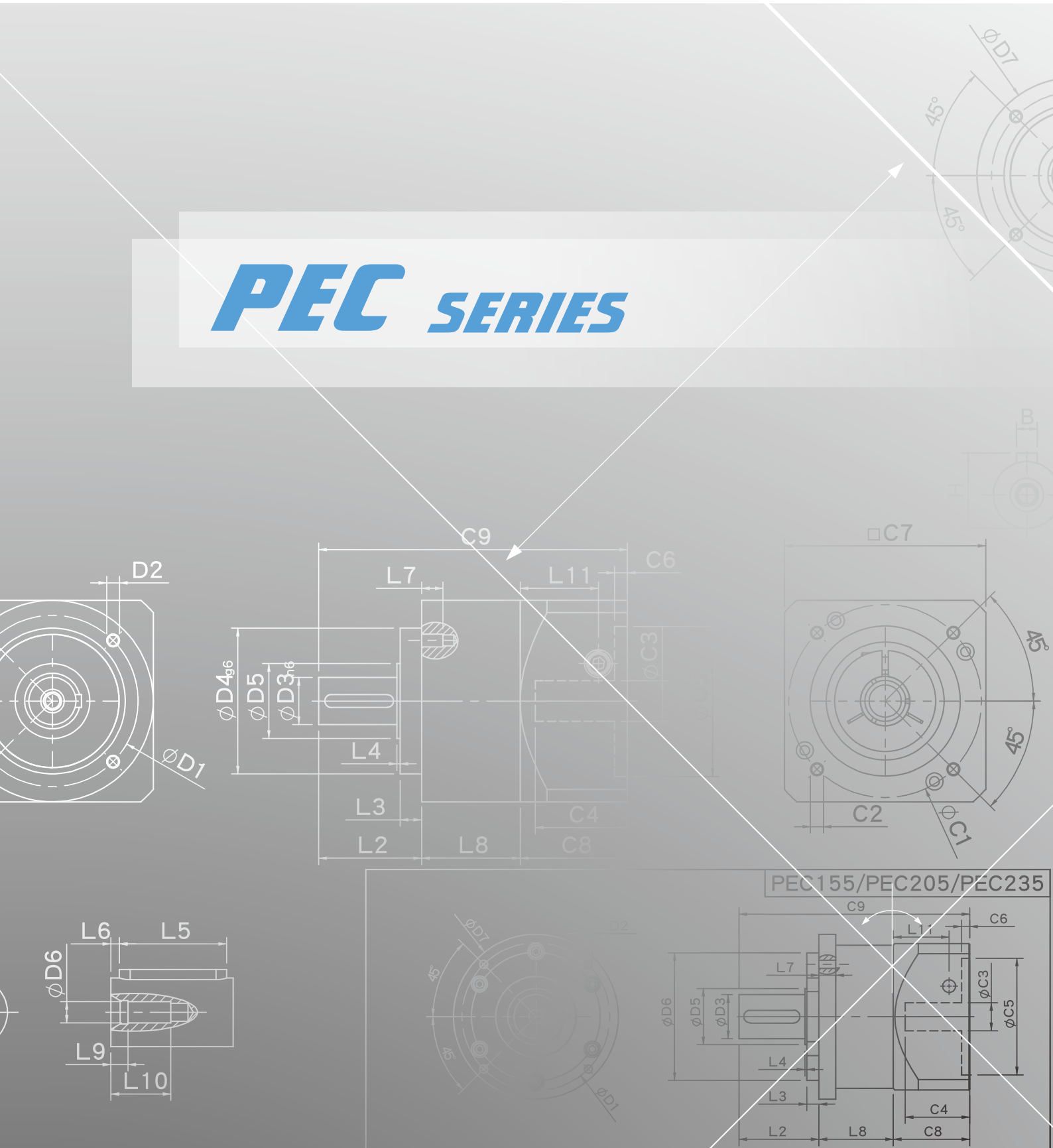
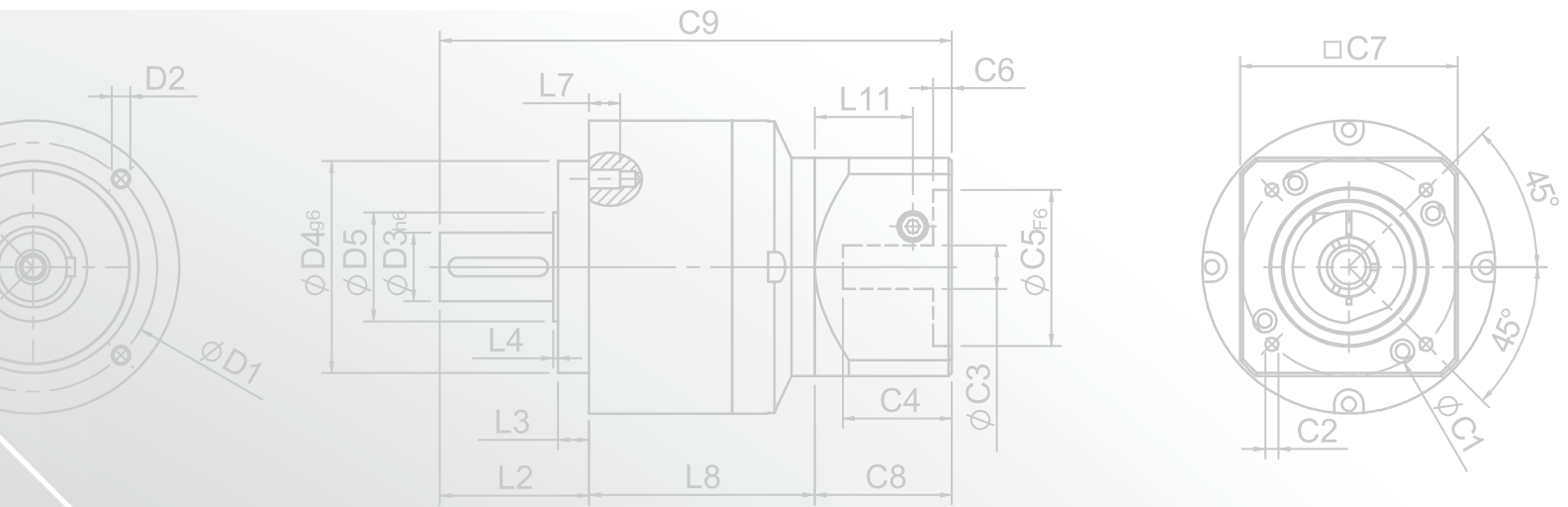
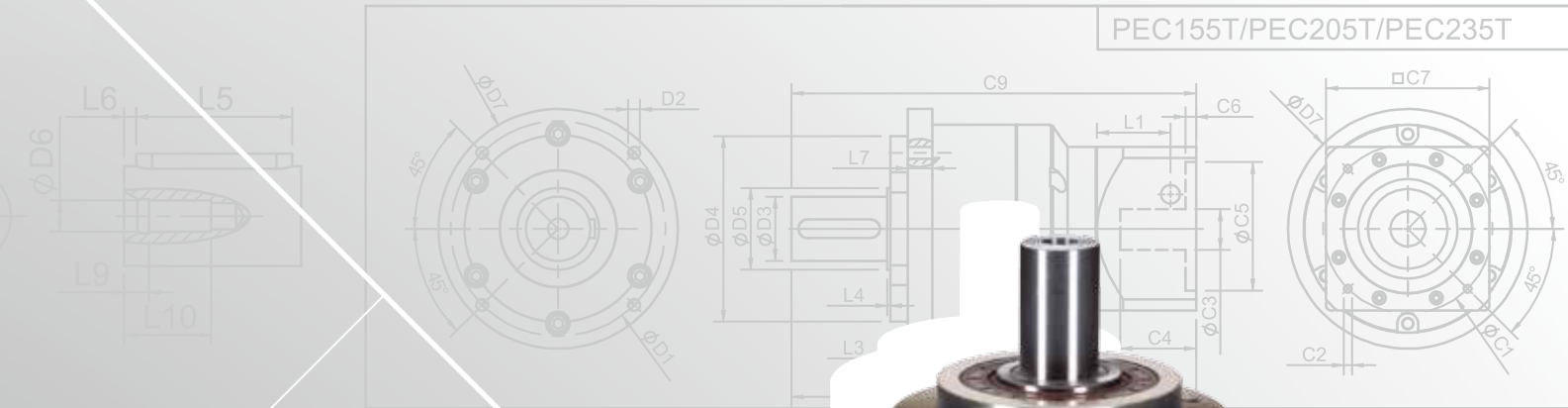


