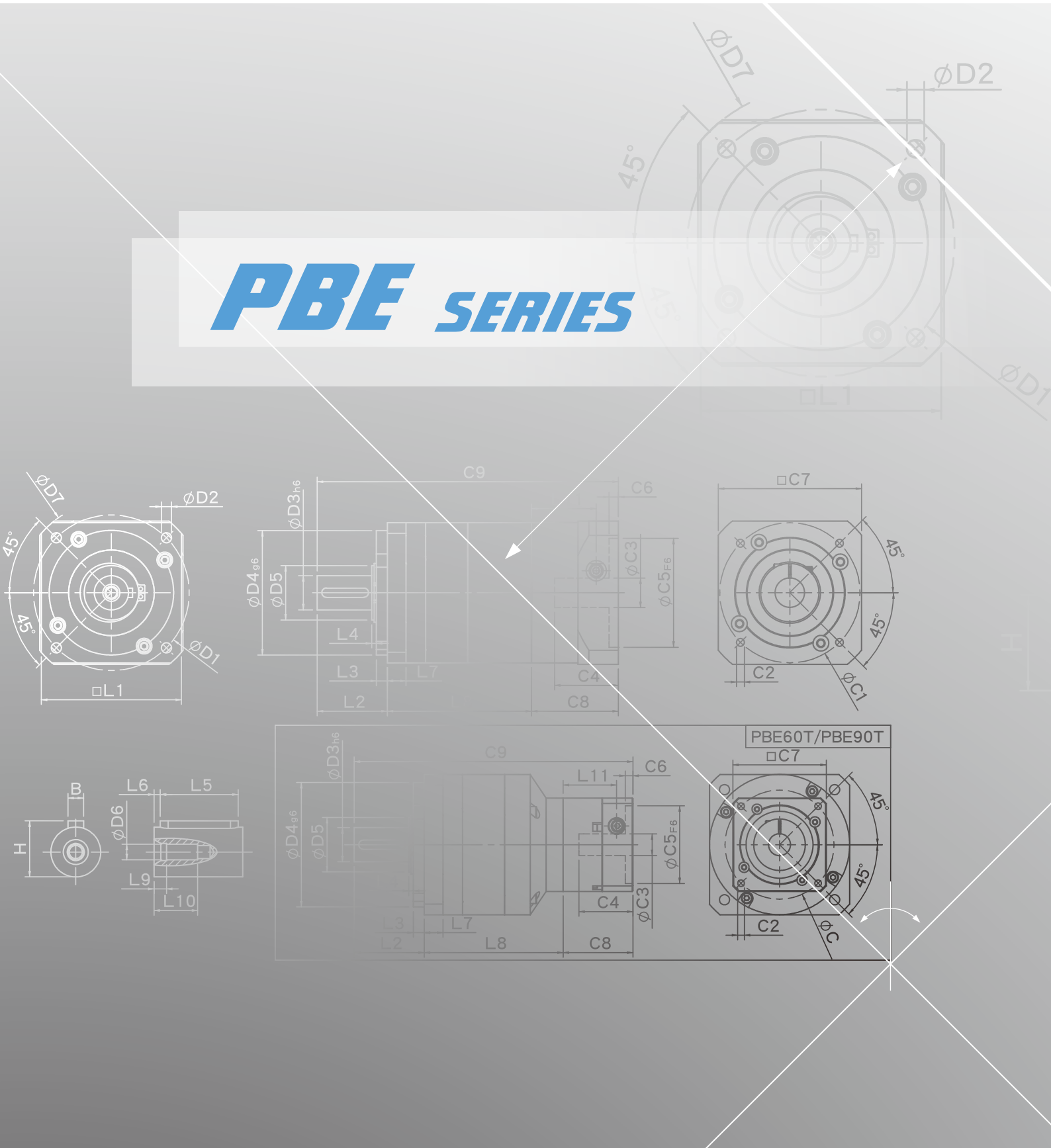
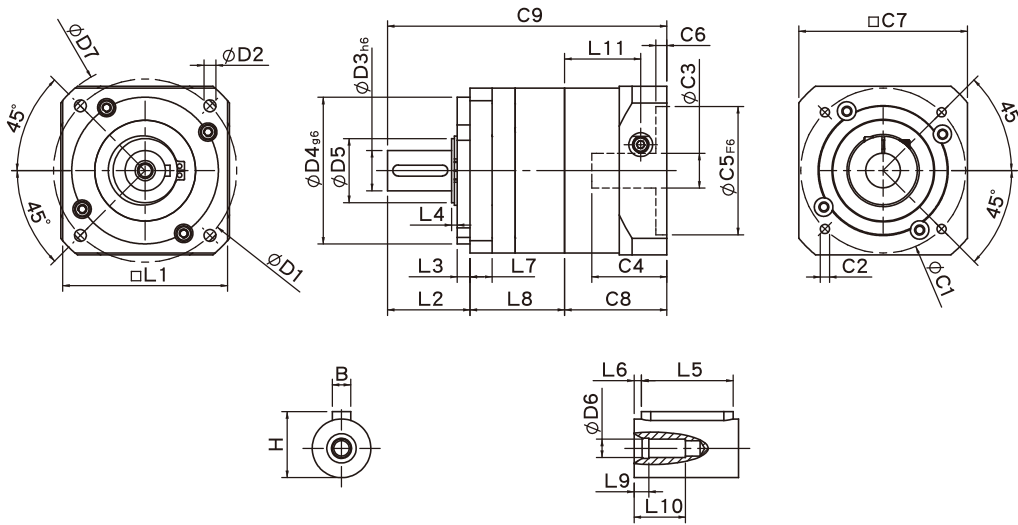


