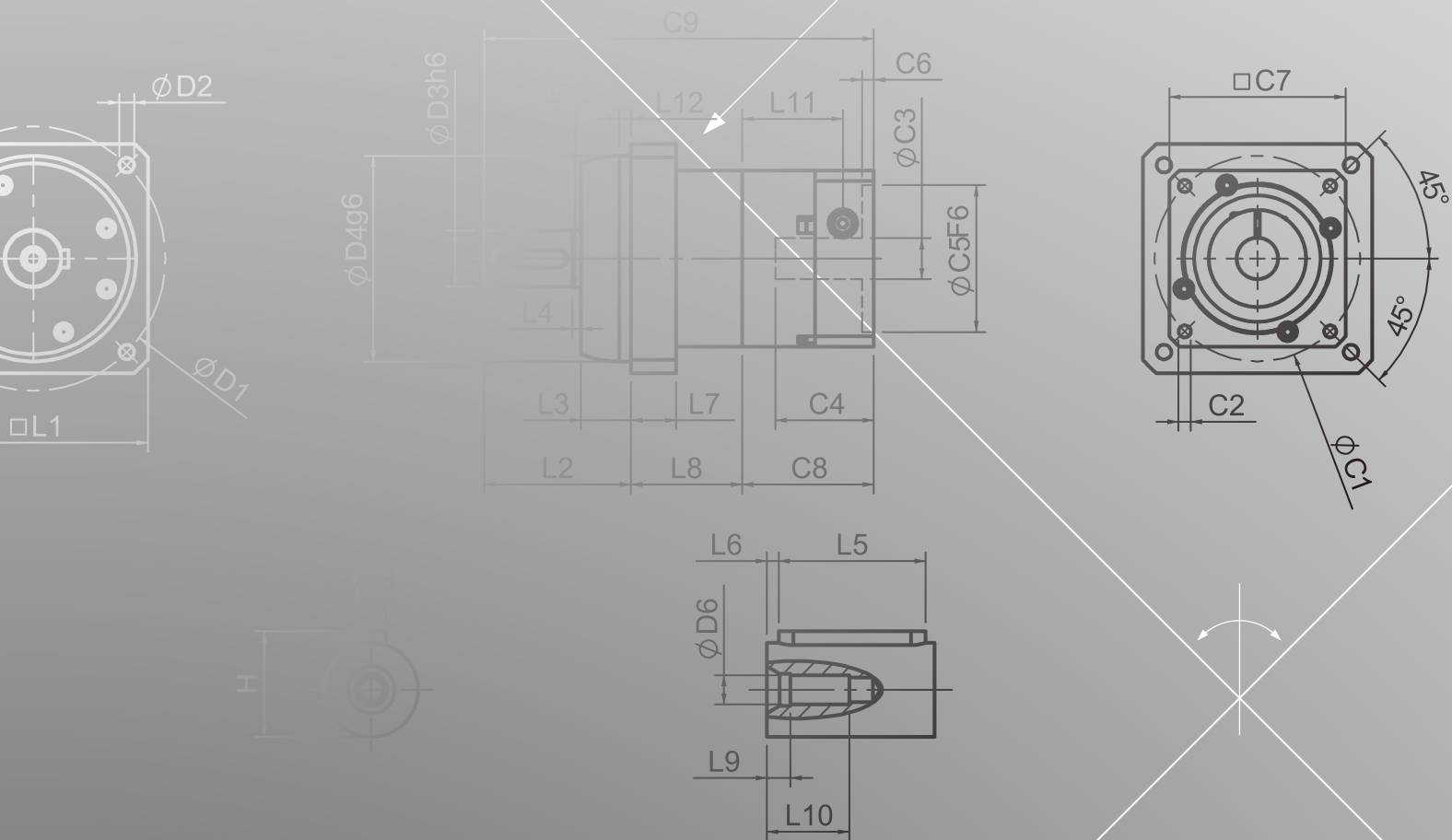
