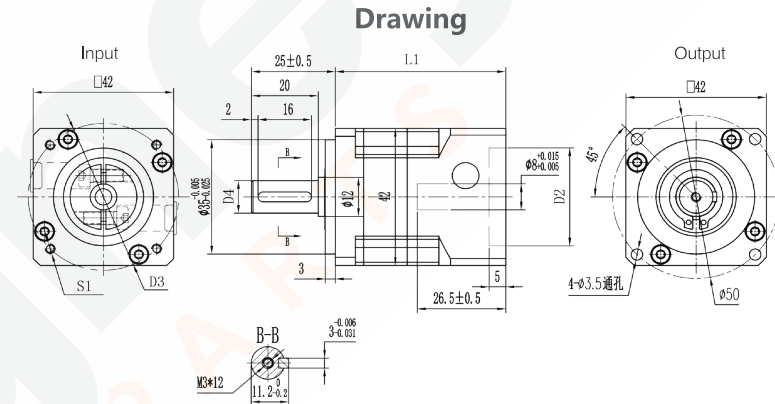
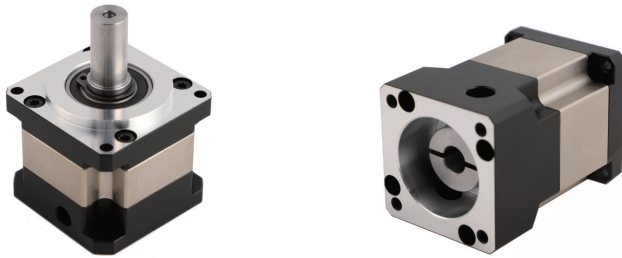
WAGNEY Planetary Gearboxes

Gearbox Performance Parameter

Product type		42	Ratio	Number of stage
Nominal Output Torque	N.m	9	4	L1
		9	5	
		5	7	
		5	10	
		/	/	
		12	16	L2
		12	20	
		10	25	
		10	28	
		10	35	
		10	40	
		10	50	
		10	70	
		/	/	
Sudden Stop Torque	N.m	2Times of Nominal Output Torque		
Nominal Input Speed	rpm	3000		
Max Input Speed	rpm	6000		
Max Radial Load	N	300		
Max Axial Load	N	100		
Efficiency	%	96%	L1	
		94%	L2	
Backlash	arcmin	≤15	L1	
		≤20	L2	
Noise	dB	≤55dB		
Protection Level	IP	IP54		
Life Span	H	20000H		
Working Temp	°C	-20° ~ +150°		
Lubrication Method		Permanent Lubrication		
Weight	kg	≈ 0.25	42-L1	
		≈ 0.36	42-L2	
		≈ 0.30	42-L1SW/SW13/R8	
		≈ 0.38	42-L2SW/SW13/R8	

WAGNEY Planetary Gearboxes

HPS-PLF42



Instructions for order and purchase of planetary gearbox

①
42
-
L1-L2
-
MA
MB
MC
MD
-
13

① Square mounting flange series

② The outer dimension of planetary gearbox is 42mm

③ **Reduction ratio**

L1-Single stage:04,05,07,010

L2-Double stage:016,020,025,028,035,040,050,070

④ MA: Suitable for servo motor, distribution diameter is $\Phi 45$

⑤ MB: Suitable for stepper motor, distribution diameter is $\Phi 46$

⑥ MC: Suitable for servo motor, distribution diameter is $\Phi 48$

⑦ MD: Suitable for 60mm flange stepper motor, installation hole center distance is 47.14mm

⑧ 13: The diameter of the output shaft of the gearbox is 13mm. If it is not equipped with 13, the default output shaft of the gearbox is 10mm

Dimension Table

Product Type	42-MA		42-MB		42-MC		42-MD		42-MB13	
	L1	L2	L1	L2	L1	L2	L1	L2	L1	L2
Number of stage	L1	L2	L1	L2	L1	L2	L1	L2	L1	L2
L1 Total length without output shaft(mm)	51	62	51	62	51	62	49	60	51	62
D4 Output shaft diameter(Φ)	10		10		10		10		13	
D2 Adapted motor shaft length(mm)	26.5		26.5		26.5		24.5		26.5	
D3 Distributed circle of mounting holes	$\Phi 45$		$\Phi 46$		$\Phi 48$		$\Phi 67$		$\Phi 46$	
S1 The install threaded hole	M3*8		M4*8		M3*8		M4*10		M4*8	

42 standard series reducer different models, only the above 6 sizes will change. The output shaft size, input size, installation size, etc. of the reducer can be customized according to the actual use of customers.

