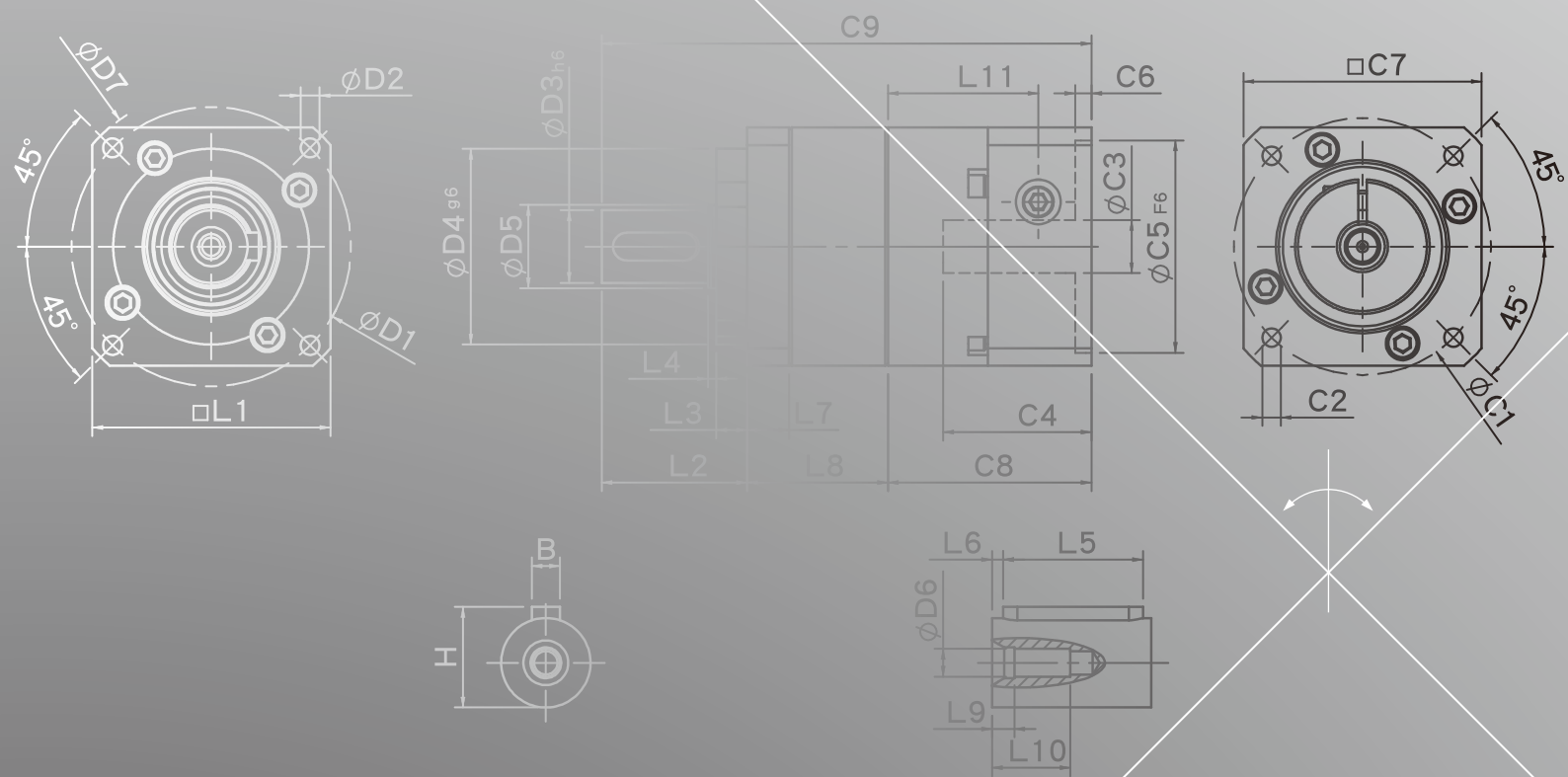
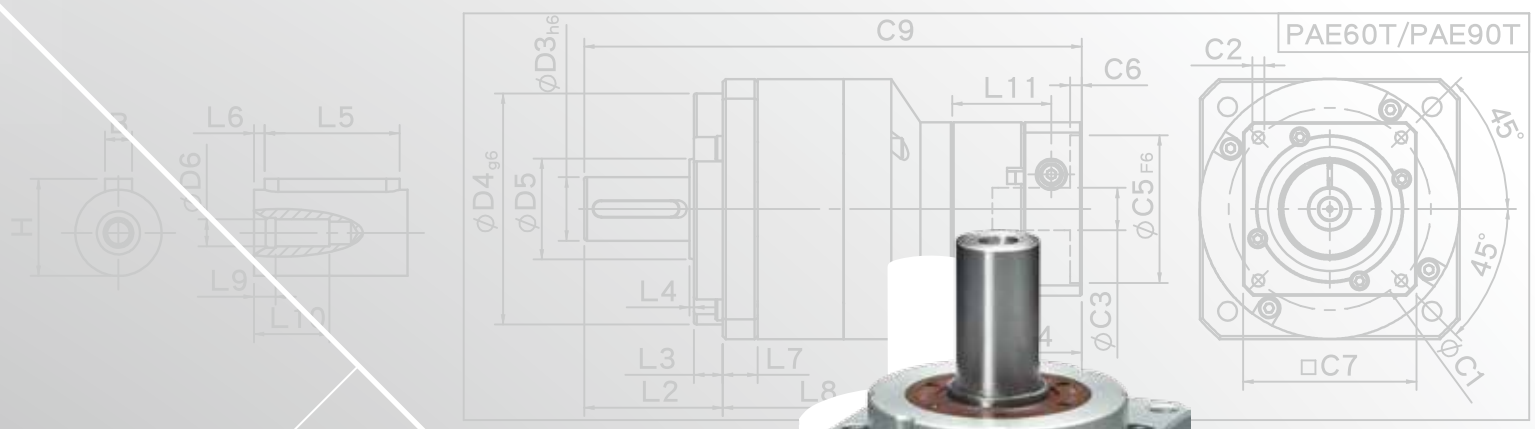