PBE SERIES





PBE Single Stage Dimensions



Specifications

Unit:mm

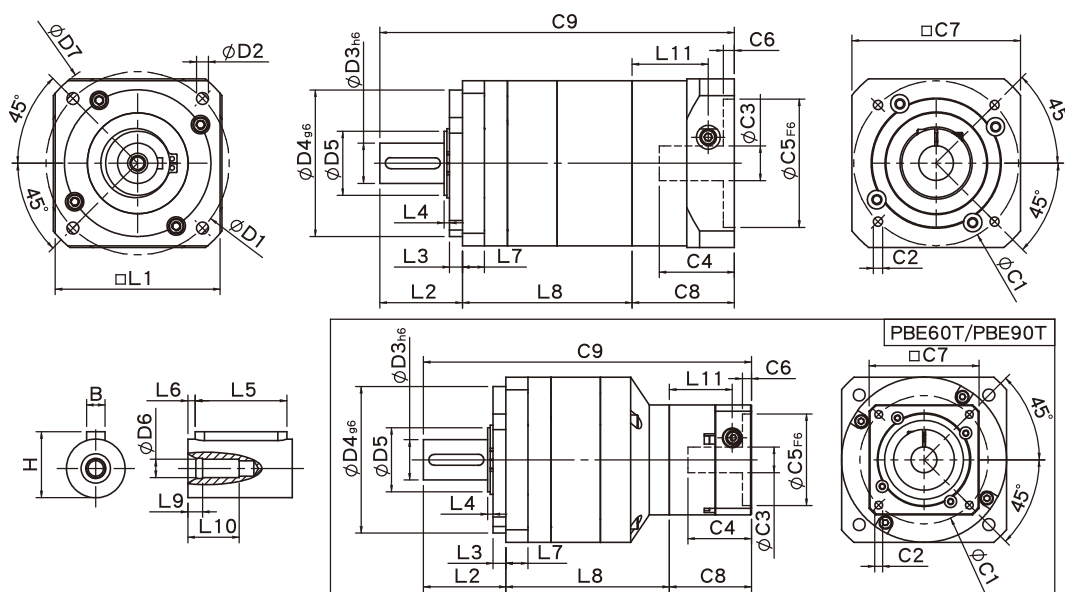
Dimensions	PBE42	PBE60	PBE90
D1	50	70	100
D2	3.4	5.5	6.5
D3 _{h6}	13	16	22
D4 _{g6}	35	50	80
D5	15	20	35
D6	M4x0.7P	M5x0.8P	M8x1.25P
D7	56	80	118
L1	42.6(44) ¹	60	90
L2	26	36	45
L3	5.5	5	7
L4	2.6	2.7	3
L5	15	25	30
L6	2	2	3
L7	8	10	12
L8	32.4	49.6	54.4
L9	4	4	4.5
L10	14	16.5	20.5
L11	26.9	34.3	41.5
C1 ²	46	70	90
C2 ²	M4x0.7P	M5x0.8P	M6x1.0P
C3 ²	$\leq 8/\leq 11$	$\leq 14/\leq 19$	$\leq 19/\leq 24/\leq 28$
C4 ²	26.5	33.5	41
C5 ² _{F6}	30	50	70
C6 ²	4	4	6
C7 ²	42.6	60	92
C8 ²	36.4	44.8	55.8
C9 ²	94.8	130.4	155.2
B	5	5	6
H	15	18	24.5

