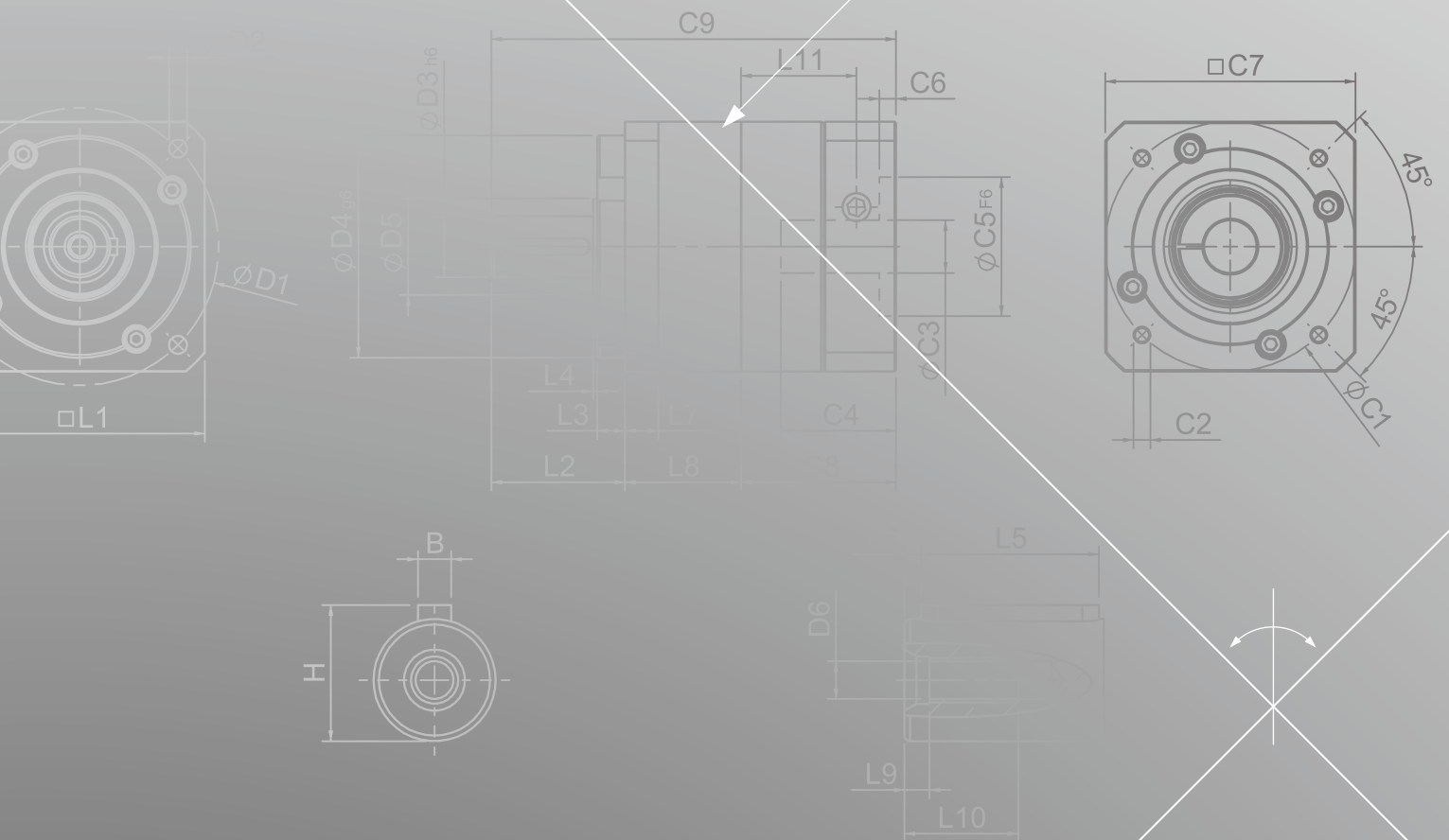
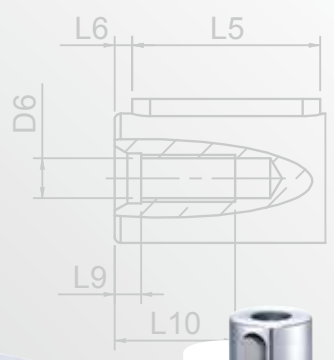
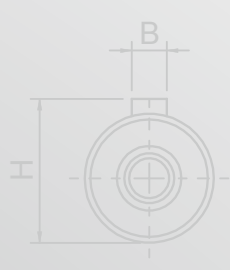