# PEC SERIES

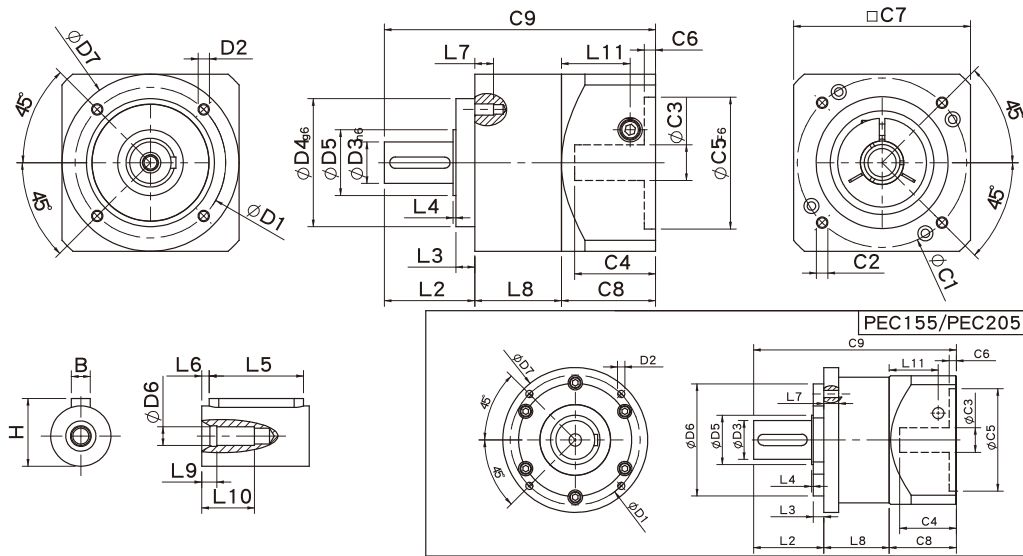




PEC155T/PEC205T/PEC235T



## PEC Single Stage Dimensions



## Specifications

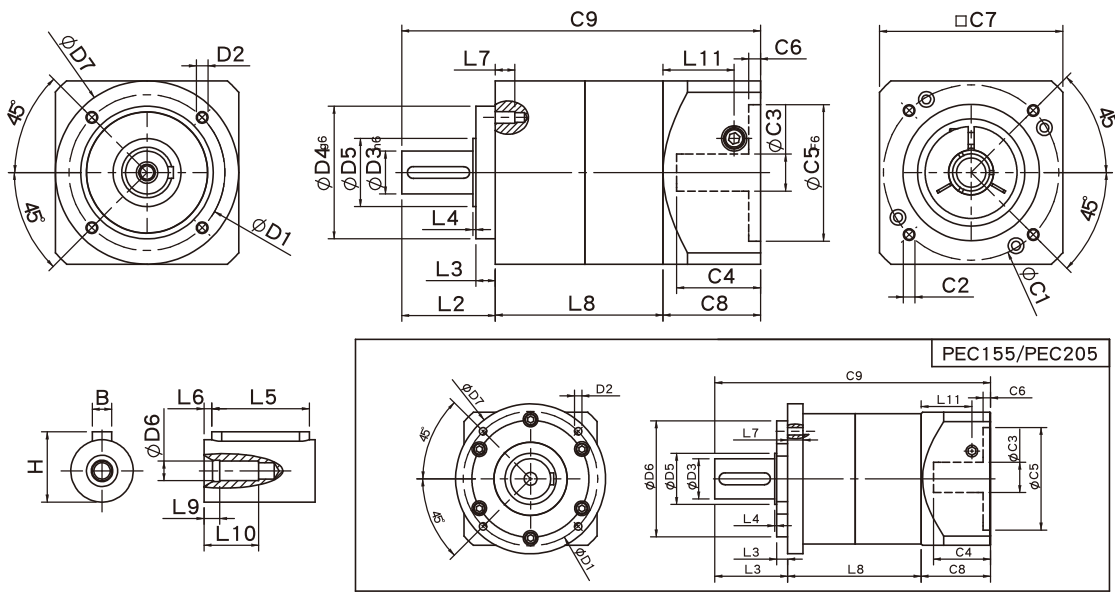
Unit:mm

Dimensions	PEC50	PEC70	PEC90	PEC120	PEC155	PEC205
D1	44	62	80	108	140	184
D2	M4x0.7P	M5x0.8P	M6x1.0P	M8x1.25P	M10x1.5P	M12x1.75P
D3 <sub>h6</sub>	13	16	22	32	40	55
D4 <sub>g6</sub>	35	52	68	90	120	160
D5	15	25	35	45	50	70
D6	M4x0.7P	M5x0.8P	M8x1.25P	M12x1.75P	M16x2.0P	M20x2.5P
D7	50	70	94	120	155	205
L2	24.5	35	48	60	93	99.5
L3	4	5	10	6	8	15
L4	1.5	1.5	1.5	3	6	2.5
L5	15	25	32	40	60	70
L6	2	2	3	5	5	6
L7	8	10	10	15	18	21
L8	30	38	46	61	79	92.5
L9	4	4	4.5	6	6	8
L10	14	16.5	20.5	30	38	48
L11	24.4	31.5	36.5	42	63	69.5
C1 <sup>2</sup>	46	70	90	115	145	200
C2 <sup>2</sup>	M4x0.7P	M5x0.8P	M6x1.0P	M8x1.25P	M8x1.25P	M12x1.75P
C3 <sup>2</sup>	≤8	≤14	≤19/≤24	≤24/≤28	≤35	≤50
C4 <sup>2</sup>	27	35	43	58	66	82
C5 <sup>2</sup> <sub>F6</sub>	30	50	70	95	110	114.3
C6 <sup>2</sup>	4	5	5	8	6	13
C7 <sup>2</sup>	50	70	94	120	140	182
C8 <sup>2</sup>	34	44	50	63	80	95
C9 <sup>2</sup>	88.5	117	144	184	252	287
B	5	5	6	10	12	16
H	15	18	24.5	35	43	59

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

★ Specification subject to change without notice.

