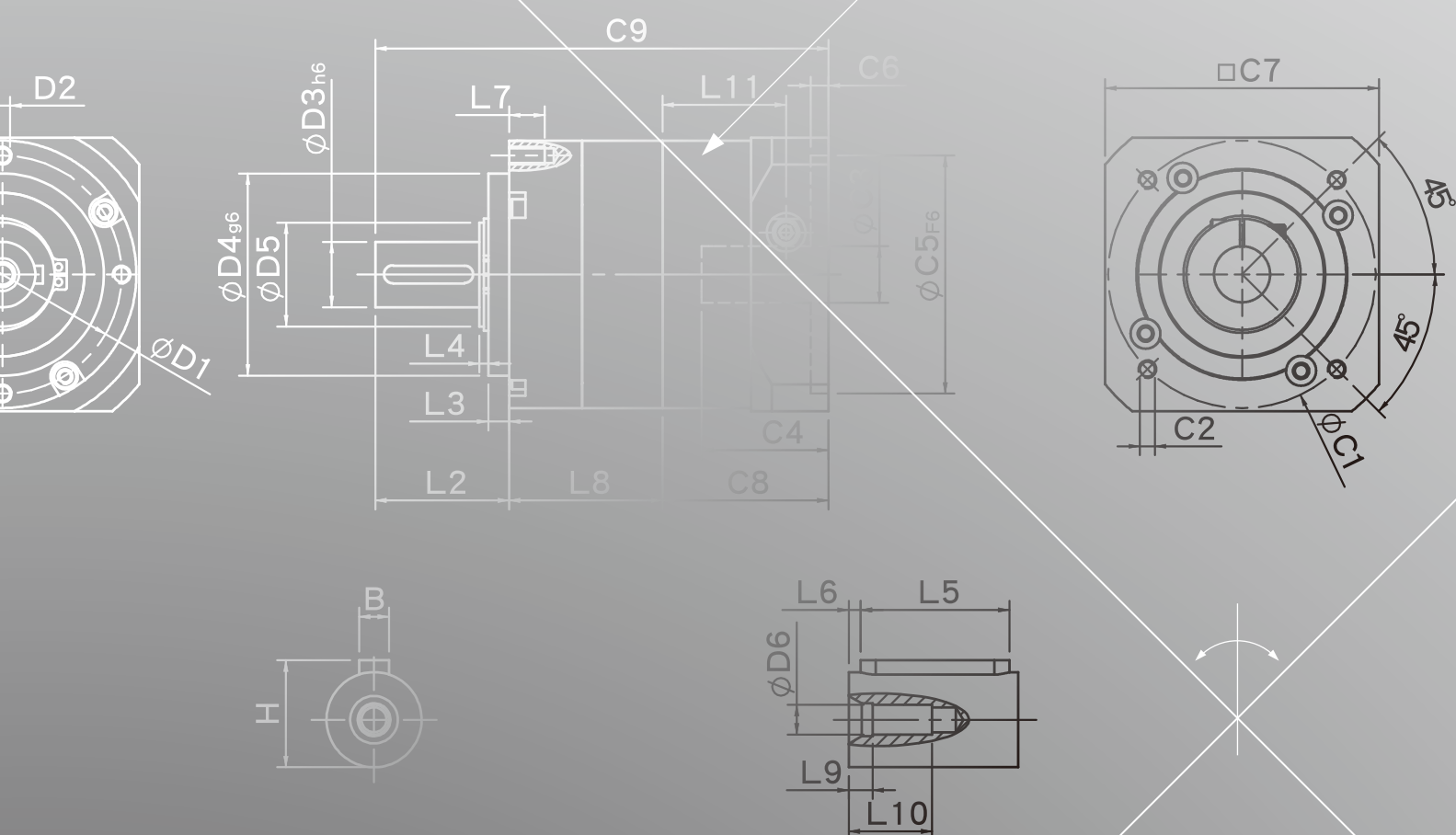
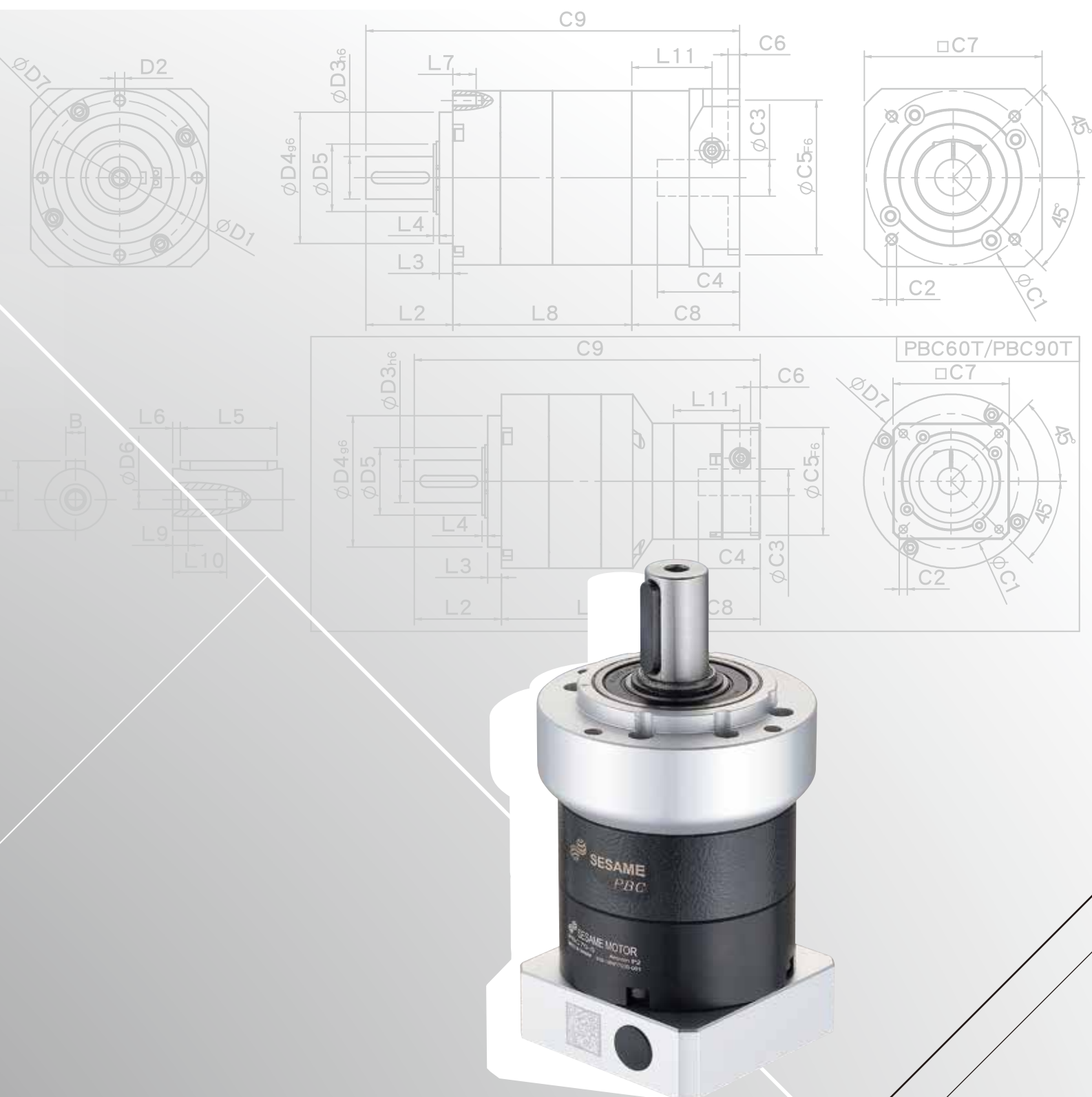
