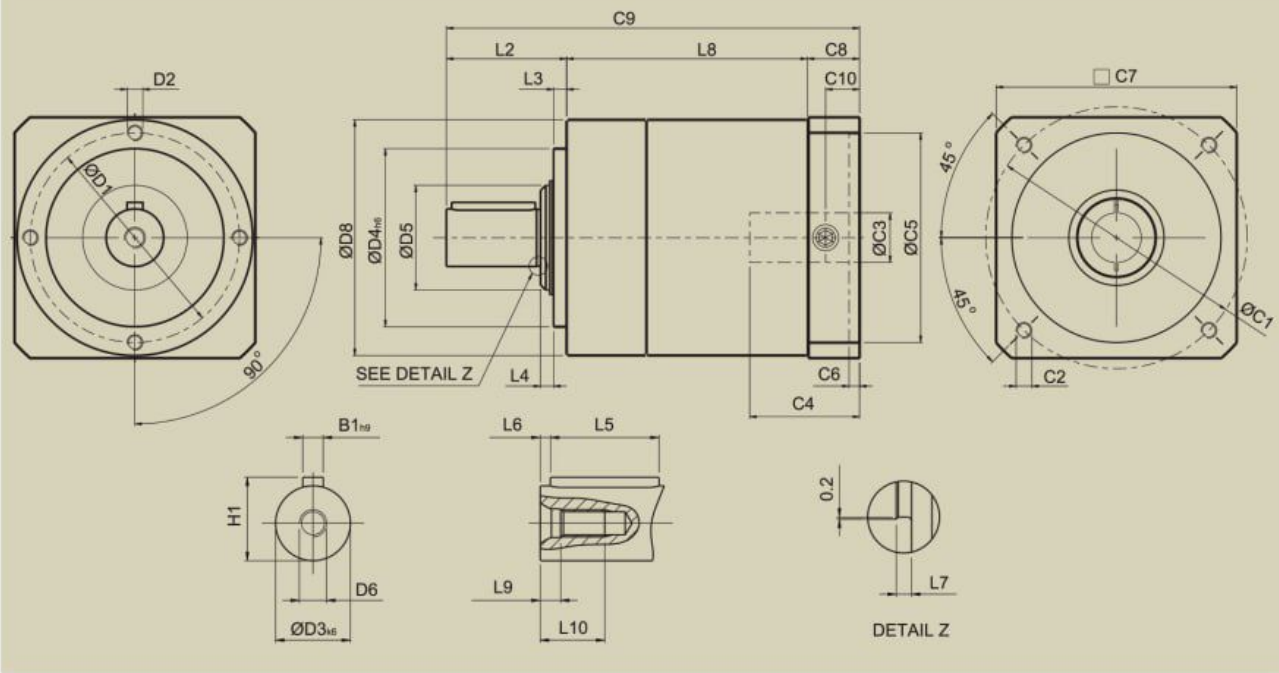


Gearbox Performance

Model No.	Stages	Ratio ¹	PE050	PE070	PE090	PE120	PE155	
Nominal Output Torque T_{2N}	1	3	14	39	104	215	423	
		4	12	31	85	176	364	
		5	14	39	104	215	423	
		7	12	33	91	195	358	
		10	9	26	65	150	293	
	2	15	14	39	104	215	423	
		16	12	31	85	176	364	
		20	12	31	85	176	364	
		25	14	39	104	215	423	
		30	14	39	104	215	423	
		35	12	33	91	195	358	
		40	12	31	85	176	364	
		50	14	39	104	215	423	
		70	12	33	91	195	358	
	100	9	26	65	150	293		
	Emergency Stop Torque T_{2NOT} ²	Nm	1,2	3~100	3 times of Nominal Output Torque			
Nominal Input Speed n_{1N}	rpm	1,2	3~100	4,500	4,000	3,600	3,000	2,500
Max. Input Speed n_{1B}	rpm	1,2	3~100	8,000	6,000	6,000	4,800	3,600
Backlash*	arcmin	1	3~10	≤ 8	≤ 8	≤ 6	≤ 6	≤ 6
		2	15~100	≤ 10	≤ 10	≤ 8	≤ 8	≤ 8
Torsional Rigidity	Nm/arcmin	1,2	3~100	2	4.4	13.5	35.6	64
Max. Radial Load F_{2rB} ³	N	1,2	3~100	820	1,910	2,060	4,160	6,450
Max. Axial Load F_{2aB} ³	N	1,2	3~100	410	955	1,030	2,080	3,225
Service Life	hr	1,2	3~100	20,000*				
Efficiency η	%	1	3~10	≥ 97%				
		2	15~100	≥ 94%				
Weight	kg	1	3~10	0.8	1.9	3.8	8.9	18.0
		2	15~100	1.1	2.7	5.2	12.2	24.6
Operating Temp	°C	1,2	3~100	-10°C~90°C				
Lubrication				Synthetic lubrication grease				
Degree of Gearbox Protection		1,2	3~100	IP64				
Mounting Position		1,2	3~100	all directions				
Noise Level ($n_1=3000\text{rpm}$, No Load)	dB(A)	1,2	3~100	≤ 68	≤ 70	≤ 72	≤ 74	≤ 75