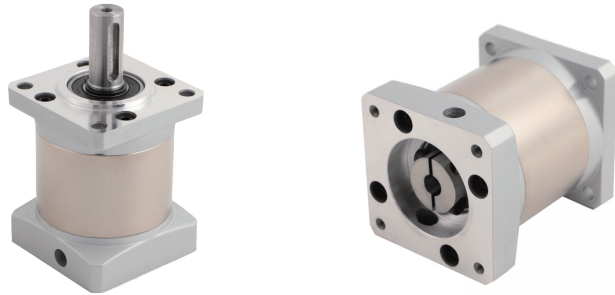
WAGNEY Planetary Gearboxes

Gearbox Performance Parameter

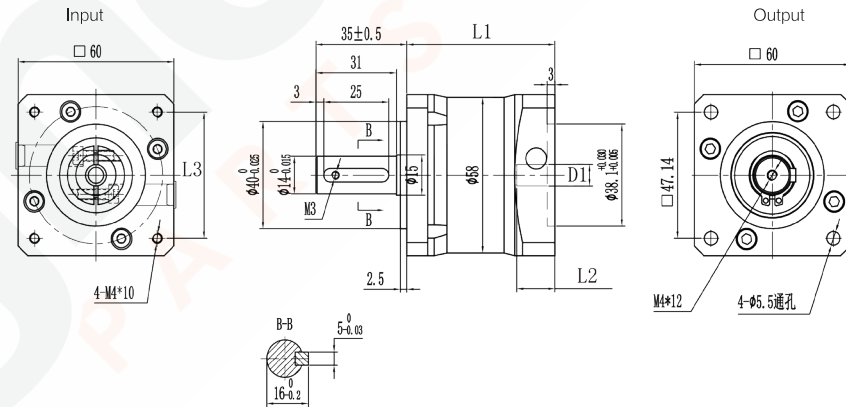
Product type		42	Ratio	Number of stage
Nominal Output Torque	N.m	9	4	L1
		9	5	
		5	7	
		5	10	
		/	/	
		12	16	L2
		12	20	
		12	25	
		12	28	
		10	35	
		10	40	
		10	50	
		10	70	
		/	/	
Sudden Stop Torque	N.m	2Times of Nominal Output Torque		
Nominal Input Speed	rpm	3000		
Max Input Speed	rpm	6000		
Max Radial Load	N	300		
Max Axial Load	N	100		
Efficiency	%	96%	L1	
		94%	L2	
Backlash	arcmin	≤15	L1	
		≤20	L2	
Noise	dB	≤55dB		
Protection Level	IP	IP54		
Life Span	H	20000H		
Working Temp	°C	-20° ~ +150°		
Lubrication Method		Permanent Lubrication		
Weight	kg	≈0.40	42-L1MA13/MB13	
		≈0.52	42-L2MA13/MB13	

WAGNEY Planetary Gearboxes

PLF60
SPLF60



Drawing



Instructions for order and purchase of planetary gearbox

① 60 - ② L1-L2 - ③ SS50 - ④ SW - ⑤ R10

①	Square mounting flange series
②	The outer dimension of planetary gearbox is 60mm
③	Reduction ratio L1-Single stage:03,04,05,07,010 L2-Double stage:016,020,025,028,030,035,040,050,070,100
④	SS50: Standard flange, suitable for stepper motor with 50mm mounting hole pitch
⑤	SW: Standard flange, adapted motor shaft length is 31mm
⑥	R10: Motor shaft diameter 10mm

Dimension Table

Product Type	60-SW		60-SW -R6.35		60-SW50		60-SW50 -R10	
Number of stage	L1	L2	L1	L2	L1	L2	L1	L2
L1 Total length without output shaft(mm)	73.5	89.5	73.5	89.5	73.5	89.5	73.5	89.5
D1 Adapted motor shaft diameter(Φ)	8		6.35		8		10	
L3 Installation hole center distance(mm)	□47.14		□47.14		□50		□50	

60 standard series reducer different models, only the above 4 sizes will change. The output shaft size, input size, installation size, etc. of the reducer can be customized according to the actual use of customers.