## PEC Double Stage Dimensions-1



## Specifications

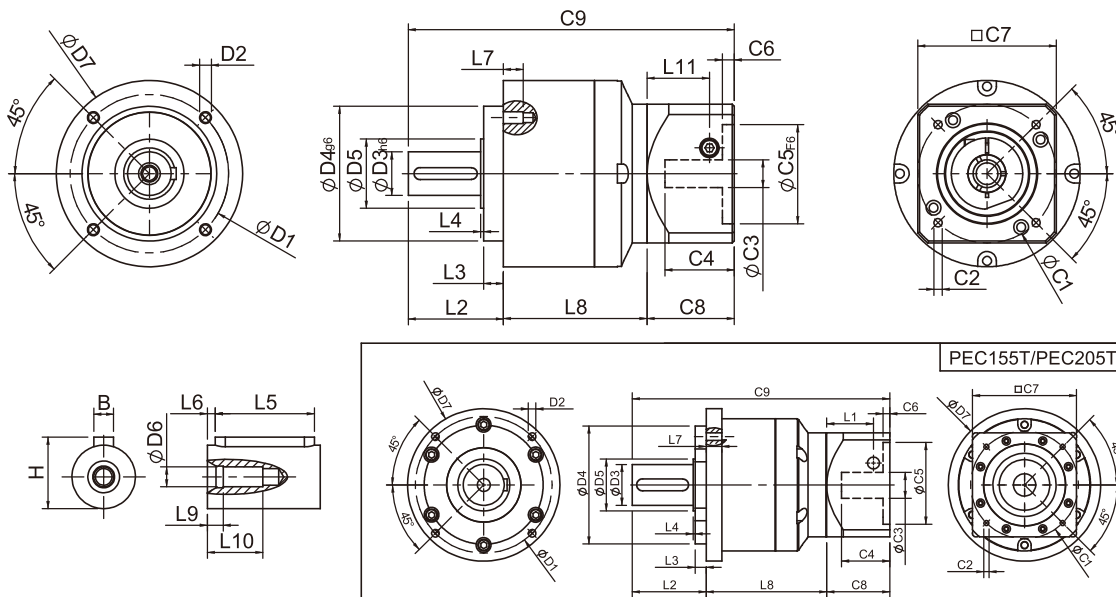
Unit:mm

Dimensions	PEC50	PEC70	PEC90	PEC120	PEC155	PEC205
D1	44	62	80	108	140	184
D2	M4x0.7P	M5x0.8P	M6x1.0P	M8x1.25P	M10x1.5P	M12x1.75P
D3 <sub>h6</sub>	13	16	22	32	40	55
D4 <sub>g6</sub>	35	52	68	90	120	160
D5	15	25	35	45	50	70
D6	M4x0.7P	M5x0.8P	M8x1.25P	M12x1.75P	M16x2.0P	M20x2.5P
D7	50	70	94	120	155	205
L2	24.5	35	48	60	93	99.5
L3	4	5	10	6	8	15
L4	1.5	1.5	1.5	3	6	2.5
L5	15	25	32	40	60	70
L6	2	2	3	5	5	6
L7	8	10	10	15	18	21
L8	56	66	86	109	140	182.5
L9	4	4	4.5	6	6	8
L10	14	16.5	20.5	30	38	48
L11	24.4	31.5	36.5	42	63	69.5
C1 <sup>2</sup>	46	70	90	115	145	200
C2 <sup>2</sup>	M4x0.7P	M5x0.8P	M6x1.0P	M8x1.25P	M8x1.25P	M12x1.75P
C3 <sup>2</sup>	≤8	≤14	≤19/≤24	≤24/≤28	≤35	≤50
C4 <sup>2</sup>	27	35	43	58	66	82
C5 <sup>2</sup> <sub>F6</sub>	30	50	70	95	110	114.3
C6 <sup>2</sup>	4	5	5	8	6	13
C7 <sup>2</sup>	50	70	94	120	140	182
C8 <sup>2</sup>	34	44	50	63	80	95
C9 <sup>2</sup>	114.5	145	184	232	313	377
B	5	5	6	10	12	16
H	15	18	24.5	35	43	59

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

★ Specification subject to change without notice.

## PEC Double Stage Dimensions-2



## Specifications

Unit:mm

Dimensions	PEC70T	PEC90T	PEC120T	PEC155T	PEC205T
D1	62	80	108	140	184
D2	M5x0.8P	M6x1.0P	M8x1.25P	M10x1.5P	M12x1.75P
D3 <sub>h6</sub>	16	22	32	40	55
D4 <sub>g6</sub>	52	68	90	120	160
D5	25	35	45	50	70
D6	M5x0.8P	M8x1.25P	M12x1.75P	M16x2.0P	M20x2.5P
D7	70	94	120	155	205
L2	35	48	60	93	99.5
L3	5	10	6	8	15
L4	1.5	1.5	3	6	2.5
L5	25	32	40	60	70
L6	2	3	5	5	6
L7	10	10	15	18	21
L8	60.8	70.5	99.4	127	162
L9	4	4.5	6	6	8
L10	16.5	20.5	30	38	48
L11	29	35.5	40.5	42	63
C1 <sup>2</sup>	46	70	90	115	145
C2 <sup>2</sup>	M4x0.7P	M5x0.8P	M6x1.0P	M8x1.25P	M8x1.25P
C3 <sup>2</sup>	≤8	≤14	≤19/≤24	≤24/≤28	≤35
C4 <sup>2</sup>	28.5	41	47.75	58	66
C5 <sup>2</sup> <sub>F6</sub>	30	50	70	95	110
C6 <sup>2</sup>	5.5	8	6	8	6
C7 <sup>2</sup>	50	70	94	120	140
C8 <sup>2</sup>	40	50	55	63	80
C9 <sup>2</sup>	135.8	170.5	214.4	283	341.5
B	5	6	10	12	16
H	18	24.5	35	43	59

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

★ Specification subject to change without notice.