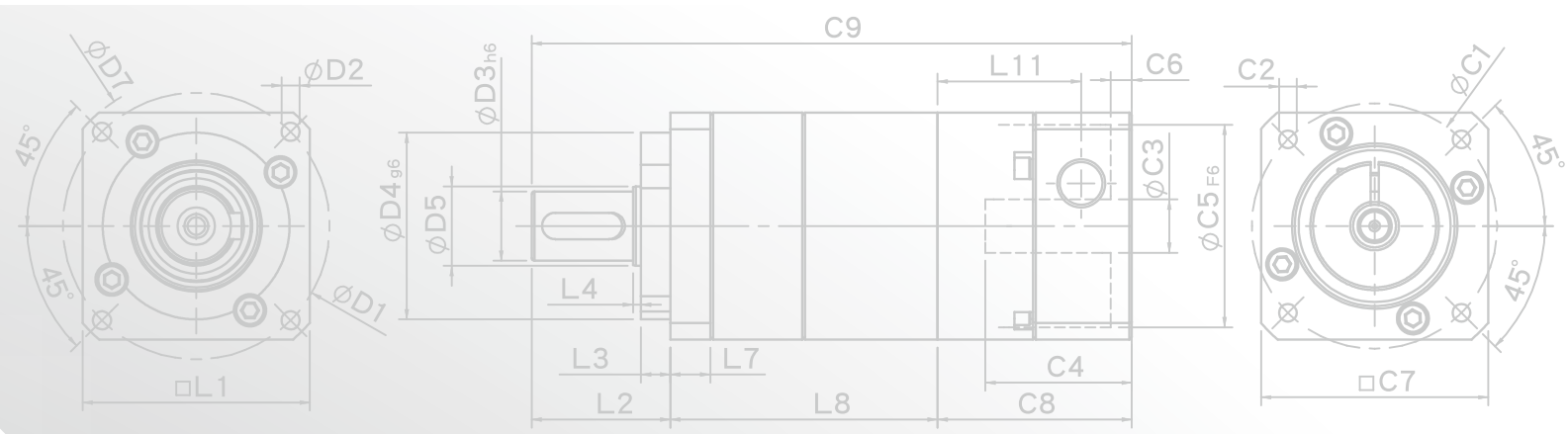
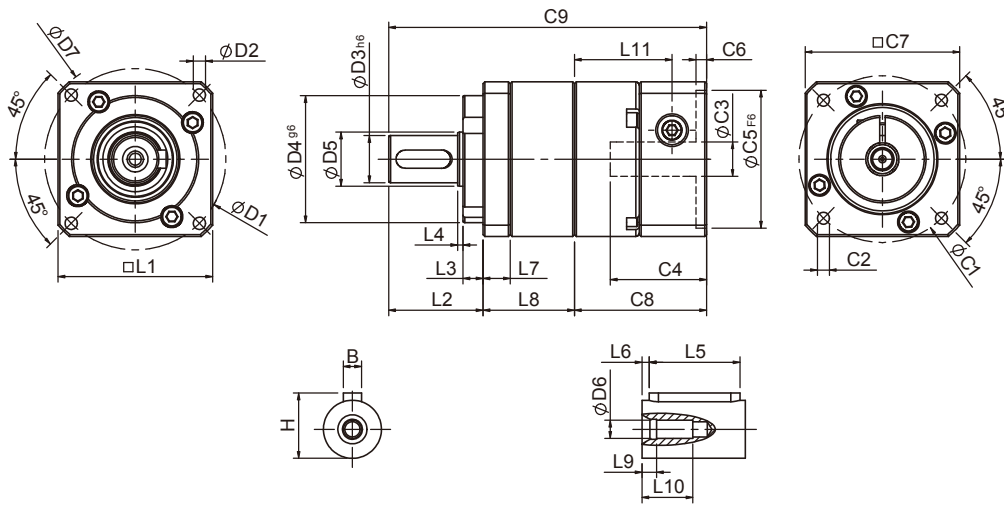