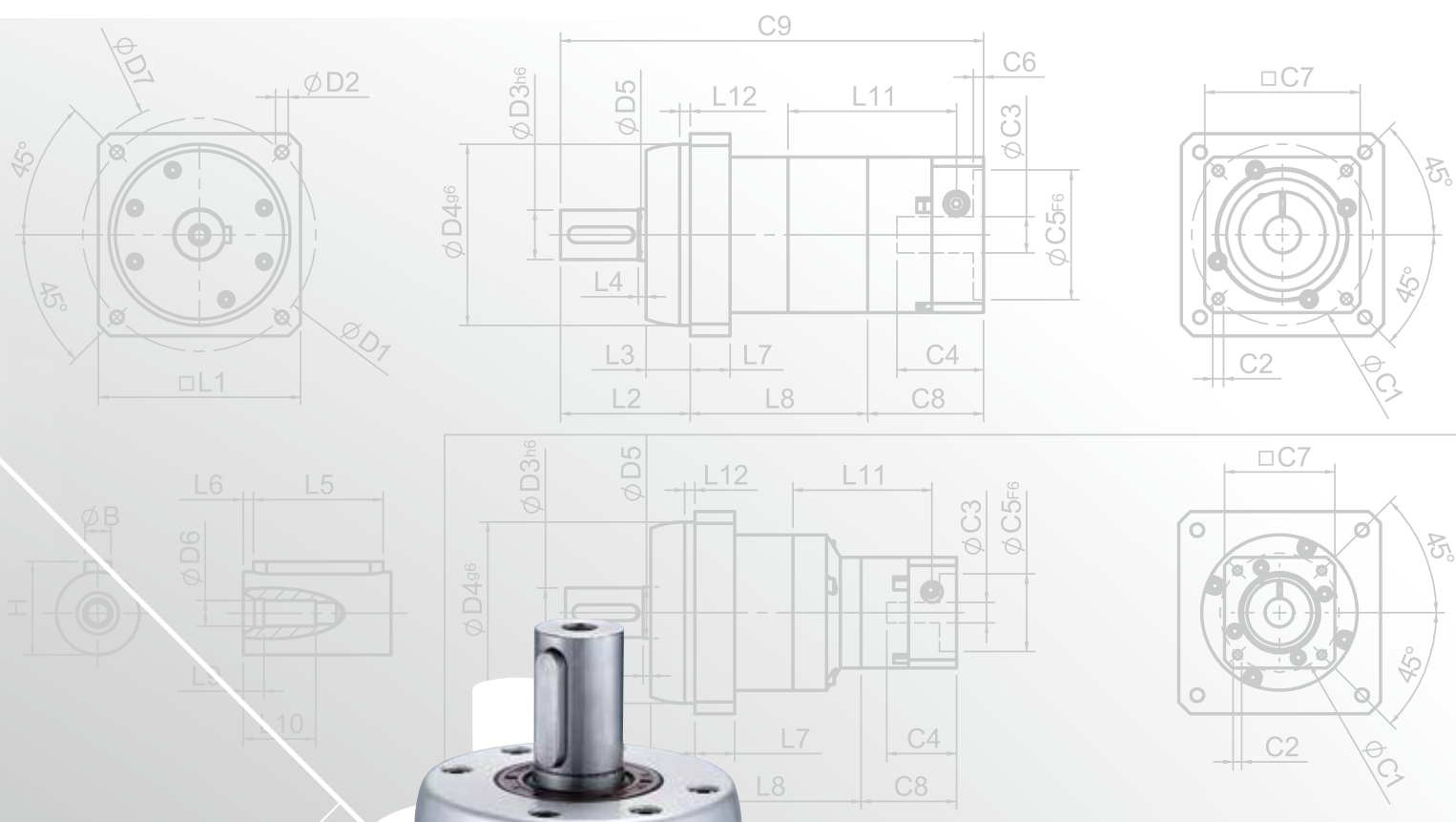