## PEC Specifications Table

Specifications		Stage	Ratio	PEC-50	PEC-70	PEC-90	PEC-120	PEC-155	PEC-205	
Nominal Output Torque	N • m	1	3	13.8	44.2	95.2	283	482	1151	
			4	11.9	35.9	74.6	249	490	1055	
			5	13.8	43.0	95.2	283	473	1151	
			7	11.9	36.0	85.6	219	400	1055	
			10	10.1	25.0	75.0	210	320	763	
		Stage	Ratio	PEC-50	PEC-70(T)	PEC-90(T)	PEC-120(T)	PEC-155(T)	PEC-205(T)	
		2	15	13.8	44.2	95.2	283	482	1151	
			20	11.9	35.9	74.6	249	490	1055	
			25	13.8	43.0	95.2	283	473	1151	
			30	13.8	43.0	95.2	283	473	1151	
			35	13.8	43.0	95.2	283	473	1151	
			40	13.8	43.0	95.2	283	473	1151	
			50	13.8	43.0	95.2	283	473	1151	
			70	11.9	36.0	85.6	219	400	1055	
100	10.1	25.0	75.0	210	320	763				
Emergency Stop Torque	N • m		3.0 times of Nominal Output Torque (* Max. Output Torque T2B =60% of Emergency Stop Torque)							
Nominal Input Speed	rpm	1,2	3-100	3000	3000	3000	2500	2000	2000	
Max. Input Speed	rpm	1,2	3-100	6000	6000	6000	5000	4000	4000	
Backlash	arcmin	1	3-10	≤ 12	≤ 9	≤ 9	≤ 7	≤ 7	≤ 7	
		2	12-100	≤ 15	≤ 12	≤ 12	≤ 9	≤ 9	≤ 9	
Torsional Rigidity	N • m /arcmin	1,2	3-100	1.0	2.8	7.5	15.5	30	57	
Max. Radial Load	N	1,2	3-100	350	960	1630	3380	6150	7260	
Max. Axial Load	N	1,2	3-100	320	900	1420	2930	5510	5550	
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	12-100	≥ 90%						
Weight	kg	1	3-10	0.7	1.4	3.0	7.3	15.6	26	
		2	12-100	0.9	2.2/1.7	5.0/3.4	11.5/8.5	20.7/17.2	36/31	
Mounting Position	-	1,2	3-100	Any direction						
Noise Level <sup>2</sup>	dBA/1m	1,2	3-100	≤ 65	≤ 67	≤ 70	≤ 70	≤ 75	≤ 75	
Protection Class	-	1,2	3-100	IP65						
Lubrication	-	1,2	3-100	Synthetic Lubricant						
Inertia(J1)										
Stage	Ratio	unit		PEC-50	PEC-70	PEC-90	PEC-120	PEC-155	PEC-205	
1	3	Kg • cm <sup>2</sup>		0.03	0.20	0.81	2.20	7.89	25.2	
	4			0.03	0.16	0.65	1.80	5.83	19.8	
	5			0.03	0.15	0.62	1.61	5.38	18.3	
	7			0.03	0.14	0.60	1.55	5.22	17.8	
	10			0.03	0.14	0.60	1.53	5.20	17.6	
Stage	Ratio			PEC-50	PEC-70(T)	PEC-90(T)	PEC-120(T)	PEC-155(T)	PEC-205(T)	
2	15/20/25			0.02	0.15(0.02)	0.62(0.15)	1.61(0.62)	5.38(1.61)	18.3(5.38)	
	30/35/40			0.02	0.14(0.02)	0.60(0.14)	1.55(0.60)	5.22(1.55)	17.8(5.22)	
	50/70/100			0.02	0.14(0.02)	0.60(0.14)	1.53(0.60)	5.20(1.53)	17.6(5.20)	

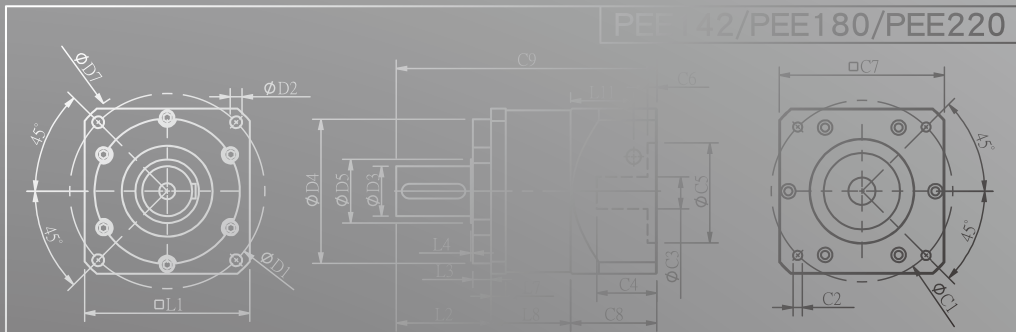
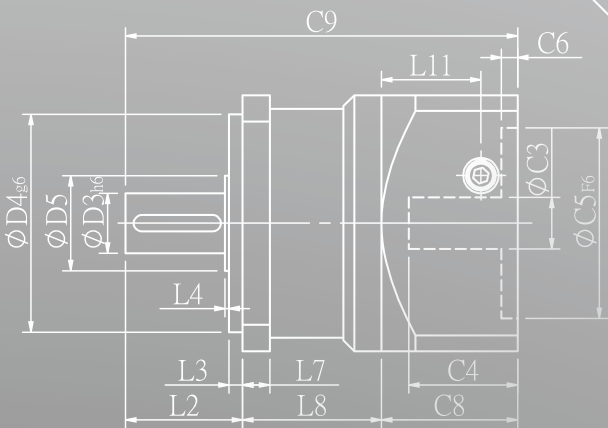
\* 1. Applied to the output shaft center @100rpm.

