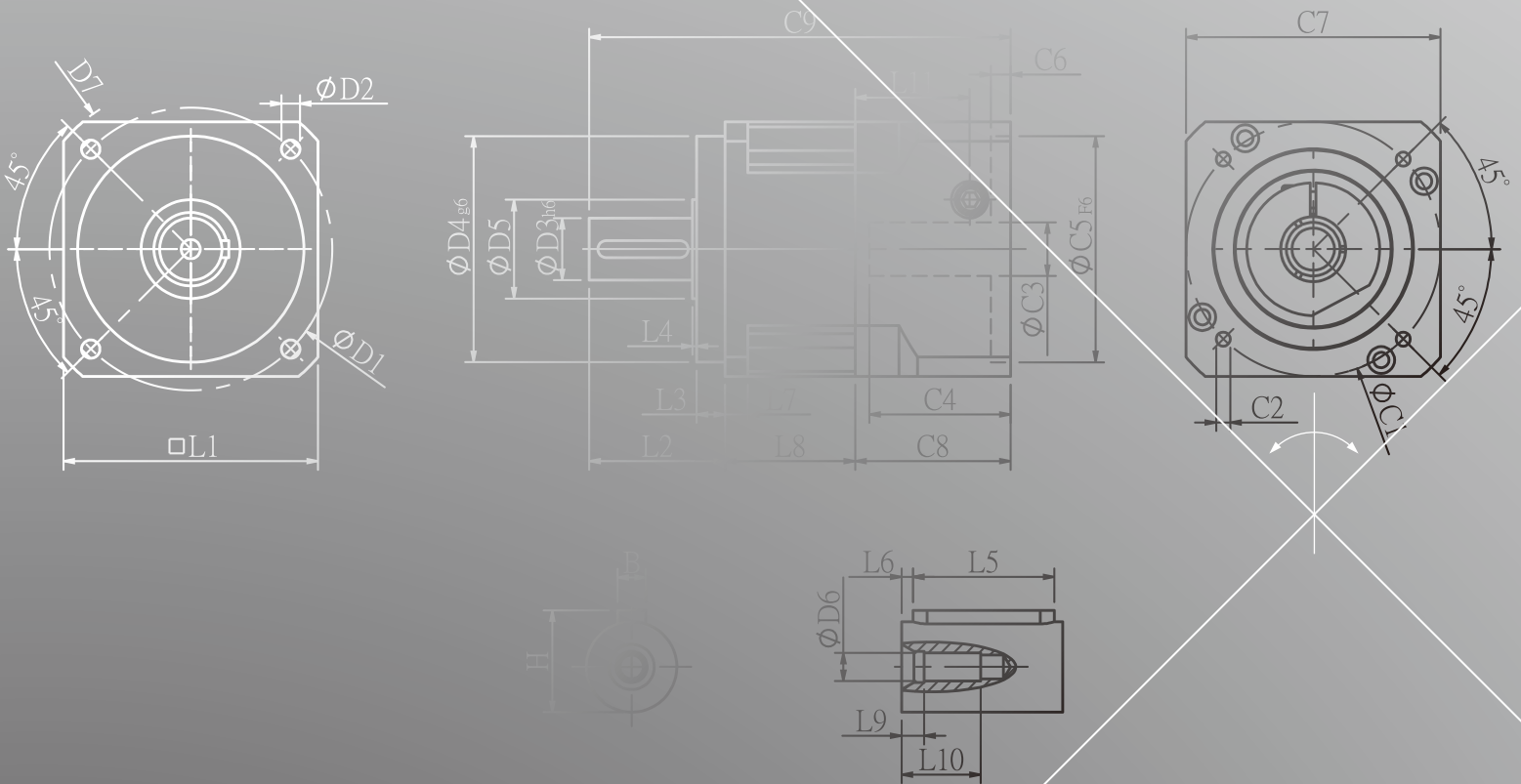
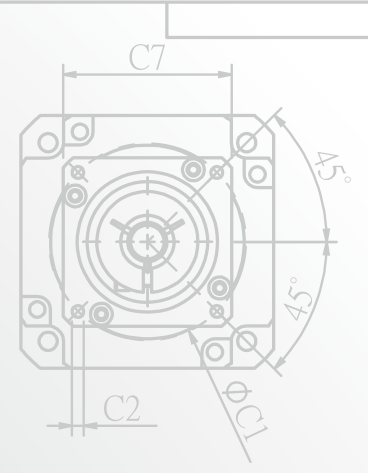
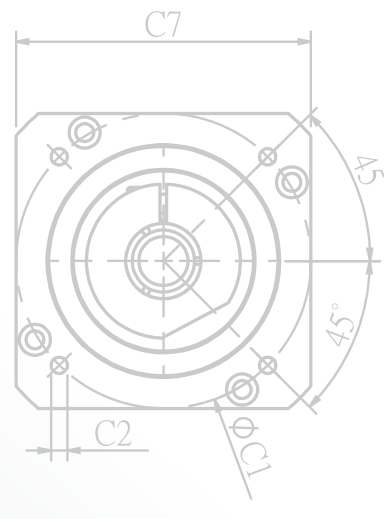