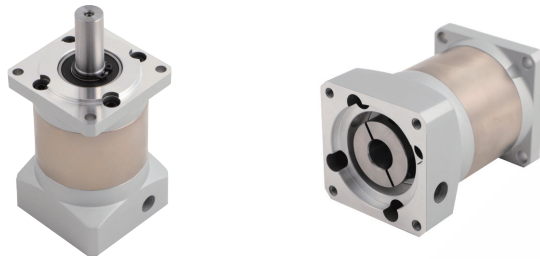
WAGNEY Planetary Gearboxes

Gearbox Performance Parameter

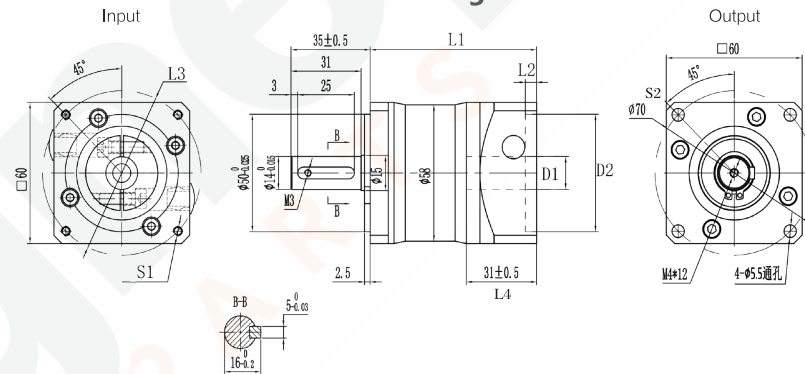
Product type		60	Ratio	Number of stage
Nominal Output Torque	N.m	16	3	L1
		25	4	
		28	5	
		20	7	
		10	10	
		/	/	
		30	16	L2
		30	20	
		32	25	
		30	28	
		30	30	
		30	35	
		25	40	
		25	50	
20	70			
10	100			
Sudden Stop Torque	N.m	2Times of Nominal Output Torque		
Nominal Input Speed	rpm	3000		
Max Input Speed	rpm	6000		
Max Radial Load	N	400		
Max Axial Load	N	230		
Efficiency	%	96%	L1	
		94%	L2	
Backlash	arcmin	≤15	L1	
		≤20	L2	
Noise	dB	≤55dB		
Protection Level	IP	IP54		
Life Span	H	20000H		
Working Temp	°C	-20° ~ +150°		
Lubrication Method		Permanent Lubrication		
Weight	kg	≈ 0.75	60-L1	
		≈ 0.96	60-L2	
		≈ 0.85	60-L1SW/SW50/R6.35/R10	
		≈ 1.10	60-L2SW/SW50/R6.35/R10	

WAGNEY Planetary Gearboxes

PLF60
SPLF60



Drawing



Dimension Table

Instructions for order and purchase of planetary gearbox

① 60 - L1-L2 - MA-MB-MC

① Square mounting flange series

② The outer dimension of planetary gearbox is 60mm

③ Reduction ratio

L1-Single stage:04,05,07,010

L2-Double stage:016,020,025,028,035,040,050,070

④ MA: Standard flange, suitable for 400W servo motor, install threaded holes M4

⑤ MB: Standard Flange, adapt to 57 -step motor

⑥ MC: Standard flange, suitable for 400W servo motor, install threaded holes M5

Product Type	60		60-MA		60-MB		60-MC	
Number of stage	L1	L2	L1	L2	L1	L2	L1	L2
L1 Total length without output shaft(mm)	57	89.5	73.5	89.5	73.5	89.5	73.5	89.5
D1 Adapted motor shaft diameter (Φ)	8		14		8		14	
L4 Adapted motor shaft length(mm)	14.7		31		31		31	
D3 Distributed circle of mounting holes (Φ)	Φ66.7		Φ70		Φ66.7		Φ70	
L2 Positioning depth(mm)	3		5		4.5		5	
D2 Positioning stop shaft diameter (Φ)	38.1		50		38.1		50	
S1 The install threaded hole	M4*10		M4*12		M4*12		M5*12	
S2 Distributed circle of output flange (Φ)	Φ66.7		Φ70		Φ70		Φ70	

S60 standard series reducer different models, only the above 9 sizes will change. The output shaft size, input size, installation size, etc. of the reducer can be customized according to the actual use of customers.