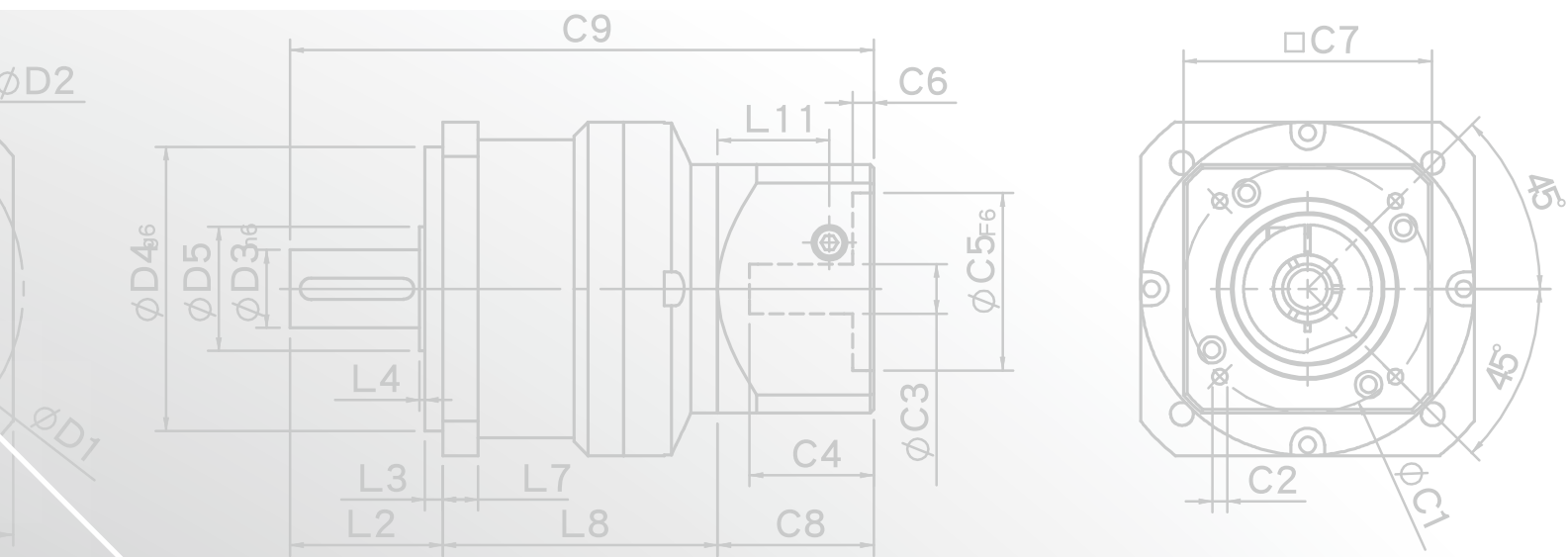
\* 2. Measured at 3000rpm with no load

※ 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.

