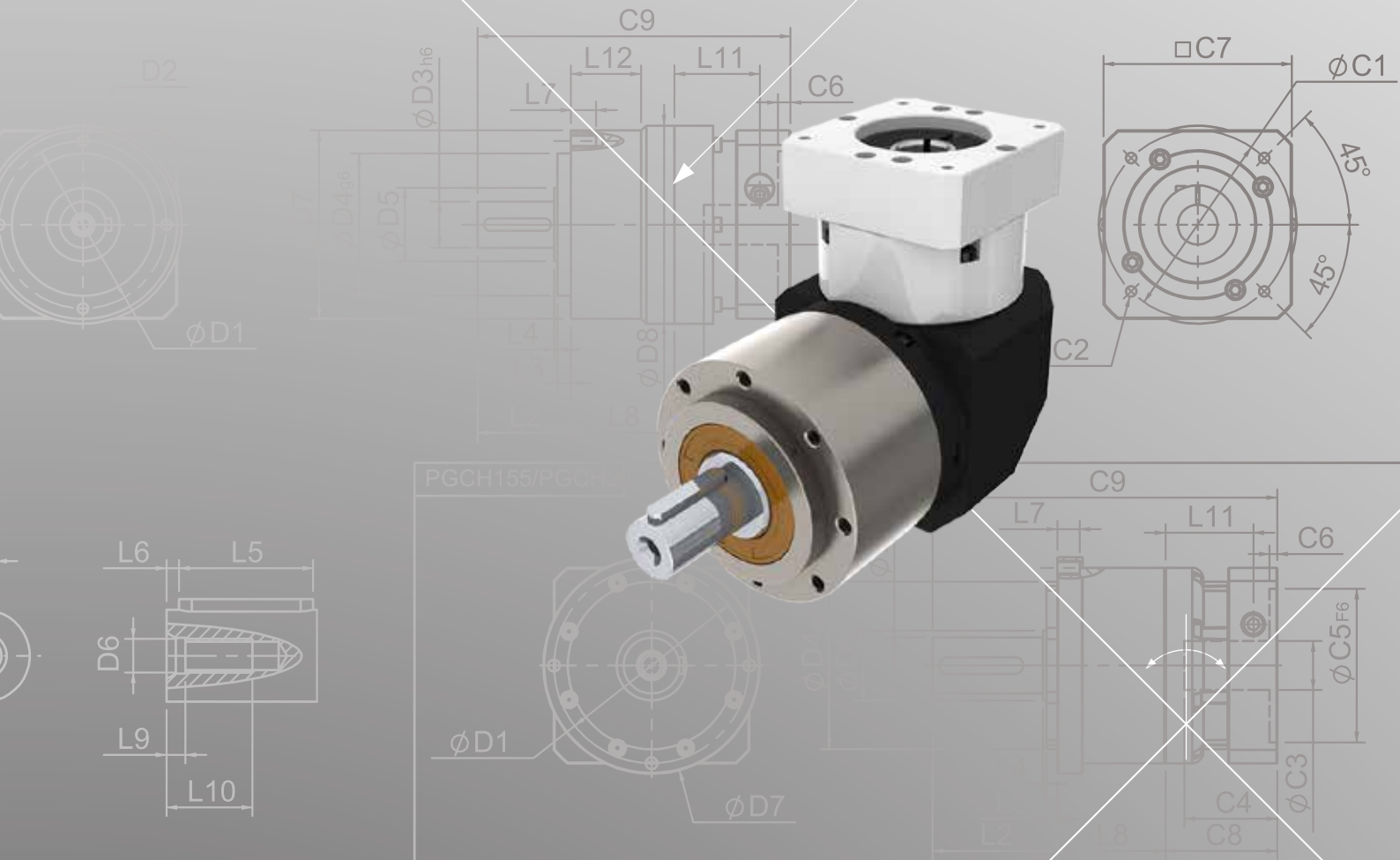