WAGNEY Planetary Gearboxes

Gearbox Performance Parameter

Product type		60	Ratio	Number of stage
Nominal Output Torque	N.m	/	/	L1
		25	4	
		28	5	
		20	7	
		10	10	
		/	/	L2
		30	16	
		30	20	
		32	25	
		30	28	
		/	/	
		30	35	
		25	40	
		25	50	
20	70			
/	/			
Sudden Stop Torque	N.m	2Times of Nominal Output Torque		
Nominal Input Speed	rpm	3000		
Max Input Speed	rpm	6000		
Max Radial Load	N	450		
Max Axial Load	N	230		
Efficiency	%	96%	L1	
		94%	L2	
Backlash	arcmin	≤10	L1	
		≤15	L2	
Noise	dB	≤55dB		
Protection Level	IP	IP54		
Life Span	H	20000H		
Working Temp	°C	-20° ~ +150°		
Lubrication Method		Permanent Lubrication		
Weight	kg	≈ 0.85	60-L1MA/MB/MC	
		≈ 1.10	60-L2MA/MB/MC	

WAGNEY Planetary Gearboxes

Gearbox Performance Parameter

Product type		90	Ratio	Number of stage
Nominal Output Torque	N.m	/	/	L1
		80	4	
		90	5	
		60	7	
		39	10	
		/	/	L2
		90	16	
		90	20	
		100	25	
		90	28	
		/	/	
		100	35	
		90	40	
		100	50	
70	70			
/	/			
Sudden Stop Torque	N.m	2Times of Nominal Output Torque		
Nominal Input Speed	rpm	3000		
Max Input Speed	rpm	6000		
Max Radial Load	N	1000		
Max Axial Load	N	800		
Efficiency	%	96%	L1	
		94%	L2	
Backlash	arcmin	≤10	L1	
		≤15	L2	
Noise	dB	≤55dB		
Protection Level	IP	IP54		
Life Span	H	20000H		
Working Temp	°C	-20° ~ +150°		
Lubrication Method		Permanent Lubrication		
Weight	kg	≈ 2.90	90-L1MA/MB	
		≈ 3.70	90-L2MA/MB	