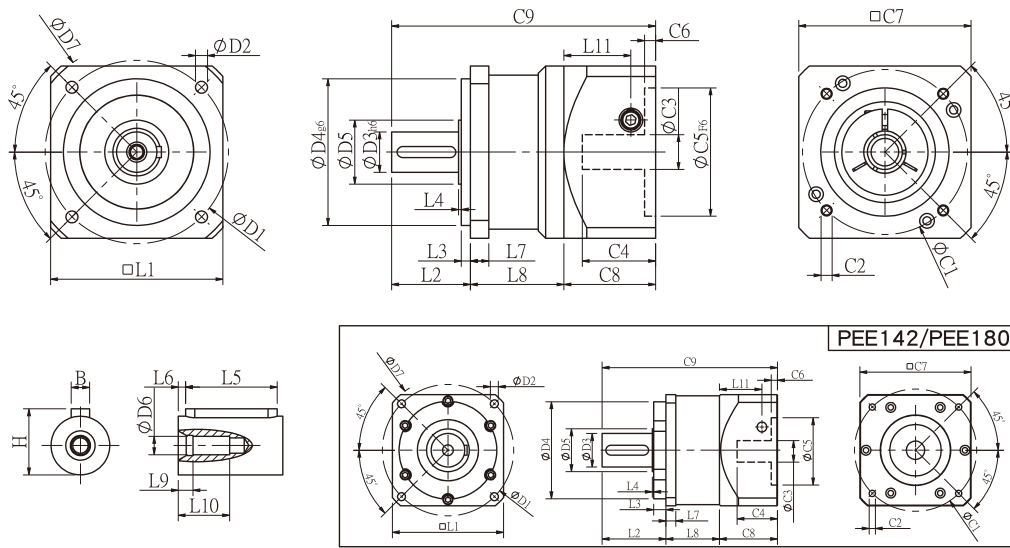
# PEE SERIES







## PEE Single Stage Dimensions



## Specifications

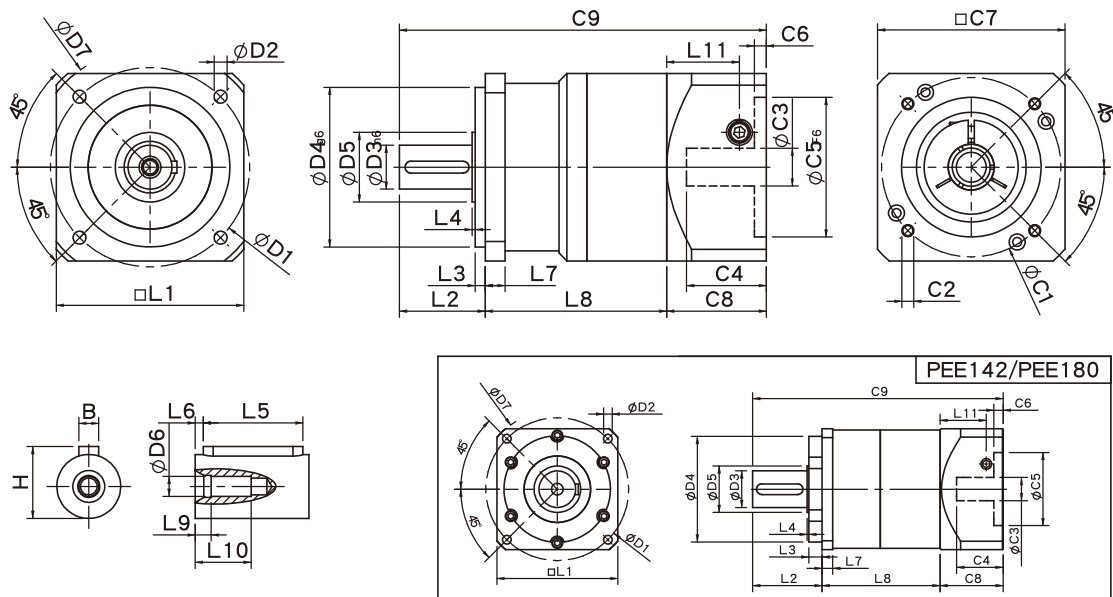
Unit:mm

Dimensions	PEE50	PEE70	PEE90	PEE120	PEE142	PEE180
D1	50	70	100	130	165	215
D2	3.4	6	6.5	8.5	10.5	13
D3 <sub>h6</sub>	13	16	22	32	40	55
D4 <sub>g6</sub>	35	50	80	110	130	160
D5	15	25	35	45	50	70
D6	M4x0.7P	M5x0.8P	M8x1.25P	M12x1.75P	M16x2.0P	M20x2.5P
D7	64	90	120	152	186	239
L1	50	70	94	120	142	182
L2	24.5	37	43	60	93	104.5
L3	4	7	5	6	8	20
L4	1.5	1.5	1.5	3	6	2.5
L5	15	25	32	40	60	70
L6	2	2	3	5	5	6
L7	5	6	10	12	18	16
L8	30	36	51	61	79	87.5
L9	4	4	4.5	6	6	8
L10	14	16.5	20.5	30	38	48
L11	24.4	31.5	36.5	42	63	69.5
C1 <sup>2</sup>	46	70	90	115	145	200
C2 <sup>2</sup>	M4x0.7P	M5x0.8P	M6x1.0P	M8x1.25P	M8x1.25P	M12x1.75P
C3 <sup>2</sup>	≤8	≤14	≤19/≤24	≤24/≤28	≤35	≤50
C4 <sup>2</sup>	27	35	43	58	66	82
C5 <sup>2</sup> <sub>F6</sub>	30	50	70	95	110	114.3
C6 <sup>2</sup>	4	5	5	8	6	13
C7 <sup>2</sup>	50	70	94	120	140	182
C8 <sup>2</sup>	34	44	50	63	80	95
C9 <sup>2</sup>	88.5	117	144	184	252	287
B	5	5	6	10	12	16
H	15	18	24.5	35	43	59

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