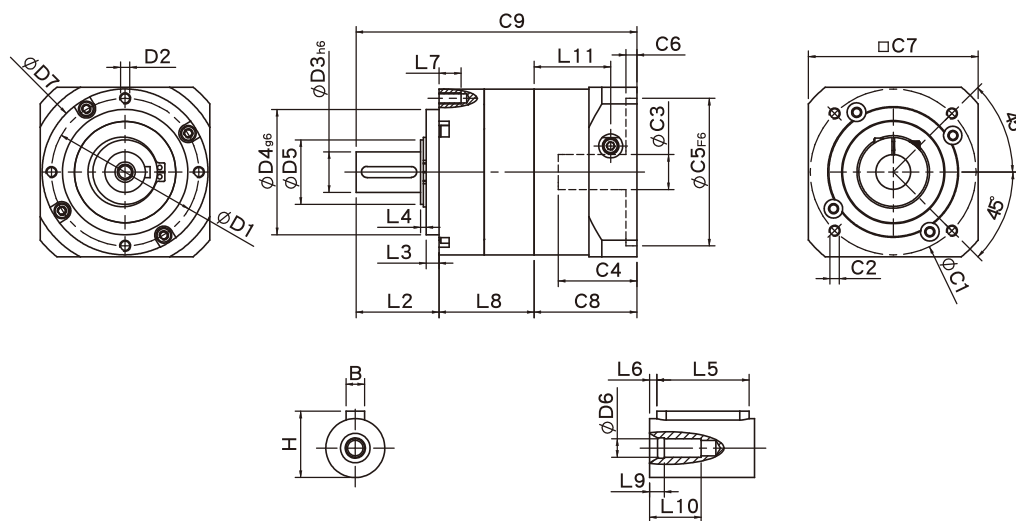