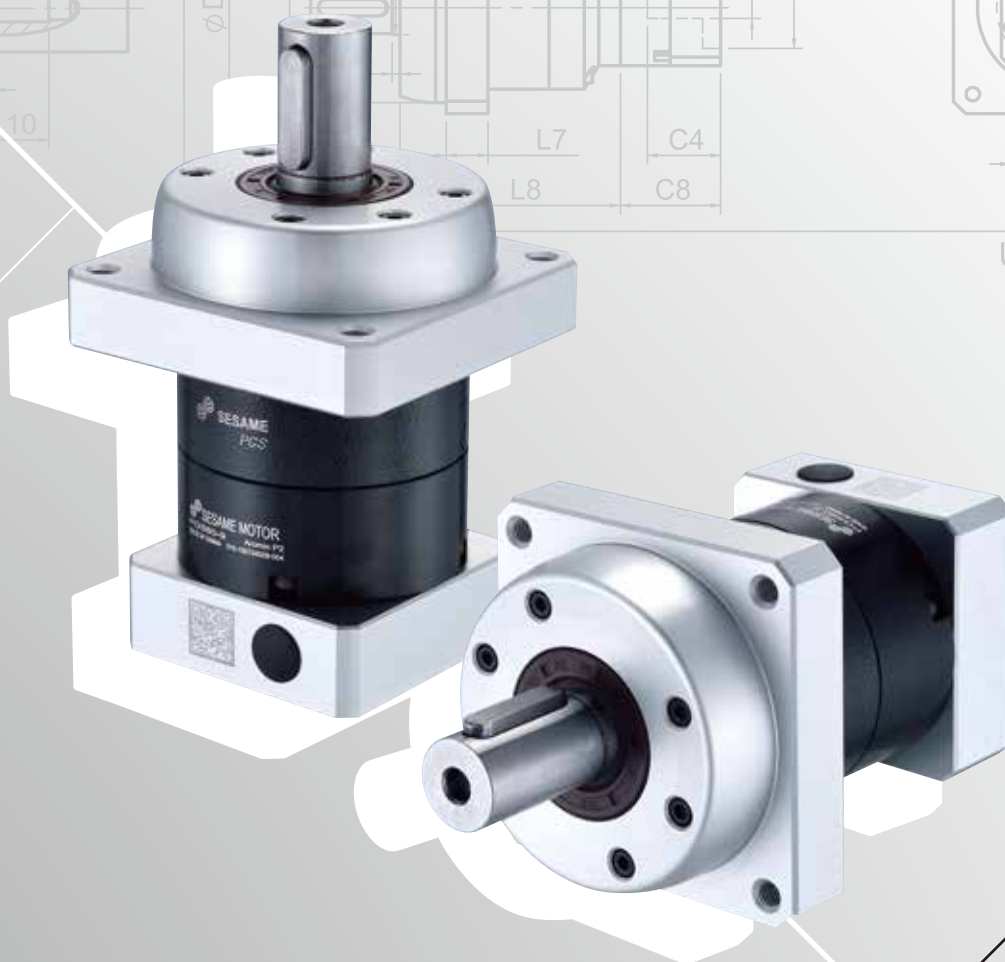