Gearbox Performance

Model No.	Stages	Ratio ¹	PE050	PE070	PE090	PE120	PE155	
Nominal Output Torque T_{2N}	1	3	14	39	104	215	423	
		4	12	31	85	176	364	
		5	14	39	104	215	423	
		7	12	33	91	195	358	
		10	9	26	65	150	293	
	2	15	14	39	104	215	423	
		16	12	31	85	176	364	
		20	12	31	85	176	364	
		25	14	39	104	215	423	
		30	14	39	104	215	423	
		35	12	33	91	195	358	
		40	12	31	85	176	364	
		50	14	39	104	215	423	
		70	12	33	91	195	358	
	100	9	26	65	150	293		
	Emergency Stop Torque T_{2NOT} ²	Nm	1,2	3~100	3 times of Nominal Output Torque			
Nominal Input Speed n_{1N}	rpm	1,2	3~100	4,500	4,000	3,600	3,000	2,500
Max. Input Speed n_{1B}	rpm	1,2	3~100	8,000	6,000	6,000	4,800	3,600
Backlash*	arcmin	1	3~10	≤ 8	≤ 8	≤ 6	≤ 6	≤ 6
		2	15~100	≤ 10	≤ 10	≤ 8	≤ 8	≤ 8
Torsional Rigidity	Nm/arcmin	1,2	3~100	2	4.4	13.5	35.6	64
Max. Radial Load F_{2rB} ³	N	1,2	3~100	820	1,910	2,060	4,160	6,450
Max. Axial Load F_{2aB} ³	N	1,2	3~100	410	955	1,030	2,080	3,225
Service Life	hr	1,2	3~100	20,000*				
Efficiency η	%	1	3~10	≥ 97%				
		2	15~100	≥ 94%				
Weight	kg	1	3~10	0.8	1.9	3.8	8.9	18.0
		2	15~100	1.1	2.7	5.2	12.2	24.6
Operating Temp	°C	1,2	3~100	-10°C~90°C				
Lubrication				Synthetic lubrication grease				
Degree of Gearbox Protection		1,2	3~100	IP64				
Mounting Position		1,2	3~100	all directions				
Noise Level ($n_1=3000\text{rpm}$, No Load)	dB(A)	1,2	3~100	≤ 68	≤ 70	≤ 72	≤ 74	≤ 75



[unit: mm]

Dimension	PE050	PE070	PE090	PE120	PE155
D1	44	62	80	108	140
D2	M4X9	M5X10	M6X12	M8X15	M10X18
D3 _{k6}	12	16	22	32	40
D4 _{h6}	35	52	68	90	120
D5	17	25	40	50	65
D6	M4X0.7P	M5X0.8P	M8X1.25P	M12X1.75P	M16X2P
D8	50	70	90	120	155
L2	24.5	36	46	70	97
L3	4	5	5	6	8
L4	2.5	3	5	6	7
L5	14	25	32	50	70
L6	2	2	2	4	6
L7	1	1	1.5	2	2
L8	1-stage	55	77	92	127
	2-stage	79.5	110	131.5	180
L9	4.5	4.8	7.2	10	12
L10	10	12.5	19	28	36
C1 ⁴	46	70	100	130	165
C2 ⁴	M4X0.7P	M5X0.8P	M6X1P	M8X1.25P	M10X1.5P
C3 ⁴	≤12	≤16	≤24	≤32	≤38
C4 ⁴	30	34	40	50	60
C5 ⁴	30	50	80	110	130
C6 ⁴	3.5	8	4	5	6
C7 ⁴	52	72	92	122	157
C8 ⁴	21.5	21.5	20	24	31
C9 ⁴	1-stage	101	134.5	158	221
	2-stage	125.5	167.5	197.5	274
C10 ⁴	14.5	15.5	13	16	21
B1 _{h9}	4	5	6	10	12
H1	13.5	18	24.5	35	43

4. C1-C10 are motor specific dimensions (metric std shown). Refer to Apexdyna.com and Design Tool to view your specific motor mounting system.