# ***PBC SERIES***





## PBC Single Stage Dimensions



## Specifications

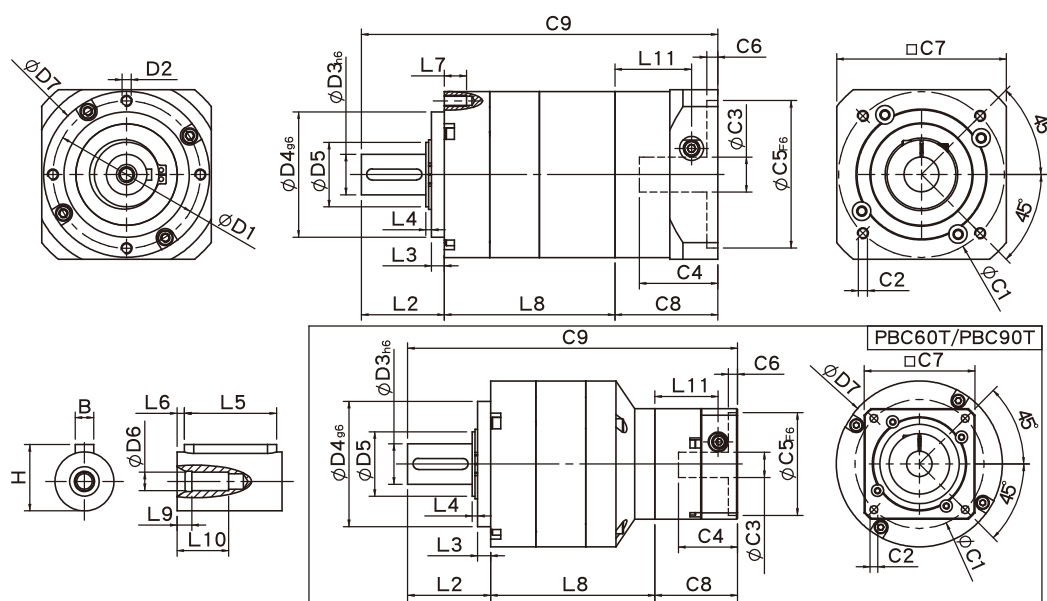
Unit:mm

Dimensions	PBC50	PBC70	PBC90
D1	44	62	80
D2	M4x0.7P	M5x0.8P	M6x1.0P
D3 <sub>h6</sub>	12	16	22
D4 <sub>g6</sub>	35	52	68
D5	15	20	35
D6	M4x0.7P	M5x0.8P	M8x1.25P
D7	50	70	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	41.55
C1 <sup>2</sup>	46	70	90
C2 <sup>2</sup>	M4x0.7P	M5x0.8P	M6x1.0P
C3 <sup>2</sup>	≤8/≤11	≤14/≤19	≤19/≤24/≤28
C4 <sup>2</sup>	26.5	33.5	41
C5 <sup>2</sup> <sub>F6</sub>	30	50	70
C6 <sup>2</sup>	4	4	6
C7 <sup>2</sup>	42.6	60	92
C8 <sup>2</sup>	36.4	44.8	55.8
C9 <sup>2</sup>	94.8	130.4	155.2
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.