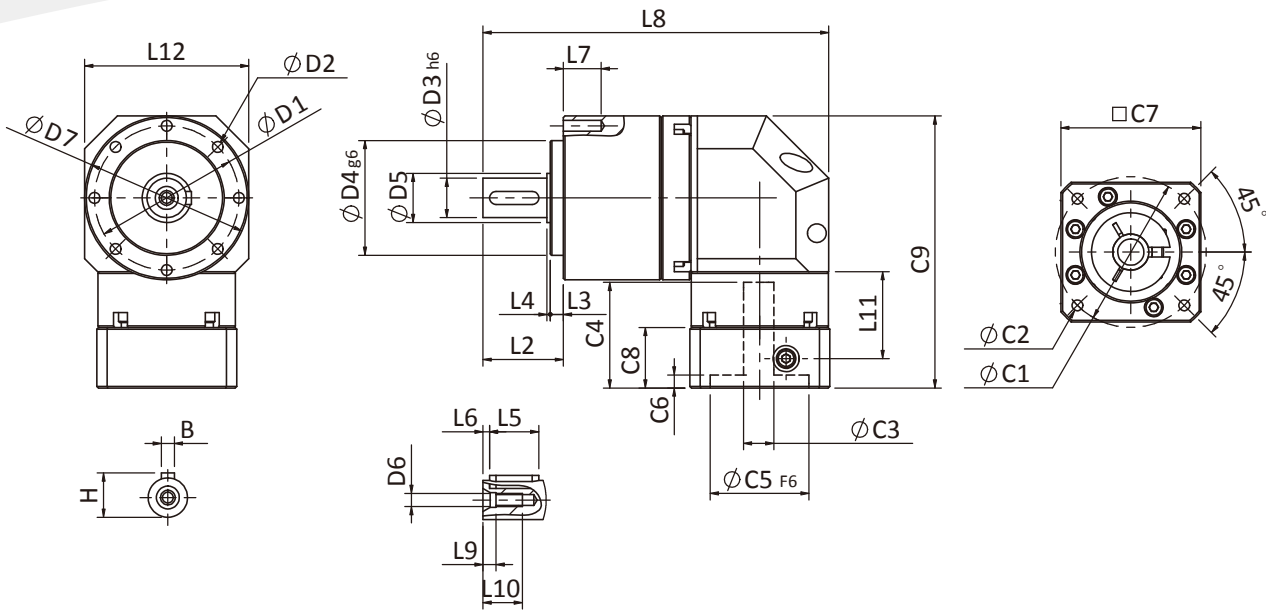