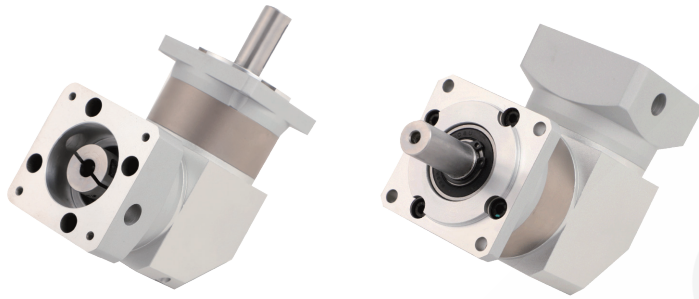
WAGNEY Planetary Gearboxes

Gearbox Performance Parameter

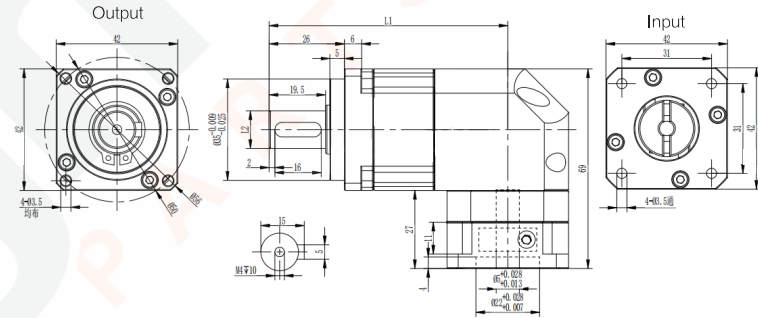
Product type		115	Ratio	Number of stage
Nominal Output Torque	N.m	150	3	L1
		220	4	
		230	5	
		150	7	
		90	10	
		250	12	L2
		250	16	
		250	20	
		270	25	
		250	28	
		/	/	
		270	35	
		250	40	
		270	50	
180	70			
/	/			
Sudden Stop Torque	N.m	2Times of Nominal Output Torque		
Nominal Input Speed	rpm	3000		
Max Input Speed	rpm	6000		
Max Radial Load	N	2200		
Max Axial Load	N	1600		
Efficiency	%	96%	L1	
		94%	L2	
Backlash	arcmin	≤10	L1	
		≤15	L2	
Noise	dB	≤55dB		
Protection Level	IP	IP54		
Life Span	H	20000H		
Working Temp	°C	-20° ~ +150°		
Lubrication Method		Permanent Lubrication		
Weight	kg	≈ 8,5	115-L1MA/MB/MC	
		≈ 9,1	115-L2MA/MB/MC	

WAGNEY Planetary Gearboxes

HPZS42



Drawing



Instructions for order and purchase of planetary gearbox

42
-
L1-L2
-
13

- ① Square mounting flange series
- ② The outer dimension of planetary gearbox is 42mm
- ③ **Reduction ratio**
L1/Single stage:03,04,05,07,08,010
L2/Double stage:09,012,015,016,020,025,032,040
- ④ 13: The output shaft diameter is 13mm

Dimension Table

Product Type	S42		42-13	
Number of stage	L1	L2	L1	L2
L1 Total length without output shaft(mm)	82.5	98	82.5	98
L2 Output shaft diameter(Φ)	10	10	13	13

HPZS42 standard series reducer different models, only the above 3 sizes will change. The output shaft size, input size, installation size, etc. of the reducer can be customized according to the actual use of customers.

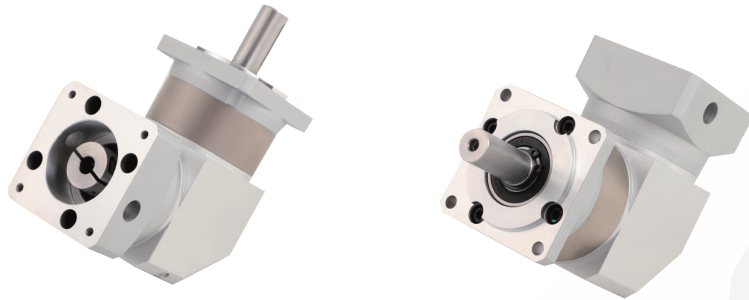
WAGNEY Planetary Gearboxes

Gearbox Performance Parameter

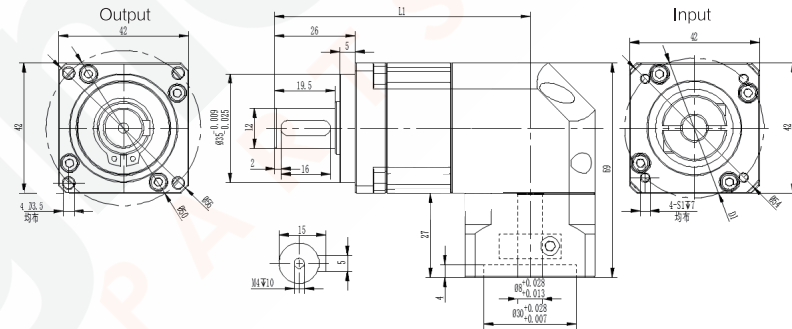
Product type		42	Ratio	Number of stage
Nominal Output Torque	N.m	9	3	L1
		18	4	
		16	5	
		12	7	
		9	8	
		7	10	
		9	9	L2
		18	12	
		16	15	
		18	16	
		18	20	
		16	25	
		18	32	
		16	40	
Sudden Stop Torque	N.m	2Times of Nominal Output Torque		
Nominal Input Speed	rpm	4500		
Max Input Speed	rpm	6000		
Max Radial Load	N	170		
Max Axial Load	N	140		
Efficiency	%	95%	L1	
		94%	L2	
Backlash	arcmin	≤ 15	L1	
		≤ 18	L2	
Noise	dB	≤ 60dB		
Protection Level	IP	IP65		
Life Span	H	20000H		
Working Temp	°C	-20° ~ +150°		
Lubrication Method		Permanent Lubrication		
Weight	kg	≈ 1	PZS42-L1	
		≈ 1.2	PZS42-L2	