★ 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.

PBE Double Stage Dimensions



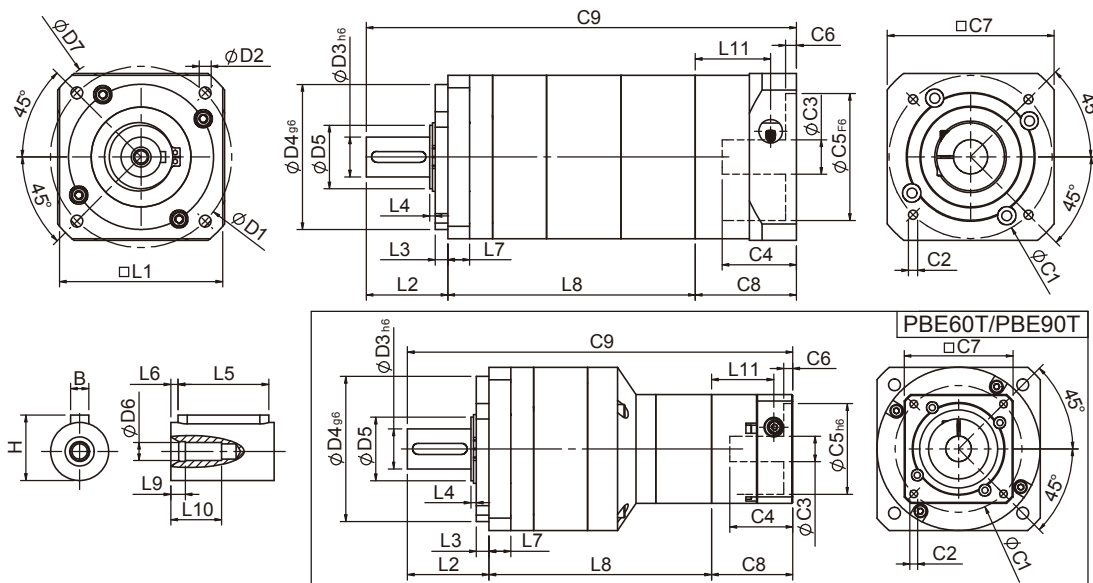
Specifications Unit:mm

Unit:mm

Dimensions	PBE42	PBE60/PBE60T		PBE90/PBE 90T	
D1	50	70		100	
D2	3.4	5.5		6.5	
D3 _{h6}	13	16		22	
D4 _{g6}	35	50		80	
D5	15	20		35	
D6	M4x0.7P	M5x0.8P		M8x1.25P	
D7	56	80		118	
L1	42.6	60		90	
L2	26	36		45	
L3	5.5	5		7	
L4	2.6	2.7		3	
L5	15	25		30	
L6	2	2		3	
L7	8	10		12	
L8	57.3	80.3	75.9	95.4	92
L9	4	4		4.5	
L10	14	16.5		20.5	
L11	26.9	34.3	26.9	41.55	34.3
C1 ²	46	70	46	90	70
C2 ²	M4x0.7P	M5x0.8P	M4x0.7P	M6x1.0P	M5x0.8P
C3 ²	≤8/≤11	≤14/≤19	≤8/≤11	≤19/≤24/≤28	≤14/≤19
C4 ²	26.5	33.5	26.5	41	33.5
C5 ² _{F6}	30	50	30	70	50
C6 ²	4	4	4	6	4
C7 ²	42.6	60	42.6	92	60
C8 ²	36.4	44.8	36.4	55.8	44.8
C9 ²	119.7	161.1	148.3	196.2	181.8
B	5	5		6	
H	15	18		24.5	

★ Specification subject to change without notice.