# ***PAE SERIES***





## PAE Single Stage Dimensions



## Specifications

Unit:mm

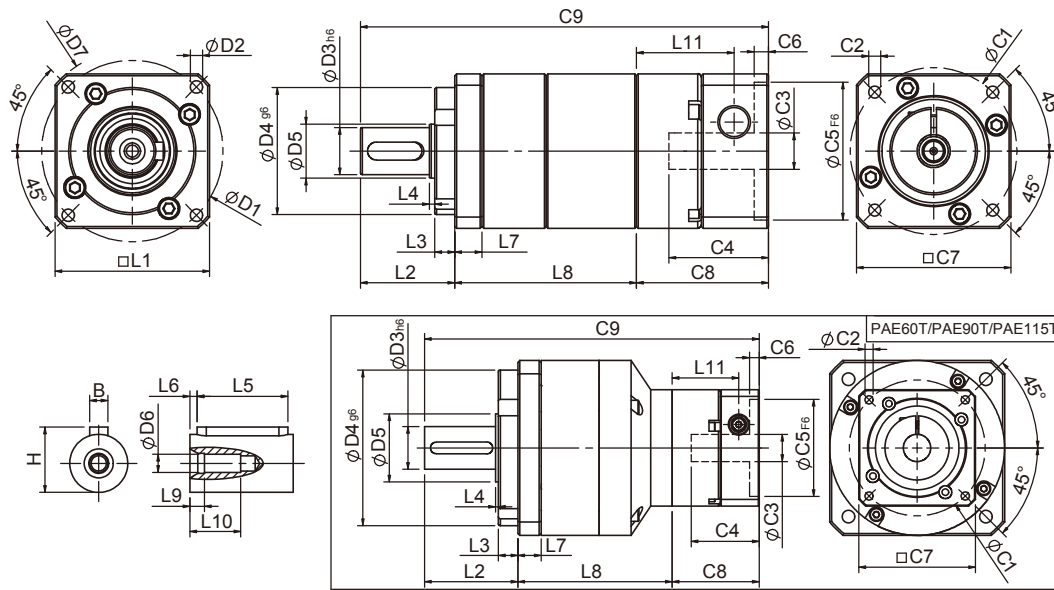
Dimensions	PAE42	PAE60	PAE90	PAE115
D1	50	70	100	130
D2	3.4	5.5	6.5	9
D3 <sub>h6</sub>	13	16	22	32
D4 <sub>g6</sub>	35	50	80	110
D5	15	20	35	45
D6	M4x0.7P	M5x0.8P	M8x1.25P	M12x1.75P
D7	56	80	118	148
L1	42.6(44)	60	90	115
L2	26	37	48	65
L3	5.5	7	10	12
L4	1.5	1.5	1.5	2
L5	15	25	32	40
L6	2	2	3	5
L7	7.3	10	12	16
L8	25	36.3	41.8	60.3
L9	4	4	4.5	6
L10	14	16.5	20.5	30
L11	26.9	34.3	41.5	51.5
C1 <sup>2</sup>	46	70	90	145
C2 <sup>2</sup>	M4x0.7P	M5x0.8P	M6x1.0P	M8x1.25P
C3 <sup>2</sup>	≤8/≤11	≤14/≤19	≤19/≤24/≤28	≤24/≤32/≤38
C4 <sup>2</sup>	26.5	33.5	41	51.5
C5 <sup>2</sup> <sub>F6</sub>	30	50	70	110
C6 <sup>2</sup>	4	4	6	6
C7 <sup>2</sup>	42.6	60	90	130
C8 <sup>2</sup>	36.4	44.8	55.8	68
C9 <sup>2</sup>	87.4	118.1	145.6	193.3
B	5	5	6	10
H	15	18	24.5	35

★ L1=44 when gear ratio is 10.