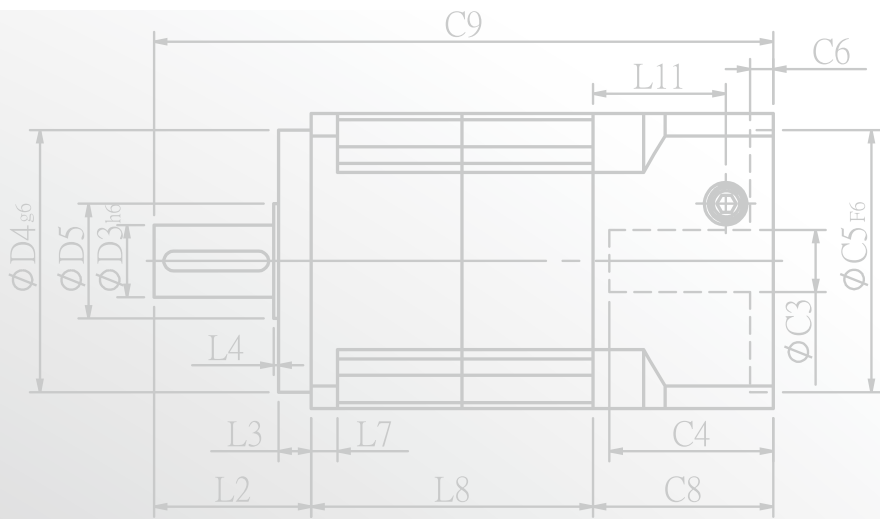
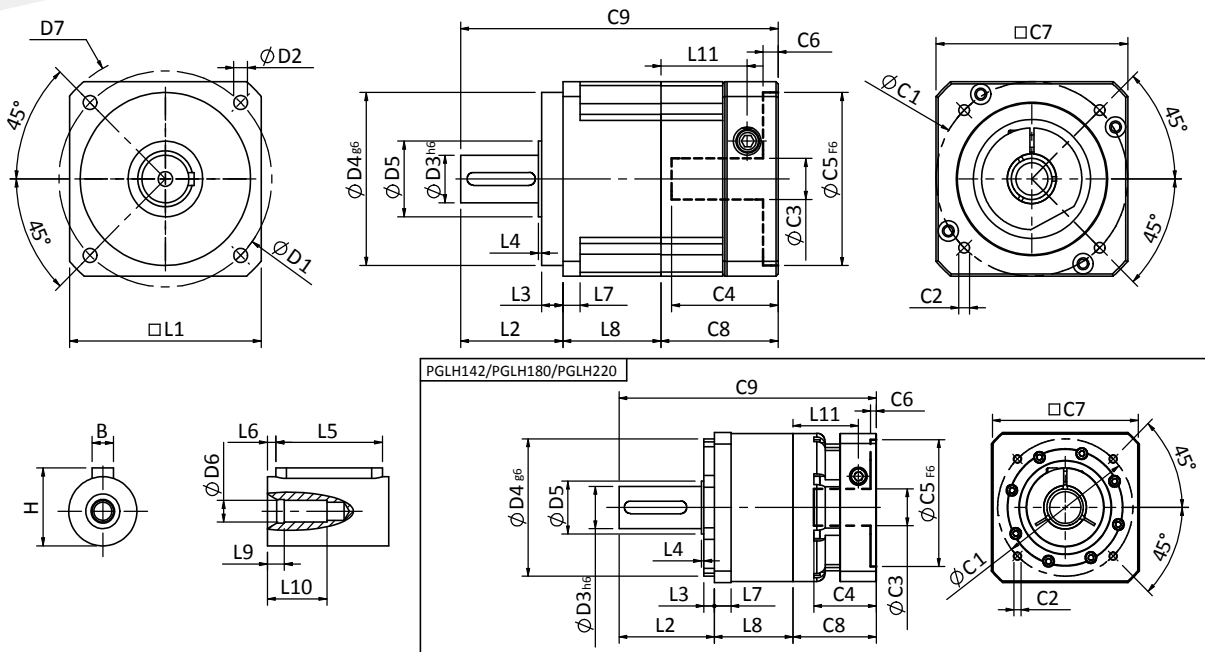