# PGS SERIES

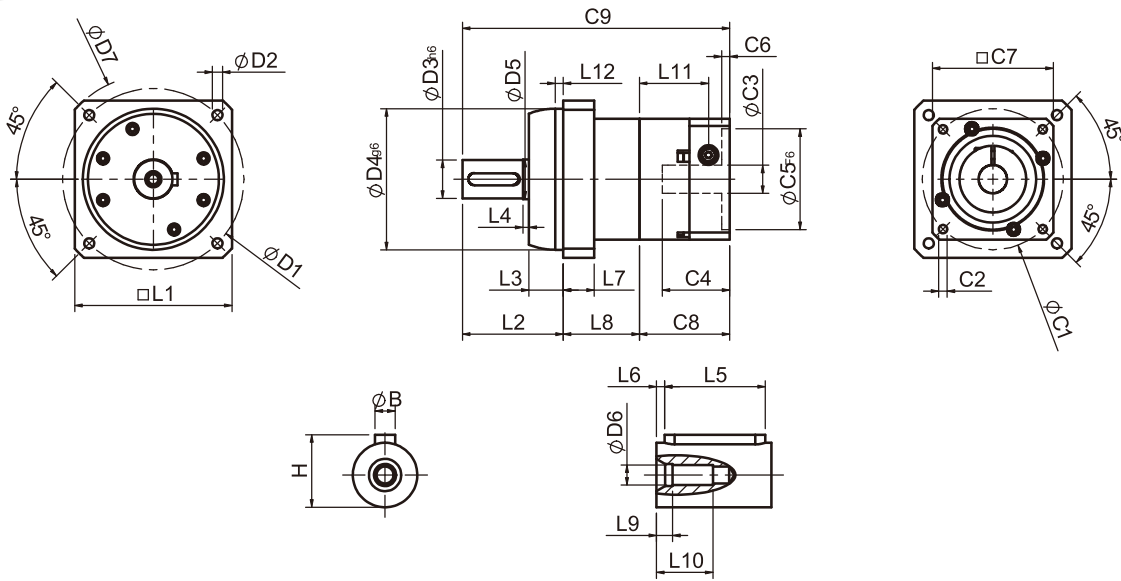




Unit:mm



## PGS Single Stage Dimensions



## Specifications

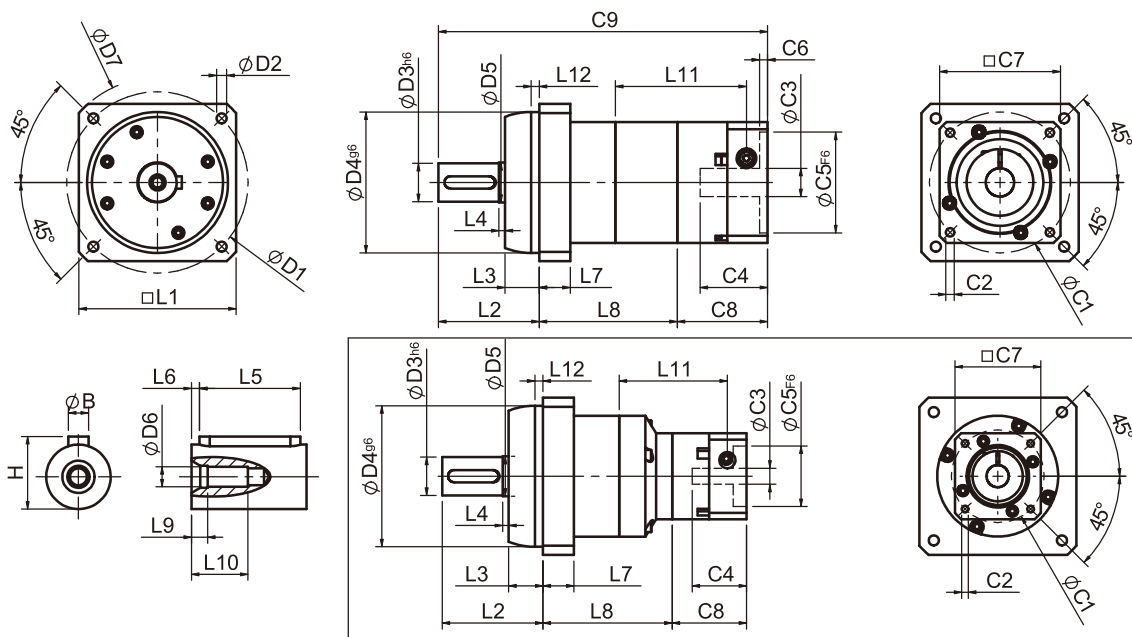
Unit:mm

Dimensions	PGS42	PGS60	PGS90
D1	60	90	115
D2	M5x0.8P	M6x1.0P	M8x1.25P
D3 <sub>h6</sub>	12	19	24
D4 <sub>g6</sub>	50	70	90
D5	17	20	30
D6	M4x0.7P	M6x1.0P	M8x1.25P
D7	70	104	132
L1	52	78	98
L2	32	50	61
L3	10	17	18
L4	2	3	1.5
L5	16	25	32
L6	2	3	3
L7	11.5	15.4	18
L8	27.6	37.8	46.2
L9	4	4	4.5
L10	14	16.5	20.5
L11	26.9	34.3	41.55
L12	3	4	5
C1 <sup>2</sup>	46	70	90
C2 <sup>2</sup>	M4x0.7P	M5x0.8P	M6x1.0P
C3 <sup>2</sup>	$\leq 8/\leq 11$	$\leq 14/\leq 19$	$\leq 19/\leq 24/\leq 28$
C4 <sup>2</sup>	26.5	33.5	41
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>	36.4	44.8	55.8
C9 <sup>2</sup>	96	132.6	163
B	4	6	8
H	13.5	21.5	27

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

★ Specification subject to change without notice.