★ Specification subject to change without notice.

## PEE Double Stage Dimensions-1



## Specifications

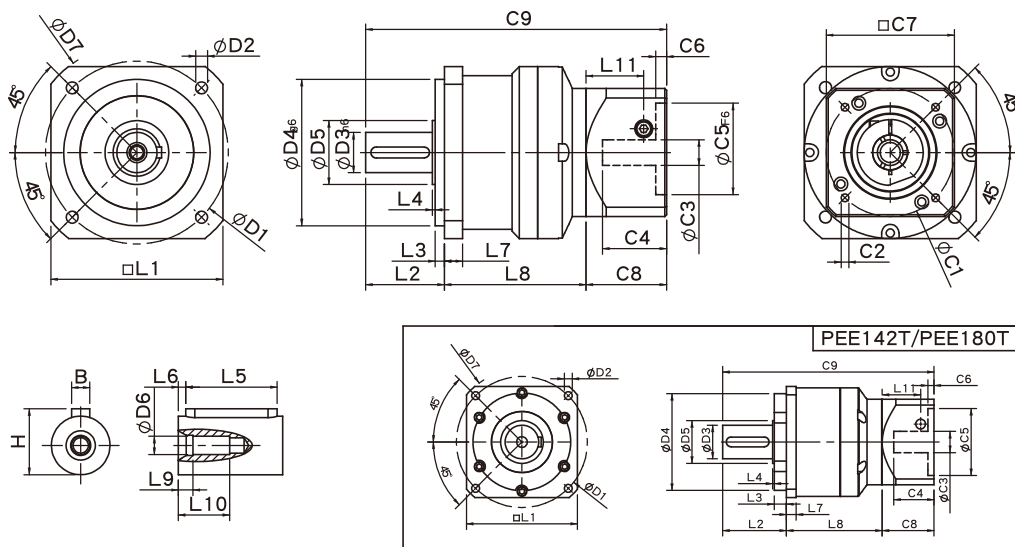
Unit:mm

Dimensions	PEE50	PEE70	PEE90	PEE120	PEE142	PEE180
D1	50	70	100	130	165	215
D2	3.4	6	6.5	8.5	10.5	13
D3 <sub>h6</sub>	13	16	22	32	40	55
D4 <sub>g6</sub>	35	50	80	110	130	160
D5	15	25	35	45	50	70
D6	M4x0.7P	M5x0.8P	M8x1.25P	M12x1.75P	M16x2.0P	M20x2.5P
D7	64	90	120	152	186	239
L1	50	70	94	120	142	182
L2	24.5	37	43	60	93	104.5
L3	4	7	5	6	8	20
L4	1.5	1.5	1.5	3	6	2.5
L5	15	25	32	40	60	70
L6	2	2	3	5	5	6
L7	5	6	10	12	18	16
L8	56	64	91	109	140	177.5
L9	4	4	4.5	6	6	8
L10	14	16.5	20.5	30	38	48
L11	24.4	31.5	36.5	42	63	69.5
C1 <sup>2</sup>	46	70	90	115	145	200
C2 <sup>2</sup>	M4x0.7P	M5x0.8P	M6x1.0P	M8x1.25P	M8x1.25P	M12x1.75P
C3 <sup>2</sup>	≤8	≤14	≤19/≤24	≤24/≤28	≤35	≤50
C4 <sup>2</sup>	27	35	43	58	66	82
C5 <sup>2</sup> <sub>F6</sub>	30	50	70	95	110	114.3
C6 <sup>2</sup>	4	5	5	8	6	13
C7 <sup>2</sup>	50	70	94	120	140	182
C8 <sup>2</sup>	34	44	50	63	80	95
C9 <sup>2</sup>	114.5	145	184	232	313	377
B	5	5	6	10	12	16
H	15	18	24.5	35	43	59

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

★ Specification subject to change without notice.