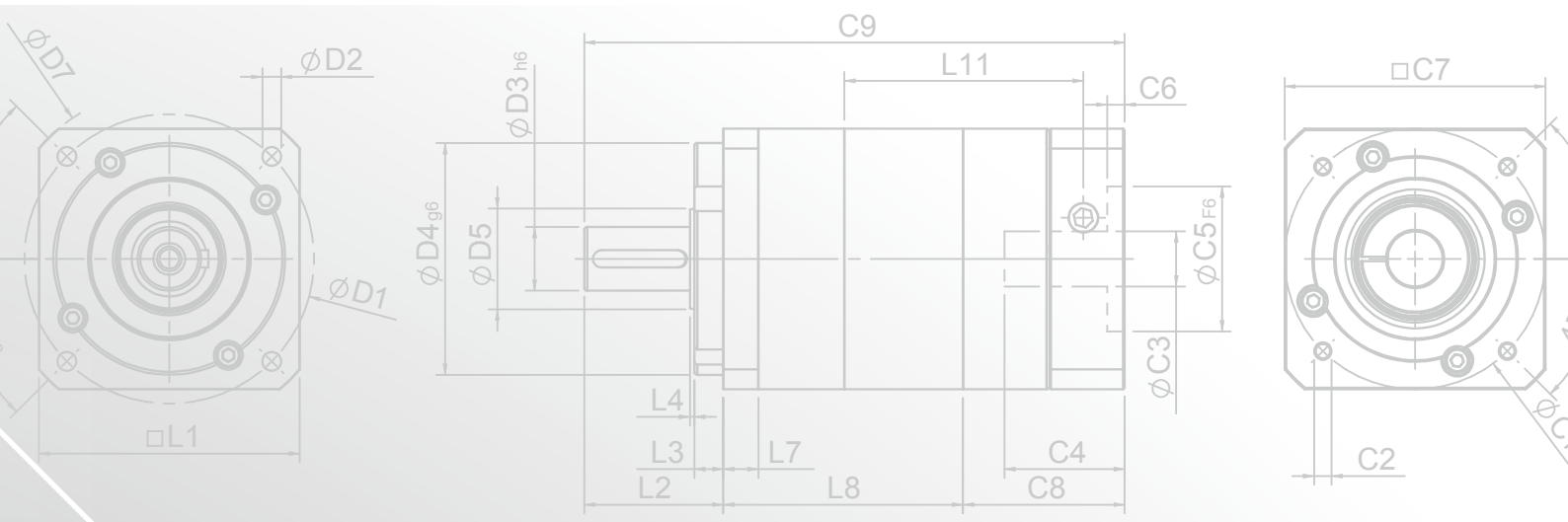
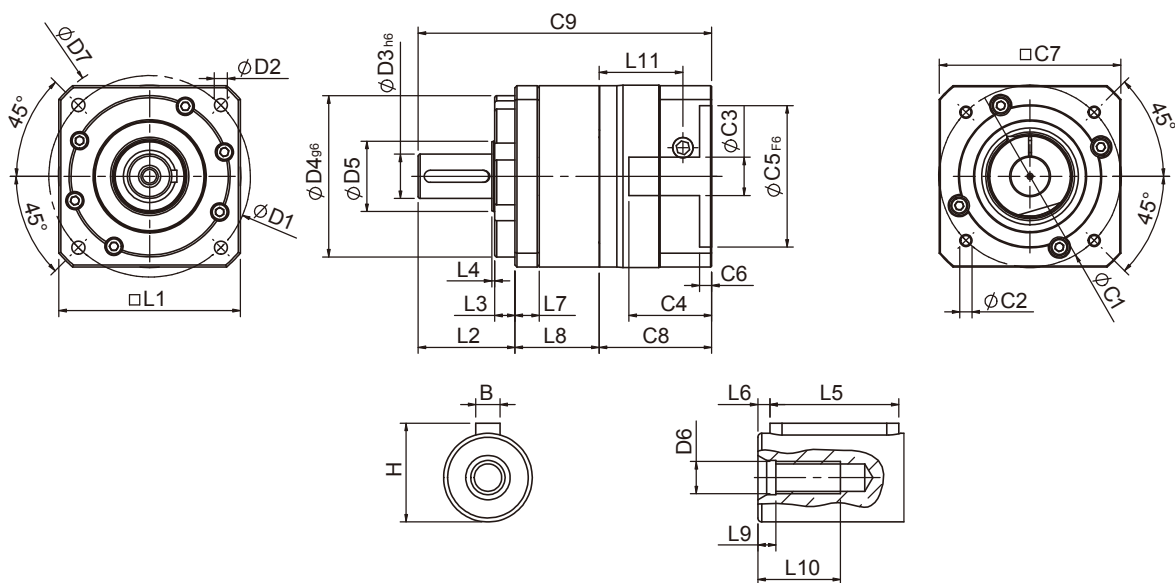