PBE Triple Stage Dimensions



Specifications

Unit:mm

Dimensions	PBE42	PBE60T	PBE90T
D1	50	70	100
D2	3.4	5.5	6.5
D3 _{h6}	13	16	22
D4 _{g6}	35	50	80
D5	15	20	35
D6	M4x0.7P	M5x0.8P	M8x1.25P
D7	56	80	118
L1	42.6	60	90
L2	26	36	45
L3	5.5	5	7
L4	2.6	2.7	3
L5	15	25	30
L6	2	2	3
L7	8	10	12
L8	82.2	100.8	122.7
L9	4	4	4.5
L10	14	16.5	20.5
L11	26.9	26.9	34.3
C1 ²	46	46	70
C2 ²	M4x0.7P	M4x0.7P	M5x0.8P
C3 ²	≤8/≤11	≤8/≤11	≤14/≤19
C4 ²	26.5	26.5	33.5
C5 ² _{F6}	30	30	50
C6 ²	4	4	4
C7 ²	42.6	42.6	60
C8 ²	36.4	36.4	44.8
C9 ²	144.6	173.2	212.5
B	5	5	6
H	15	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.

PBE Specifications Table

Specifications		Stage	Ratio	PBE-42	PBE-60	PBE-90
Nominal Output Torque T_{2N}	N • m	1	3	4.8	13.6	33.5
			4	6.3	21.6	58.6
			5	6.0	20.5	55.1
			7	5.6	19.2	51.8
			9	5.4	18.5	50.0
			10	5.4	17.0	48.0
		Stage	Ratio	PBE-42	PBE-60(T)	PBE-90(T)
		2	15	4.8	13.6	33.5
			20	6.3	21.6	58.6
			25	6.0	20.5	55.1
			35	6.0	20.5	55.1
			45	6.0	20.5	55.1
			49	5.6	19.2	51.8
			63	5.6	19.2	51.8
			81	5.4	18.5	50.0
		Stage	Ratio	PBE-42	PBE-60(T)	PBE-90(T)
		3	125	6.0	20.5	55.1
			175	6.0	20.5	55.1
			225	6.0	20.5	55.1
			245	6.0	20.5	55.1
			315	6.0	20.5	55.1
			405	6.0	20.5	55.1
			567	5.6	19.2	51.8
			729	5.4	18.5	50.0
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	3-729	4000	4000	3000
Max. Input Speed n_{1max}	rpm	1,2,3	3-729	8000	6000	6000
Backlash	arcmin	1	3-10	≤ 9	≤ 8	≤ 7
		2	15-81	≤ 12	≤ 10	≤ 9
		3	125-729	≤ 15	≤ 12	≤ 12
Torsional Rigidity	N • m / arcmin	1,2,3	3-729	0.8	2.0	7
Max. Radial Load F_{2rB}^1	N	1,2,3	3-729	540	1040	1700
Max. Axial Load F_{2aB}^1	N	1,2,3	3-729	360	720	735
Operating Temp.	°C	1,2,3	3-729	-10 °C ~ +90 °C		
Service Life	hr	1,2,3	3-729	20,000 (10,000/Continuous operation)		
Efficiency	%	1	3-10	≥ 95%		
		2	15-81	≥ 90%		
		3	125-729	≥ 85%		
Weight	kg	1	3-10	0.5	1.2	3.1
		2	15-81	0.7	1.7/1.5	4.7/3.6
		3	125-729	0.9	2.0/1.8	5.3/4.0
Mounting Position	-	1,2,3	3-729	Any direction		
Noise Level ²	dBA/1m	1,2,3	3-729	≤ 62	≤ 64	≤ 67
Protection Class	-	1,2,3	3-729	IP64		
Lubrication	-	1,2,3	3-729	Synthetic Lubricant		

* 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.
* 3. The inertia value of input shaft is same as that of the PAE series.
※ 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.