# PGCHR SERIES



## PGCHR Single Stage Dimensions



## Specifications

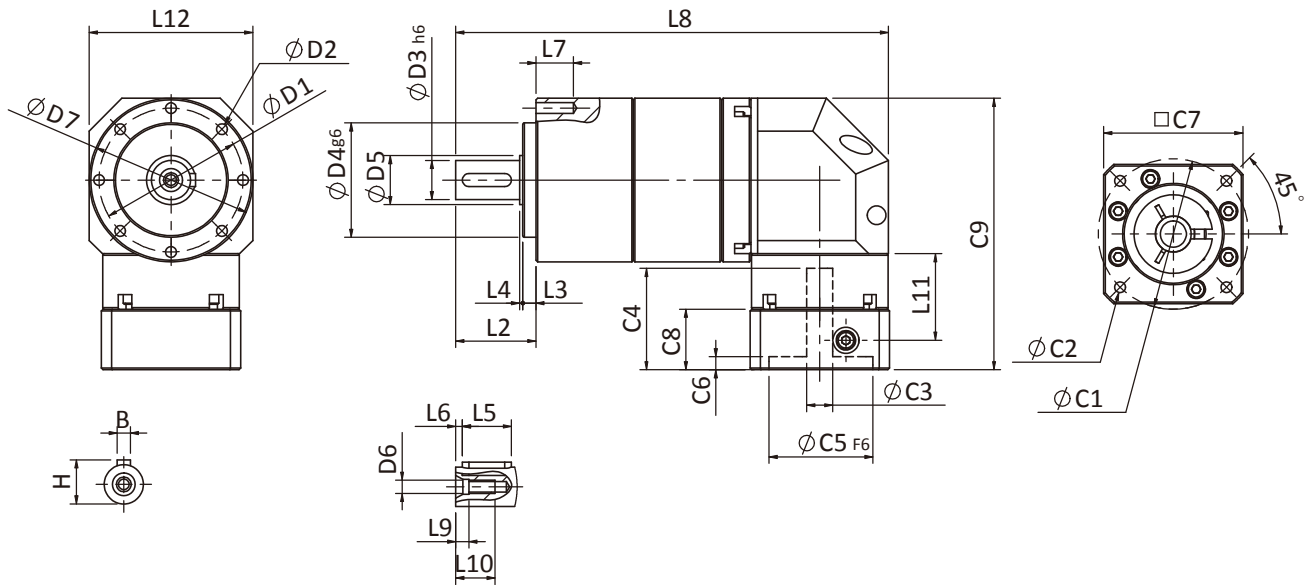
Unit: mm

Dimensions	PGCHR50	PGCHR70	PGCHR90
D1	44	62	80
D2	M4x0.7P	M5x0.8P	M6x1.0P
D3 <sub>h6</sub>	12	16	22
D4 <sub>g6</sub>	35	52	68
D5	15	25	35
D6	M4x0.7P	M5x0.8P	M8x1.25P
D7	50	70	90
-	-	-	-
L2	24.5	36	44.5
L3	4	6	6.5
L4	1	1.5	1.5
L5	15	25	32
L6	2	2	3
L7	8	10	12
L8	105.3	144.3	201
L9	4	4	4.5
L10	12	16.5	20.5
L11	26.5	36	41.2
L12	50	70	98
C1 <sup>2</sup>	46	70	90
C2 <sup>2</sup>	M4x0.7P	M5x0.8P	M6x1.0P
C3 <sup>2</sup>	≤8/≤11	≤14/≤19	≤19/≤24
C4 <sup>2</sup>	33	44	57
C5 <sup>2</sup> <sub>F6</sub>	30	50	70
C6 <sup>2</sup>	4	4	6
C7 <sup>2</sup>	42.6	60	90
C8 <sup>2</sup>	18.5	20	26
C9 <sup>2</sup>	83	111.4	149.2
B	4	5	6
H	13.5	18	24.5

\*2. C1~C9 are motor specific dimensions (metric std shown). Sizes may vary according to the motor flange chosen.

★ Specification subject to change without notice.