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

★ Specification subject to change without notice.

## PAE Double Stage Dimensions



## Specifications

Unit:mm

Dimensions	PAE42	PAE60	PAE60T	PAE90	PAE 90T	PAE115T
D1	50	70		100		130
D2	3.4	5.5		6.5		9
D3 <sub>h6</sub>	13	16		22		32
D4 <sub>g6</sub>	35	50		80		110
D5	15	20		35		45
D6	M4x0.7P	M5x0.8P		M8x1.25P		M12x1.75P
D7	56	80		118		148
L1	42.6(44)	60		90		115
L2	26	37		48		65
L3	5.5	7		10		12
L4	1.5	1.5		1.5		2
L5	15	25		32		40
L6	2	2		3		5
L7	7.3	10		12		16
L8	49.9	67	62.6	82.8	72.3	98.4
L9	4	4		4.5		6
L10	14	16.5		20.5		30
L11	26.9	34.3	26.9	41.5	34.3	41.5
C1 <sup>2</sup>	46	70	46	90	70	90
C2 <sup>2</sup>	M4x0.7P	M5x0.8P	M4x0.7P	M6x1.0P	M5x0.8P	M6x1.0P
C3 <sup>2</sup>	≤8/≤11	≤14/≤19	≤8/≤11	≤19/≤24/≤28	≤14/≤19	≤19/≤24/≤28
C4 <sup>2</sup>	26.5	33.5	26.5	41	33.5	41
C5 <sup>2 F6</sup>	30	50	30	70	50	70
C6 <sup>2</sup>	4	4	4	6	4	6
C7 <sup>2</sup>	42.6	60	42.6	90	60	90
C8 <sup>2</sup>	36.4	44.8	36.4	55.8	44.8	55.8
C9 <sup>2</sup>	112.3	148.8	136	186.6	165.1	219.2
B	5	5		6		10
H	15	18		24.5		35

★ L1=44 when gear ratio is 10.

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

★ Specification subject to change without notice.

## PAE Specifications Table

Specifications		Stage	Ratio	PAE-42	PAE-60	PAE-90	PAE-115
Nominal Output Torque $T_{2N}$	N · m	1	3	9	28	85	210
			4	10	32	80	240
			5	11	35	95	260
			7	10	28	85	220
			9	8	23	75	210
		10	8	21	65	190	
		Stage	Ratio	PAE-42	PAE-60/ PAE-60T	PAE-90/ PAE-90T	PAE-115T
		2	15	11	34	90	230
			20	10	32	80	240
			25	11	35	95	260
			30	-	-	-	260
			35	11	35	95	260
			40	-	-	-	260
			45	11	35	95	260
49	10		-	-	-		
50	-		35	95	260		
63	10	-	-	-			
70	-	28	85	220			
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	8000	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	3-100 -10°C ~ +90°C					
Service Life	hr	3-100 20,000 (10,000/Continuous operation)					
Efficiency	%	1	3-10	≥ 95%			
		2	15-100	≥ 90%			
Weight	kg	1	3-10	0.6	1.3	3.2	7.5
		2	15-100	0.8	1.8/1.6	4.8/3.7	9.2
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			
Lubrication	-	1,2	3-100	Synthetic Lubricant			
Inertia (J1)							
Stage	Ratio	unit	PAE-42(ψ8)	PAE-60(ψ14)	PAE-90(ψ19)	PAE-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		PAE-42(ψ8)	PAE-60(ψ14)/ PAE-60T(ψ8)	PAE-90(ψ19)/ PAE-90T(ψ14)	PAE-115T (ψ19)	
2	15/20/25		0.03	0.21(0.03)	0.61(0.21)	0.61	
	30/35/49		0.03	0.21(0.03)	0.60(0.21)	0.60	
	40/45/50/63/70/100		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.