WAGNEY Planetary Gearboxes

HPZS42



Drawing



Instructions for order and purchase of planetary gearbox

①
42
-
L1-L2
-
MA-MB
-
13

- ① Square mounting flange series
- ② The outer dimension of planetary gearbox is 42mm
- ③ **Reduction ratio**
L1/Single stage:03,04,05,07,08,010
L2/Double stage:09,012,015,016,020,025,032,040
- ④ MA: Standard flange, suitable for 100W servo motor
MB: Standard flange, suitable for 42mm stepper motor
- ⑤ 13: The output shaft of gearbox is 13mm

Dimension Table

Product Type	42-MA13		42-MB13		42-MB	
	L1	L2	L1	L2	L1	L2
Number of stage	L1	L2	L1	L2	L1	L2
L1 Total length without output shaft(mm)	82.5	98	82.5	98	82.5	98
L2 Output shaft diameter(Φ)	13	13	13	13	10	10
D1 Mounting hole distribution circle(Φ)	45		46		46	
S1 Mounting hole thread and depth	M3		M4		M4	

HPZS42 standard series reducer different models, only the above 5 sizes will change. The output shaft size, input size, installation size, etc. of the reducer can be customized according to the actual use of customers.

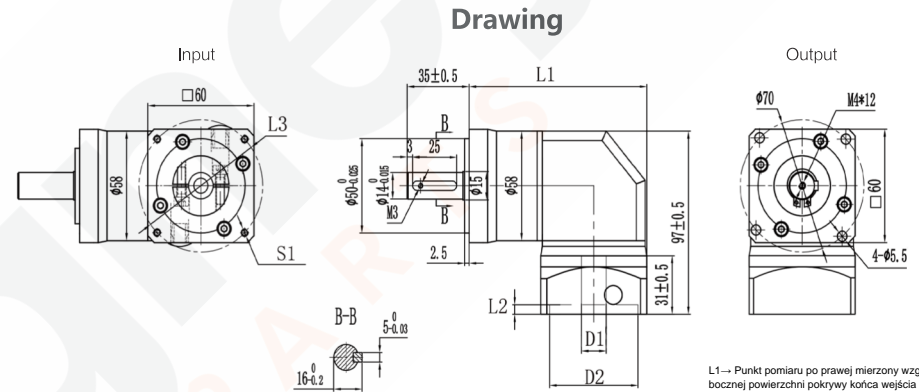
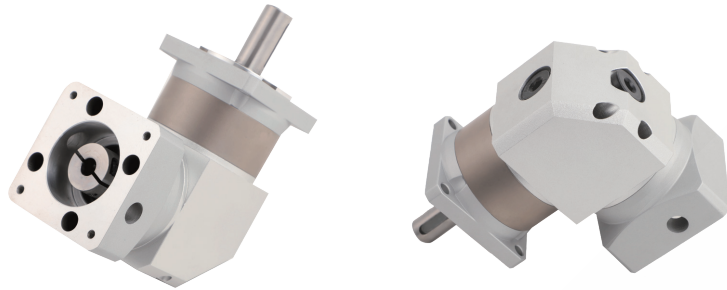
WAGNEY Planetary Gearboxes

Gearbox Performance Parameter

Product type		42MA/MB	Ratio	Number of stage
Nominal Output Torque	N.m	9	3	L1
		18	4	
		16	5	
		12	7	
		9	8	
		7	10	
		9	9	L2
		18	12	
		16	15	
		18	16	
		18	20	
		16	25	
		18	32	
		16	40	
Sudden Stop Torque	N.m	2Times of Nominal Output Torque		
Nominal Input Speed	rpm	4500		
Max Input Speed	rpm	6000		
Max Radial Load	N	170		
Max Axial Load	N	140		
Efficiency	%	95%	L1	
		94%	L2	
Backlash	arcmin	≦ 15	L1	
		≦ 18	L2	
Noise	dB	≦ 60dB		
Protection Level	IP	IP65		
Life Span	H	20000H		
Working Temp	°C	-20° ~ +150°		
Lubrication Method		Permanent Lubrication		
Weight	kg	≈ 1	PZS42-L1MA/MB	
		≈ 1.2	PZS42-L2MA/MB	