PGLH SERIES





PGLH Single Stage Dimensions



Specifications

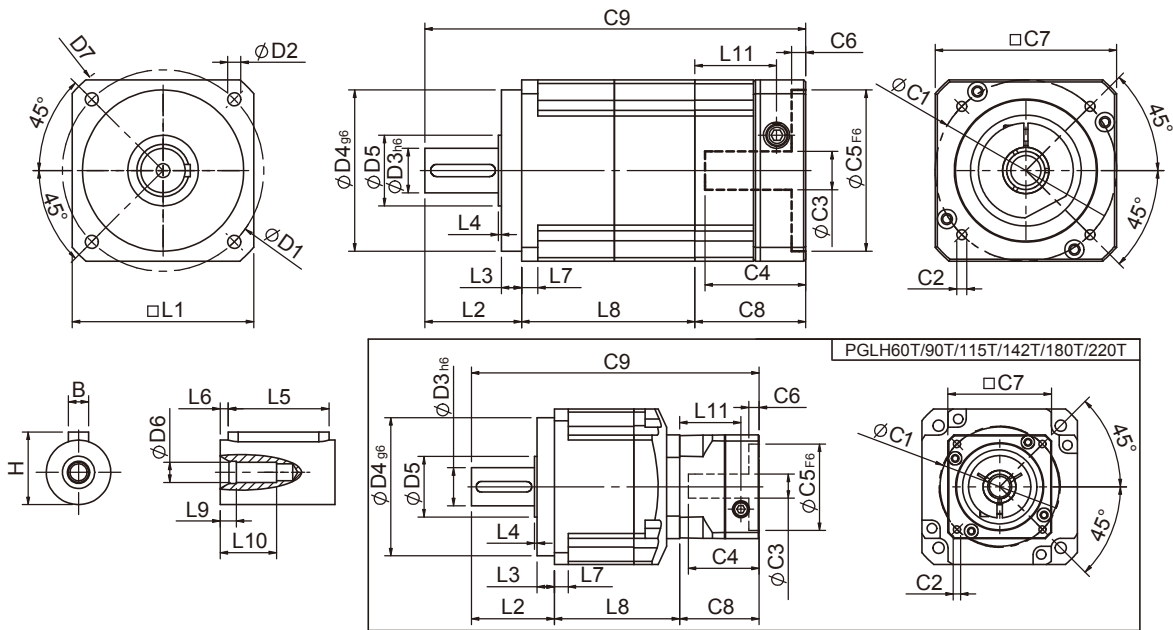
Unit:mm

Dimensions	PGLH42	PGLH60	PGLH90	PGLH115	PGLH142	PGLH180	PGLH220
D1	50	70	100	130	165	215	215
D2	3.4	5.5	6.5	8.5	10.5	13	17
D3 _{h6}	13	16	22	32	40	55	75
D4 _{g6}	35	50	80	110	130	160	180
D5	15	25	35	45	50	70	114.4
D6	M4x0.7P	M5x0.8P	M8x1.25P	M12x1.75P	M16x2.0P	M20x2.5P	M20x2.5P
D7	56	80	118	148	186	239	292
L1	42.6	60	90	115	142	182	220
L2	26	37	48	63	91.5	100.5	138
L3	5.5	7	10	10	10	16	30
L4	1	1.5	1.5	3.5	2.5	2.5	3
L5	15	25	32	40	60	70	90
L6	2	2	3	5	5	6	7
L7	4	6	8	11	16	20	20
L8	28.3	37	46	57	75.5	94	111
L9	4	4	4.5	6	6	8	15
L10	14	16.5	20.5	30	38	48	42
L11	29	35.5	40.5	53.7	63	69.5	96
C1 ²	46	70	90	115	145	200	235
C2 ²	M4x0.7P	M5x0.8P	M6x1.0P	M8x1.25P	M8x1.25P	M12x1.75P	M12x1.75P
C3 ²	≤8/≤14	≤14/≤19	≤19/≤24	≤24/≤32/≤38	≤35/≤38	≤50	≤55
C4 ²	27	37	41	56.3	66.5	82	112
C5 ² _{F6}	30	50	70	95	110	114.3	200
C6 ²	4	4	6	10	5.5	13	6
C7 ²	42.6	60	90	115	140	182	220
C8 ²	38.5	46	55	75	80	95	120
C9 ²	92.8	120	149	195	247	289.5	369
B	5	5	6	10	12	16	20
H	15	18	24.5	35	43	59	79.5