# ***SGE*** SERIES





## SGE Single Stage Dimensions



## Specifications

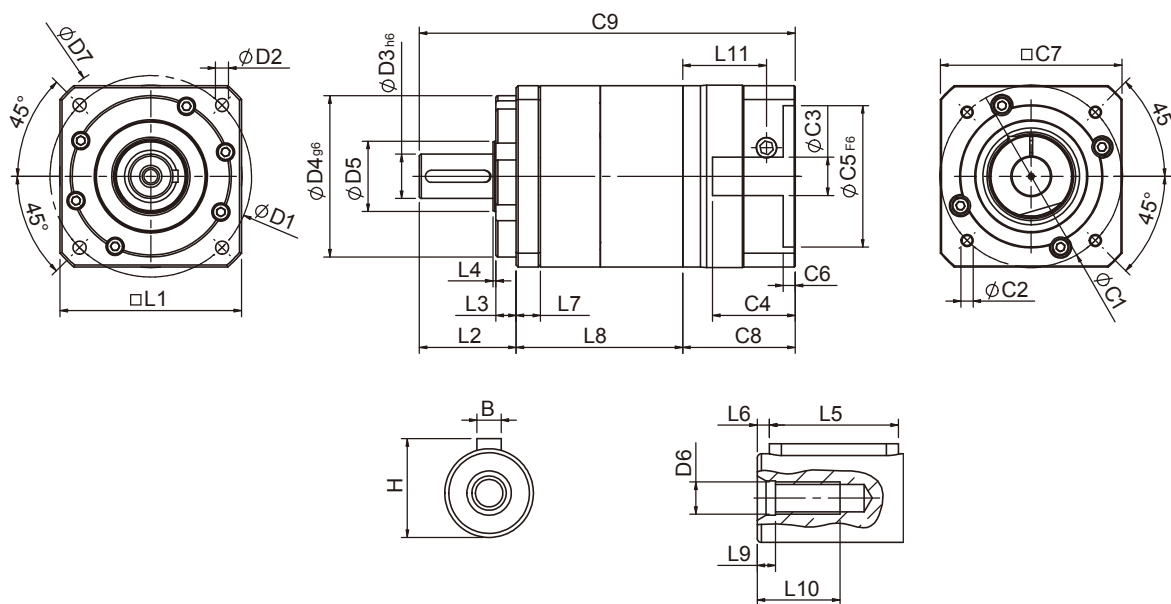
Unit:mm

Dimensions	SGE42	SGE60	SGE90
D1	-	70	100
D2	-	5.5	6.5
D3 <sub>h6</sub>	-	16	22
D4 <sub>g6</sub>	-	50	80
D5	-	20	35
D6	-	M5x0.8P	M8x1.25P
D7	-	80	118
L1	-	62.5	90
L2	-	37	48
L3	-	7	10
L4	-	1.5	1.5
L5	-	25	32
L6	-	2	3
L7	-	10	12.1
L8	-	36.3	41.8
L9	-	4	4.5
L10	-	16.5	20.5
L11	-	34.3	41.5
C1 <sup>2</sup>	-	70	90
C2 <sup>2</sup>	-	M5x0.8P	M6x1.0P
C3 <sup>2</sup>	-	≤14/≤19	≤19/≤24/≤28
C4 <sup>2</sup>	-	33.5	41
C5 <sup>2</sup> <sub>F6</sub>	-	50	70
C6 <sup>2</sup>	-	4	6
C7 <sup>2</sup>	-	60	90
C8 <sup>2</sup>	-	44.8	55.8
C9 <sup>2</sup>	-	118.1	145.6
B	-	5	6
H	-	18	24.5

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

★ Specification subject to change without notice.