WAGNEY Planetary Gearboxes

HPZS60



Dimension Table

Product Type	60-MA		60-MB		60-MC	
	L1	L2	L1	L2	L1	L2
Number of stage	L1	L2	L1	L2	L1	L2
L1 Total length without output shaft(mm)	99.5	115.5	99.5	115.5	99.5	115.5
L2 Positioning depth	5		4.5		5	
L3 Installationhole center distance/Distributed circle	φ70		□47.14		φ70	
D1 Adapted motor shaft diameter	14		8		14	
D2 Positioning stop shaft diameter	50		38.1		50	
S1 Mounting hole thread and depth	M4*12		M4*12		M5*12	

HPZS60 standard series reducer different models, only the above 7 sizes will change. The output shaft size, input size, installation size, etc. of the reducer can be customized according to the actual use of customers.

Instructions for order and purchase of planetary gearbox

① 60 - ② L1-L2 - ③ MA-MB-MC

① Square mounting flange series

② The outer dimension of planetary gearbox is 60mm

③ Reduction ratio

L1-Single stage:04,05,07,010

L2-Double stage:016,020,025,028,035,040,050,070

④ MA: Standard flange, suitable for 400W servo motor, install threaded holes M4

⑤ MB: Standard Flange, adapt to 57 -step motor

⑥ MC: Standard flange, suitable for 400W servo motor, install threaded holes M5

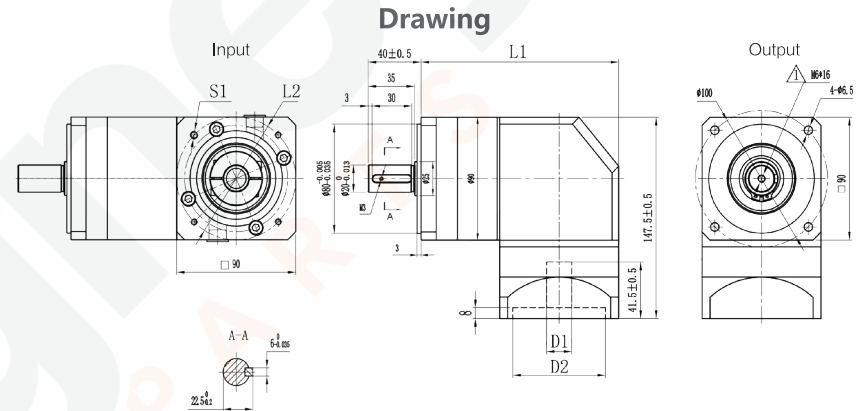
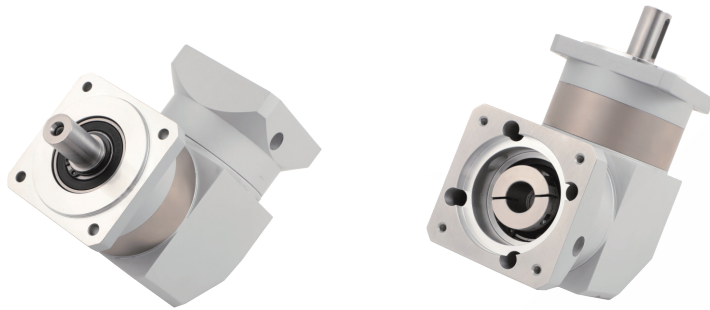
WAGNEY Planetary Gearboxes

Gearbox Performance Parameter

Product type		60	Ratio	Number of stage
Nominal Output Torque	N.m	/	/	L1
		25	4	
		28	5	
		20	7	
		10	10	
		/	/	L2
		30	16	
		30	20	
		32	25	
		30	28	
		/	/	
		30	35	
		25	40	
		25	50	
20	70			
/	/			
Sudden Stop Torque	N.m	2Times of Nominal Output Torque		
Nominal Input Speed	rpm	3000		
Max Input Speed	rpm	6000		
Max Radial Load	N	450		
Max Axial Load	N	230		
Efficiency	%	96%	L1	
		94%	L2	
Backlash	arcmin	≤10	L1	
		≤15	L2	
Noise	dB	≤55dB		
Protection Level	IP	IP54		
Life Span	H	20000H		
Working Temp	°C	-20° ~ +150°		
Lubrication Method		Permanent Lubrication		
Weight	kg	≈ 1.40	PZS60-L1MA/MB/MC	
		≈ 1.65	PZS60-L2MA/MB/MC	