## PGCHR Double Stage Dimensions-1



## Specifications

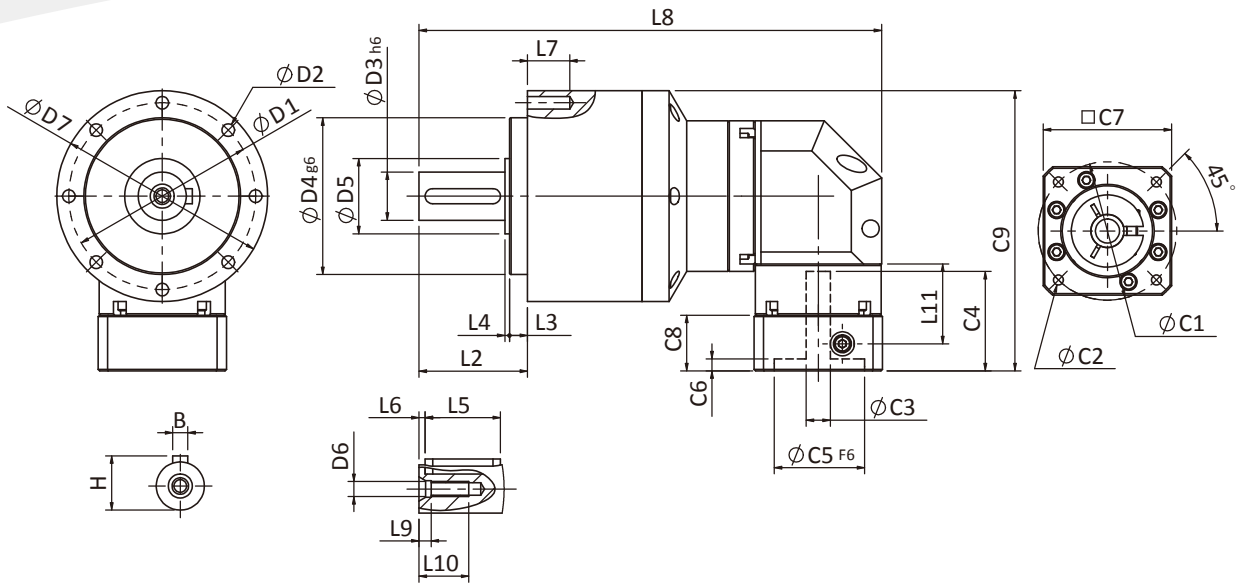
Unit: mm

Dimensions	PGCHR50	PGCHR70	PGCHR90
D1	44	62	80
D2	M4x0.7P	M5x0.8P	M6x1.0P
D3 <sub>h6</sub>	12	16	22
D4 <sub>g6</sub>	35	52	68
D5	15	25	35
D6	M4x0.7P	M5x0.8P	M8x1.25P
D7	50	70	90
-	-	-	-
L2	24.5	36	44.5
L3	4	6	6.5
L4	1	1.5	1.5
L5	15	25	32
L6	2	2	3
L7	8	10	12
L8	132.3	177.3	245
L9	4	4	4.5
L10	12	16.5	20.5
L11	26.5	36	41.2
L12	50	70	98
C1 <sup>2</sup>	46	70	90
C2 <sup>2</sup>	M4x0.7P	M5x0.8P	M6x1.0P
C3 <sup>2</sup>	≤8/≤11	≤14/≤19	≤19/≤24
C4 <sup>2</sup>	33	44	57
C5 <sup>2</sup> <sub>F6</sub>	30	50	70
C6 <sup>2</sup>	4	4	6
C7 <sup>2</sup>	42.6	60	90
C8 <sup>2</sup>	18.5	20	26
C9 <sup>2</sup>	83	111.4	149.2
B	4	5	6
H	13.5	18	24.5

\*2. C1~C9 are motor specific dimensions (metric std shown). Sizes may vary according to the motor flange chosen.

★ Specification subject to change without notice.

## PGCHR Double Stage Dimensions-2



## Specifications

Unit: mm

Dimensions	PGCHR70T	PGCHR90T	PGCHR120T
D1	62	80	108
D2	M5x0.8P	M6x1.0P	M8x1.25P
D3 <sub>h6</sub>	16	22	32
D4 <sub>g6</sub>	52	68	90
D5	25	35	45
D6	M5x0.8P	M8x1.25P	M12x1.75P
D7	70	90	120
-	-	-	-
L2	36	44.5	60
L3	6	6.5	7
L4	1.5	1.5	3.5
L5	25	32	40
L6	2	3	5
L7	10	12	16
L8	153.5	196.8	269.5
L9	4	4.5	6
L10	16.5	20.5	30
L11	26.5	36	41.2
C1 <sup>2</sup>	46	70	90
C2 <sup>2</sup>	M4x0.7P	M5x0.8P	M6x1.0P
C3 <sup>2</sup>	$\leq 8/\leq 11$	$\leq 14/\leq 19$	$\leq 19/\leq 24$
C4 <sup>2</sup>	33	44	57
C5 <sup>2</sup> <sub>F6</sub>	30	50	70
C6 <sup>2</sup>	4	4	6
C7 <sup>2</sup>	42.6	60	90
C8 <sup>2</sup>	18.5	20	26
C9 <sup>2</sup>	93	123.65	160.2
B	5	6	10
H	18	24.5	35

\*2. C1~C9 are motor specific dimensions (metric std shown). Sizes may vary according to the motor flange chosen.