## SGE Double Stage Dimensions



## Specifications

Unit:mm

Dimensions	SGE42	SGE60	SGE90
D1	-	70	100
D2	-	5.5	6.5
D3 <sub>h6</sub>	-	16	22
D4 <sub>g6</sub>	-	50	80
D5	-	20	35
D6	-	M5x0.8P	M8x1.25P
D7	-	80	118
L1	-	62.5	90
L2	-	37	48
L3	-	7	10
L4	-	1.5	1.5
L5	-	25	32
L6	-	2	3
L7	-	10	12.1
L8	-	66.9	82.7
L9	-	4	4.5
L10	-	16.5	20.5
L11	-	34.3	41.5
C1 <sup>2</sup>	-	70	90
C2 <sup>2</sup>	-	M5x0.8P	M6x1.0P
C3 <sup>2</sup>	-	≤14/≤19	≤19/≤24/≤28
C4 <sup>2</sup>	-	33.5	41
C5 <sup>2</sup> <sub>F6</sub>	-	50	70
C6 <sup>2</sup>	-	4	6
C7 <sup>2</sup>	-	60	90
C8 <sup>2</sup>	-	44.8	55.8
C9 <sup>2</sup>	-	148.7	186.5
B	-	5	6
H	-	18	24.5

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

★ Specification subject to change without notice.

## SGE Specifications Table

Specifications		Stage	Ratio	SGE-42	SGE-60	SGE-90	SGE-115	
Nominal Output Torque $T_{2N}$	N · m	1	3	9	28	85	220	
			4	10	32	80	240	
			5	11	35	95	270	
			7	10	28	85	220	
			9	8	23	75	210	
			10	8	21	65	190	
		2	Stage	Ratio	SGE-42	SGE-60(T)	SGE-90(T)	SGE-115T
			15	11	34	90	250	
			20	10	32	80	240	
			25	11	35	95	270	
			35	11	35	95	270	
			45	11	35	95	270	
			49	10	28	85	220	
			63	10	28	85	220	
81	8	23	75	210				
100	8	21	65	190				
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	2500	
Max. Input Speed $n_{1max}$	rpm	1,2	3-100	6000	6000	6000	5000	
Standard Backlash P2	arcmin	1	3-10	≤ 9	≤ 8	≤ 7	≤ 6	
		2	15-100	≤ 12	≤ 10	≤ 9	≤ 8	
Torsional Rigidity	N · m / arcmin	1,2	3-100	1.5	4.0	8.5	17	
Max. Radial Load $F_{2rB}^1$	N	1,2	3-100	760	1250	2030	4200	
Max. Axial Load $F_{2aB}^1$	N	1,2	3-100	410	700	1200	2600	
Operating Temp.	°C	1,2	3-100	-10°C ~ +90 °C				
Service Life	hr	1,2	3-100	20,000 (10,000 Continuous operation)				
Efficiency	%	1	3-10	≥ 95%				
		2	15-100	≥ 90%				
Weight	kg	1	3-10	0.9	1.9	4.8	11.5	
		2	15-100	1.1	2.4(2.2)	6.5(5.4)	13.5	
Mounting Position	-	1,2	3-100	Any Direction				
Noise Level <sup>2</sup>	dB(A)/1m	1,2	3-100	61	63	66	67	
Protection Class	-	1,2	3-100	IP65 (Optional : IP67)				
Lubrication	-	1,2	3-100	Synthetic Lubricant (Optional: Food Grade Grease)				
Inertia (J1)								
Stage	Ratio	unit	SGE-42(ψ8)	SGE-60(ψ14)	SGE-90(ψ19)	SGE-115(ψ24)		
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		
	9/10		0.03	0.21	0.60	1.63		
Stage	Ratio		SGE-42(ψ8)	SGE-60(ψ14)/ SGE-60T(ψ8)	SGE-90(ψ19)/ SGE-90T(ψ14)	SGE-115T(ψ19)		
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			
	45/63/81/100	0.03	0.21(0.03)	0.60(0.21)	0.60			
<p>* 1. Applied to the output shaft center at 100 rpm.</p> <p>* 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.</p> <p>※ The above figures/specifications are subject to change without prior notice.</p>								

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