★ C1~C9 are motor specific dimensions (metric std shown). Size may vary according to motor flange.

★ Specification subject to change without notice.

PGLH Double Stage Dimensions



Specifications

Unit:mm

Dimensions	PGLH42	PGLH60	PGLH60T	PGLH90	PGLH90T	PGLH115T	PGLH142T	PGLH180T	PGLH220T
D1	50	70		100		130	165	215	250
D2	3.4	5.5		6.5		8.5	10.5	13	17
D3 _{h6}	13	16		22		32	40	55	75
D4 _{g6}	35	50		80		110	130	160	180
D5	15	25		35		45	50	70	114.4
D6	M4x0.7P	M5x0.8P		M8x1.25P		M12x1.75P	M16x2.0P	M20x2.5P	M20x2.5P
D7	56	80		118		148	186	239	292
L1	42.6	60		90		115	142	182	220
L2	26	37		48		63	91.5	100.5	138
L3	5.5	7		10		10	10	16	30
L4	1	1.5		1.5		3.5	2.5	2.5	3
L5	15	25		32		40	60	70	90
L6	2	2		3		5	5	6	7
L7	4	6		8		11	16	20	20
L8	55.3	70	65.5	90	78.5	99.5	127.5	166	202
L9	4	4		4.5		6	6	8	15
L10	14	16.5		20.5		30	38	48	42
L11	29	35.5	29	40.5	35.5	40.7	42	63	69.5
C1 ²	46	70	46	90	70	90	115	145	200
C2 ²	M4x0.7P	M5x0.8P	M4x0.7P	M6x1.0P	M5x0.8P	M6x1.0P	M8x1.25P	M8x1.25P	M8x1.25P
C3 ²	≤8/≤14	≤14/≤19	≤8/≤14	≤19/≤24	≤14/≤19	≤19/≤24	≤24/≤32/≤38	≤35/≤38	≤50
C4 ²	27	37	27	41	37	46	56	66.5	76
C5 ² _{F6}	30	50	30	70	50	70	95	110	114.3
C6 ²	4	4	4	6	4	10	10	5.5	6
C7 ²	42.6	60	42.6	90	60	90	115	140	180
C8 ²	38.5	46	38.5	55	46	60	63	80	90
C9 ²	119.8	153	141	193	172.5	222.5	282	346.5	430
B	5	5		6		10	12	16	20
H	15	18		24.5		35	43	59	79.5

★ C1~C9 are motor specific dimensions (metric std shown). Size may vary according to motor flange.

★ Specification subject to change without notice.