\* Specification subject to change without notice.

## PGCHR Specifications Table

Specifications	Stage	Ratio	PGCHR-50	PGCHR-70	PGCHR-90	PGCHR-120	
Nominal Output Torque $T_{2N}$	1	3	16	36	105	135	
		4	18	48	140	180	
		5	17	54	140	225	
		7	14	44	125	300	
		8	18	48	140	260	
		9	16	35	95	230	
		10	17	50	140	210	
		12	18	40	120	-	
		14	14	44	125	300	
		15	17	45	135	-	
	20	11	37	95	230		
	2	Stage	Ratio	PGCHR-50	PGCHR-70/ PGCHR-70T	PGCHR-90/ PGCHR-90T	PGCHR-120T
		20	20	55	150	300	
		25	17	54	140	330	
		30	19	53	145	330	
		35	17	54	140	330	
		40	20	55	150	300	
		50	17	54	140	330	
		60	17	54	140	330	
		70	17	54	140	330	
80		17	54	140	330		
100	17	54	140	330			
120	17	54	140	330			
140	14	44	125	300			
200	11	37	95	230			
300	11	37	95	230			
Emergency Stop Torque $T_{2NOT}$	N • m	(2.5 times of Nominal Output Torque) *Max. Output Torque $T_{2B}$ =60% of Emergency Stop Torque)					
Nominal Input Speed $n_{1N}$	rpm	1,2	3-300	5000	4000	4000	4000
Max. Input Speed $n_{1max}$	rpm	1,2	3-300	10000	8000	8000	8000
Standard Backlash P2	arcmin	1 2	3-16 20-300	$\leq 10$ $\leq 12$	$\leq 10$ $\leq 12$	$\leq 9$ $\leq 11$	$\leq 8$ $\leq 10$
Torsional Rigidity	N • m /arcmin	1,2	3-300	3	7	14	25
Max. Radial Load $F_{2RB}^1$	N	1,2	3-300	702	1377	2985	6100
Max. Axial Load $F_{2aB}^1$	N	1,2	3-300	410	765	1625	3350
Operating Temp.	°C	1,2	3-300	-10°C ~ +90°C			
Service Life	hr	1,2	3-300	20,000 (10,000 Continuous operation)			
Efficiency	%	1 2	3-16 20-300	$\geq 95\%$ $\geq 92\%$			
Weight	kg	1 2	3-16 20-300	1.1 1.4	2.2 2.8/2.0	6.0 8.0/5.0	10.5 12.0
Mounting Position	-	1,2	3-300	Any direction			
Noise Level <sup>2</sup>	dBA/1m	1,2	3-300	61	63	65	68
Protection Class	-	1,2	3-300	IP 65			
Lubrication	-	1,2	3-300	Synthetic Lubricant			
Inertia (J1)							
Stage	Ratio	unit	PGCHR-50 ( $\phi 8$ )	PGCHR-70 ( $\phi 14$ )	PGCHR-90 ( $\phi 19$ )	PGCHR-120 ( $\phi 24$ )	
1	3, 4, 5, 7	Kg • cm <sup>2</sup>	0.07	0.40	2.0	2.7	
	Other ratios		0.05	0.30	1.5	2.2	
2	20, 25, 35		0.07	0.40/0.07	2.30/0.40	2.0	
	Other ratios		0.05	0.30/0.05	1.50/0.30	1.5	

\* 1. Applied to the output shaft center @100rpm.

\* 2. Measured at 3000 rpm with no load. These values are measured by gearbox with ratio = 10 (1-stage) or ratio = 100 (2-tage) 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.