## PEE Double Stage Dimensions-2



## Specifications

Unit:mm

Dimensions	PEE70T	PEE90T	PEE120T	PEE142T	PEE180T
D1	70	100	130	165	215
D2	6	6.5	8.5	10.5	13
D3 <sub>h6</sub>	16	22	32	40	55
D4 <sub>g6</sub>	50	80	110	130	160
D5	25	35	45	50	70
D6	M5x0.8P	M8x1.25P	M12x1.75P	M16x2.0P	M20x2.5P
D7	90	120	152	186	239
L1	70	94	120	142	182
L2	37	43	60	93	104.5
L3	7	5	6	8	20
L4	1.5	1.5	3	6	2.5
L5	25	32	40	60	70
L6	2	3	5	5	6
L7	6	10	12	18	16
L8	58.8	77.5	99.4	127	157
L9	4	4.5	6	6	8
L10	16.5	20.5	30	38	48
L11	29	35.5	40.5	42	63
C1 <sup>2</sup>	46	70	90	115	145
C2 <sup>2</sup>	M4x0.7P	M5x0.8P	M6x1.0P	M8x1.25P	M8x1.25P
C3 <sup>2</sup>	≤8	≤14	≤19/≤24	≤24/≤28	≤35
C4 <sup>2</sup>	28.5	41	47.75	58	66
C5 <sup>2</sup> <sub>F6</sub>	30	50	70	95	110
C6 <sup>2</sup>	5.5	8	6	8	6
C7 <sup>2</sup>	50	70	94	120	140
C8 <sup>2</sup>	40	50	55	63	80
C9 <sup>2</sup>	135.8	170.5	214.4	283	341.5
B	5	6	10	12	16
H	18	24.5	35	43	59

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

★ Specification subject to change without notice.

## PEE Specifications Table

Specifications		Stage	Ratio	PEE-50	PEE-70	PEE-90	PEE-120	PEE-142	PEE-180	
Nominal Output Torque	N • m	1	3	13.8	44.2	95.2	283	482	1151	
			4	11.9	35.9	74.6	249	490	1055	
			5	13.8	43.0	95.2	283	473	1151	
			7	11.9	36.0	85.6	219	400	1055	
			10	10.1	25.0	75.0	210	320	763	
		Stage	Ratio	PEE-50	PEE-70(T)	PEE-90(T)	PEE-120(T)	PEE-142(T)	PEE-180(T)	
		2	15	13.8	44.2	95.2	283	482	1151	
			20	11.9	35.9	74.6	249	490	1055	
			25	13.8	43.0	95.2	283	473	1151	
			30	13.8	43.0	95.2	283	473	1151	
			35	13.8	43.0	95.2	283	473	1151	
			40	13.8	43.0	95.2	283	473	1151	
			50	13.8	43.0	95.2	283	473	1151	
			70	11.9	36.0	85.6	219	400	1055	
100	10.1	25.0	75.0	210	320	763				
Emergency Stop Torque	N • m		3.0 times of Nominal Output Torque (* Max. Output Torque T2B =60% of Emergency Stop Torque)							
Nominal Input Speed	rpm	1,2	3-100	3000	3000	3000	2500	2000	2000	
Max. Input Speed	rpm	1,2	3-100	6000	6000	6000	5000	4000	4000	
Backlash	arcmin	1	3-10	≤ 12	≤ 9	≤ 9	≤ 7	≤ 7	≤ 7	
		2	12-100	≤ 15	≤ 12	≤ 12	≤ 9	≤ 9	≤ 9	
Torsional Rigidity	N • m /arcmin	1,2	3-100	1.0	2.8	7.5	15.5	30	57	
Max. Radial Load	N	1,2	3-100	350	960	1630	3380	6150	7260	
Max. Axial Load	N	1,2	3-100	320	900	1420	2930	5510	5550	
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	12-100	≥ 90%						
Weight	kg	1	3-10	0.7	1.4	3.0	7.3	15.6	26	
		2	12-100	0.9	2.2/1.7	5.0/3.4	11.5/8.5	20.7/17.2	36/31	
Mounting Position	-	1,2	3-100	Any direction						
Noise Level <sup>2</sup>	dBA/1m	1,2	3-100	≤ 65	≤ 67	≤ 70	≤ 70	≤ 75	≤ 75	
Protection Class	-	1,2	3-100	IP65						
Lubrication	-	1,2	3-100	Synthetic Lubricant						
Inertia(J1)										
Stage	Ratio	unit		PEE-50	PEE-70	PEE-90	PEE-120	PEE-142	PEE-180	
1	3	Kg • cm <sup>2</sup>		0.03	0.20	0.81	2.20	7.89	25.2	
	4			0.03	0.16	0.65	1.80	5.83	19.8	
	5			0.03	0.15	0.62	1.61	5.38	18.3	
	7			0.03	0.14	0.60	1.55	5.22	17.8	
	10			0.03	0.14	0.60	1.53	5.20	17.6	
Stage	Ratio			PEE-50	PEE-70(T)	PEE-90(T)	PEE-120(T)	PEE-142(T)	PEE-180(T)	
2	15/20/25			0.02	0.15(0.02)	0.62(0.15)	1.61(0.62)	5.38(1.61)	18.3(5.38)	
	30/35/40			0.02	0.14(0.02)	0.60(0.14)	1.55(0.60)	5.22(1.55)	17.8(5.22)	
	50/70/100			0.02	0.14(0.02)	0.60(0.14)	1.53(0.60)	5.20(1.53)	17.6(5.20)	

\* 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.