## PGS Double Stage Dimensions



## Specifications

Unit:mm

Dimensions	PGS42	PGS60	PGS60T	PGS90	PGS90T
D1	60	90		115	
D2	M5x0.8P	M6x1.0P		M8x1.25P	
D3 <sub>h6</sub>	12	19		24	
D4 <sub>g6</sub>	50	70		90	
D5	17	20		30	
D6	M4x0.7P	M6x1.0P		M8x1.25P	
D7	70	104		132	
L1	52	78		98	
L2	32	50		61	
L3	10	17		18	
L4	2	3		1.5	
L5	16	25		32	
L6	2	3		3	
L7	11.5	15.4		18	
L8	52.5	68.5	64.1	87.2	83.8
L9	4	4		4.5	
L10	14	16.5		20.5	
L11	51.8	34.3	26.9	41.55	34.3
L12	3	4		5	
C1 <sup>2</sup>	46	70	46	90	70
C2 <sup>2</sup>	M4x0.7P	M5x0.8P	M4x0.7P	M6x1.0P	M5x0.8P
C3 <sup>2</sup>	≤8/≤11	≤14/≤19	≤8/≤11	≤19/≤24/≤28	≤14/≤19
C4 <sup>2</sup>	26.5	33.5	26.5	41	33.5
C5 <sup>2</sup> <sub>F6</sub>	30	50	30	70	50
C6 <sup>2</sup>	4	4	4	6	4
C7 <sup>2</sup>	42.6	60	42.6	90	60
C8 <sup>2</sup>	36.4	44.8	36.4	55.8	44.8
C9 <sup>2</sup>	120.9	163.3	150.5	204	189.6
B	4	6		8	
H	13.5	21.5		27	

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

\* Specification subject to change without notice.

## PGS Specifications Table

Specifications		Stage	Ratio	PGS-42	PGS-60	PGS-90	PGS-115	
Nominal Output Torque $T_{2N}$	N • m	1	3	9	28	85	250	
			4	10	32	80	230	
			5	11	35	95	255	
			7	10	28	85	210	
			9	8	23	75	180	
		Stage	Ratio	PGS-42	PGS-60/ PGS-60T	PGS-90/ PGS-90T	PGS-115T	
		2	15	11	34	90	250	
			20	10	32	80	230	
			25	11	35	95	255	
			35	11	35	95	255	
			45	11	35	95	255	
			49	10	28	85	210	
			63	10	28	85	210	
		81	8	23	75	180		
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	3-81	4000	4000	3000	2500	
Max. Input Speed $n_{1max}$	rpm	1,2	3-81	8000	6000	6000	5000	
Standard Backlash P2	arcmin	1 2	3-9 15-81	$\leq 9$ $\leq 12$	$\leq 8$ $\leq 10$	$\leq 7$ $\leq 9$	$\leq 6$ $\leq 8$	
Torsional Rigidity	N • m /arcmin	1,2	3-81	1.8	5.0	10.5	20	
Max. Radial Load $F_{2rB}^{-1}$	N	1,2	3-81	1120	1720	2800	4600	
Max. Axial Load $F_{2aB}^{-1}$	N	1,2	3-81	520	830	1730	2950	
Operating Temp.	°C		3-81	-10 °C ~ +90 °C				
Service Life	hr		3-81	20,000 (10,000/Continuous operation)				
Efficiency	%	1 2	3-9 15-81	$\geq 95\%$ $\geq 90\%$				
Weight	kg	1 2	3-9 15-81	0.6 0.9	1.5 2.0/1.8	3.4 5.1/4.0	7.8 9.5	
Mounting Position	-	1,2	3-81	Any direction				
Noise Level <sup>2</sup>	dB(A)/1m	1,2	3-81	61	63	66	67	
Protection Class	-	1,2	3-81	IP65				
Lubrication	-	1,2	3-81	Synthetic Lubricant				
Inertia(J1)								
Stage	Ratio	unit		PGS-42( $\psi$ 8)	PGS-60( $\psi$ 14)	PGS-90( $\psi$ 19)	PGS-115( $\psi$ 24)	
1	3	Kg • cm <sup>2</sup>		0.04	0.23	0.77	2.30	
	4			0.03	0.21	0.67	1.92	
	5			0.03	0.21	0.61	1.71	
	7			0.03	0.21	0.60	1.65	
	9			0.03	0.21	0.60	1.63	
Stage	Ratio			PGS-42( $\psi$ 8)	PGS-60( $\psi$ 14)/ PGS-60T( $\psi$ 8)	PGS-90( $\psi$ 19)/ PGS-90T( $\psi$ 14)	PGS-115T( $\psi$ 19)	
2	15/20/25			0.03	0.21(0.03)	0.61(0.21)	0.61	
	35/49			0.03	0.21(0.03)	0.60(0.21)	0.60	
	45/63/81			0.03	0.21(0.03)	0.60(0.21)	0.60	
* 1. Applied to the output shaft center @100rpm.								
* 2. Measured at 3000rpm 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.

# SERVO MOTOR GEARHEADS



PHL

PHFR

PHF

PGH

PUR

PUL

PGLH

PGL

PGC

PGE

PGRH

PCR

PGFR

PGF

PBC

PBE

PAE

PAC

PAN

PGS

PNS