PGLH Specifications Table

Specifications		Stage	Ratio	PGLH-42	PGLH-60	PGLH-90	PGLH-115	PGLH-142	PGLH-180	PGLH-220
Nominal Output Torque T_{2N}	N · m	1	3	19	53	145	290	520	950	1100
			4	20	55	150	300	550	1000	1700
			5	17	54	140	290	600	1050	2000
			6	15	46	135	280	560	1000	1850
			7	14	44	125	270	530	960	1750
			8	12	41	110	240	480	900	1550
			9	11	37	95	220	430	800	1500
			10	11	37	95	220	430	800	1450
		Stage	Ratio	PGLH-42	PGLH-60 / PGLH-60T	PGLH-90 / PGLH-90T	PGLH-115T	PGLH-142T	PGLH-180T	PGLH-220T
		2	15	19	53	145	290	520	950	2000
			20	20	55	150	300	550	1000	2000
			25	17	54	140	290	600	1050	2000
			30	17	54	140	290	600	1050	2000
			35	17	54	140	290	600	1050	2000
			40	17	54	140	290	600	1050	2000
			45	17	54	140	290	600	1050	2000
			50	17	54	140	290	600	1050	2000
			60	15	46	135	280	560	1000	1850
			70	14	44	125	270	530	960	1750
			80	12	41	110	240	480	900	1550
90	11		37	95	220	430	800	1500		
100	11	37	95	220	430	800	1450			
Emergency Stop Torque T_{2NOT}	N · m	(3.0 times of Nominal Output Torque) (* Max. Output Torque T_{2B} =60% of Emergency Stop Torque)								
Nominal Input Speed n_{1N}	rpm	1,2	3-100	4000	4000	3000	3000	2500	2500	2000
Max. Input Speed n_{1max}	rpm	1,2	3-100	8000	8000	6000	6000	5000	4000	3000
Micro Backlash P_0	arcmin	1	3-10	≤4	≤4	≤4	≤3	≤3	≤3	≤3
		2	12-100	≤6	≤6	≤6	≤5	≤5	≤5	≤5
Precision Backlash P_1	arcmin	1	3-10	≤6	≤6	≤6	≤5	≤5	≤5	≤5
		2	12-100	≤8	≤8	≤8	≤7	≤7	≤7	≤7
Standard Backlash P_2	arcmin	1	3-10	≤8	≤8	≤8	≤7	≤7	≤7	≤7
		2	12-100	≤10	≤10	≤10	≤9	≤9	≤9	≤9
Torsional Rigidity	N · m /arcmin	1,2	3-100	2.5	6	12	23	50	145	200
Max. Radial Load F_{2rB}^1	N	1,2	3-100	640	1260	2230	4300	7140	11050	28000
Max. Axial Load F_{2aB}^1	N	1,2	3-100	410	600	1500	3310	4670	6460	15000
Operating Temp.	°C	3-100 -10°C~+90°C								
Service Life	hr	3-100 20,000 (10,000 Continuous operation)								
Efficiency	%	1	3-10	≥97%						
		2	12-100	≥94%						
Weight	kg	1	3-10	0.6	1.3	3.5	7.8	16.1	27	55
		2	12-100	0.9	2.0/1.6	5.6/3.9	9.5	19	34	68.5
Mounting Position	-	1,2	3-100	Any direction						
Noise Level ²	dBA/1m	1,2	3-100	58	60	63	65	67	68	72
Protection Class	-	1,2	3-100	IP65						
Lubrication	-	1,2	3-100	Synthetic Lubricant						
Inertia (J1)										
Stage	Ratio	unit		PGLH-42	PGLH-60	PGLH-90	PGLH-115	PGLH-142	PGLH-180	PGLH-220
1	3	Kg · cm ²		0.03	0.23	0.97	2.35	10.00	30.50	79.50
	4			0.02	0.18	0.67	1.66	7.17	25.86	58.21
	5			0.02	0.17	0.65	1.50	6.52	23.63	54.36
	6/7/8			0.02	0.14	0.60	1.45	6.17	22.92	54.12
	9/10			0.02	0.14	0.58	1.41	6.10	22.73	53.98
Stage	Ratio			PGLH-42	PGLH-60(T)	PGLH-90(T)	PGLH-115T	PGLH-142T	PGLH-180T	PGLH-220T
2	15/20/25			0.02	0.17(0.02)	0.65(0.17)	0.65	1.50	6.52	23.63
	30/35/40			0.02	0.14(0.02)	0.60(0.14)	0.60	1.45	6.17	22.92
	45/50/60/70/80/90/100			0.02	0.14(0.02)	0.58(0.14)	0.58	1.41	6.10	22.73

* 1. Applied to the output shaft center at 100 rpm.

* 2. Measured at 3000 rpm with no load. These values are measured by gearbox with ratio = 10 (1-stage) or ratio = 100 (2-stage) at nominal input speed or 3000 rpm (if nominal input speed is higher than 3000 rpm) with no load.

※ The above figures/specifications are subject to change without prior notice.

Products due to human error, natural disasters or other factors lead to poor or damaged, will not be covered under warranty.

PLANETARY GEARHEADS



- PHL
- PHFR
- PHF
- PGH
- PUR
- PUL
- PUA
- PGLH**
- PGLHBC
- PGLHBC-LD
- PGSH
- PGL
- PGC
- PGE
- SGC
- SGE
- PGRH
- PGR
- PGFR
- PGF
- PBC
- PBE
- PAE
- PAC
- PAN
- PGS
- PNS
- PGW