WAGNEY Planetary Gearboxes

HPZS90



Instructions for order and purchase of planetary gearbox

①
90
-
L1-L2
-
MA-MB-R12.7

- ① Square mounting flange series
- ② The outer dimension of planetary gearbox is 90mm
- ③ **Reduction ratio**
L1-Single stage:04,05,07,010
L2-Double stage:016,020,025,028,035,040,050,070
- ④ MA: Standard flange, suitable for 750W servo motor
- ⑤ MB: Standard Flange, adapt to 86 -step motor
- ⑥ R12.7: matched motor shaft diameter is 12.7mm

Dimension Table

Product Type	90-MA		90-MB		90-MB-R12.7	
	L1	L2	L1	L2	L1	L2
Number of stage	L1	L2	L1	L2	L1	L2
L1 Total length without output shaft(mm)	149.5	172	149.5	172	149.5	172
L2 Installationhole center distance/Distributed circle	Φ90		□69.6		□69.6	
D1 Adapted motor shaft diameter	19		14		12.7	
D2 Positioning stop shaft diameter	70		73		73	
S1 Mounting hole thread and depth	M6*12		M5*12		M5*12	

HPZS90 standard series reducer different models, only the above 6 sizes will change. The output shaft size, input size, installation size, etc. of the reducer can be customized according to the actual use of customers.

WAGNEY Planetary Gearboxes

Gearbox Performance Parameter

Product type		90	Ratio	Number of stage
Nominal Output Torque	N.m	/	/	L1
		80	4	
		90	5	
		60	7	
		39	10	
		/	/	L2
		90	16	
		90	20	
		100	25	
		90	28	
		/	/	
		100	35	
		90	40	
		100	50	
70	70			
/	/			
Sudden Stop Torque	N.m	2Times of Nominal Output Torque		
Nominal Input Speed	rpm	3000		
Max Input Speed	rpm	6000		
Max Radial Load	N	1000		
Max Axial Load	N	800		
Efficiency	%	96%		L1
		94%		L2
Backlash	arcmin	≤10		L1
		≤15		L2
Noise	dB	≤55dB		
Protection Level	IP	IP54		
Life Span	H	20000H		
Working Temp	°C	-20° ~ +150°		
Lubrication Method		Permanent Lubrication		
Weight	kg	≈ 4.30		PZS90-L1MA/MB/R12.7
		≈ 5.10		PZS90-L2MA/MB/R12.7

WAGNEY Planetary Gearboxes

Mounting method

For General Type

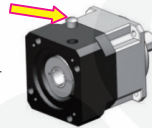
1

Check the motor and gearbox size. Clean the mounting surface.



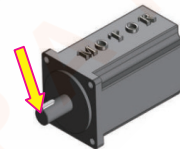
2

Take off the plug from the bracket. Revolve the set collar until the bolt is aligned with the hole.



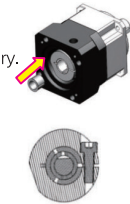
3

Remove the key from the motor shaft. Mounting the balance key if necessary.



4

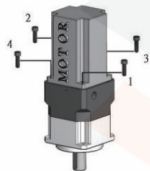
Make sure the motor shaft size. Choose the right bushing if necessary.



As installing on flatted shaft, be sure to align the collet gap over the flat and the set collar bolt perpendicular to the flat.

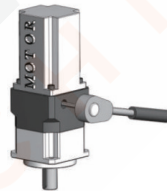
5

Tighten the mounting bolts in 1-4 order with torque wrench to 5% specified torque.



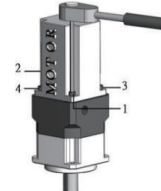
6

Install gearbox and motor vertically. Tighten the set collar bolt with torque wrench to specified torque.



7

Tighten the mounting bolts in 1-4 order with torque wrench to specified torque.



8

Put the plug back.