## PBC Double Stage Dimensions



## Specifications

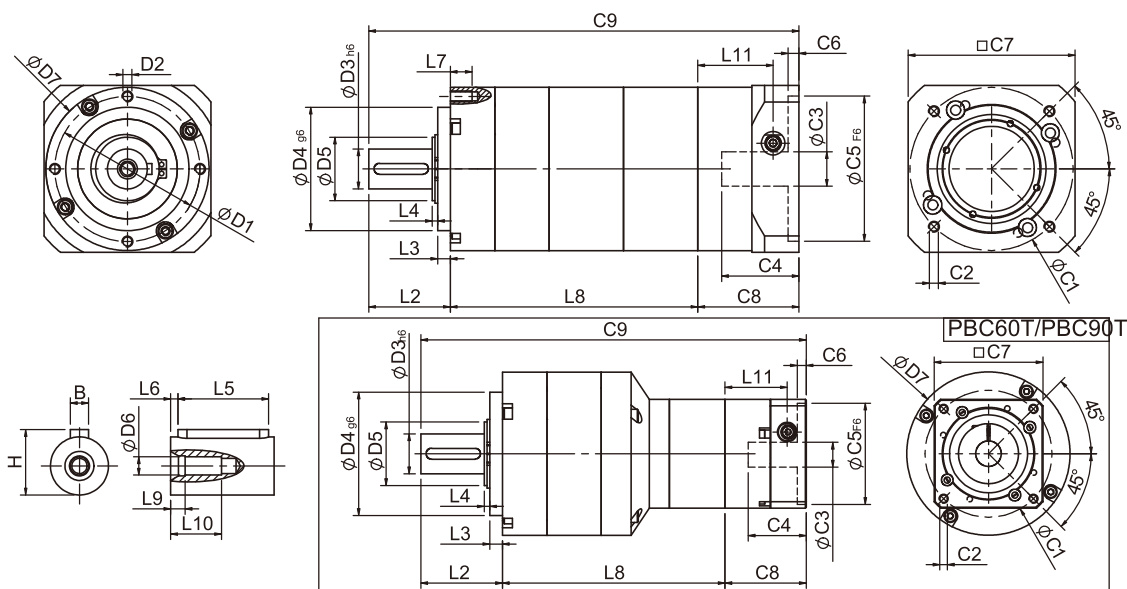
Unit:mm

Dimensions	PBC50	PBC70	PBC70T	PBC90	PBC90T
D1	44	62		80	
D2	M4x0.7P	M5x0.8P		M6x1.0P	
D3 <sub>h6</sub>	12	16		22	
D4 <sub>g6</sub>	35	52		68	
D5	15	20		35	
D6	M4x0.7P	M5x0.8P		M8x1.25P	
D7	50	70		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 <sup>2</sup>	46	70	46	90	70
C2 <sup>2</sup>	M4x0.7P	M5x0.8P	M4x0.7P	M6x1.0P	M5x0.8P
C3 <sup>2</sup>	≤8/≤11	≤14/≤19	≤8/≤11	≤19/≤24/≤28	≤14/≤19
C4 <sup>2</sup>	26.5	33.5	26.5	41	33.5
C5 <sup>2</sup> <sub>F6</sub>	30	50	30	70	50
C6 <sup>2</sup>	4	4	4	6	4
C7 <sup>2</sup>	42.6	60	42.6	92	60
C8 <sup>2</sup>	36.4	44.8	36.4	55.8	44.8
C9 <sup>2</sup>	119.7	161.1	148.3	196.2	181.8
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.

## PBC Triple Stage Dimensions



## Specifications

Unit:mm

Dimensions	PBC50	PBC70T	PBC90T
D1	44	62	80
D2	M4x0.7P	M5x0.8P	M6x1.0P
D3 <sub>h6</sub>	12	16	22
D4 <sub>g6</sub>	35	52	68
D5	15	20	35
D6	M4x0.7P	M5x0.8P	M8x1.25P
D7	50	70	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 <sup>2</sup>	46	46	70
C2 <sup>2</sup>	M4x0.7P	M4x0.7P	M5x0.8P
C3 <sup>2</sup>	≤8/≤11	≤8/≤11	≤14/≤19
C4 <sup>2</sup>	26.5	26.5	33.5
C5 <sup>2</sup> <sub>F6</sub>	30	30	50
C6 <sup>2</sup>	4	4	4
C7 <sup>2</sup>	42.6	42.6	60
C8 <sup>2</sup>	36.4	36.4	44.8
C9 <sup>2</sup>	144.6	173.2	212.5
B	4	5	6
H	13.5	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.

## PBC Specifications Table

Specifications		Stage	Ratio	PBC-50	PBC-70	PBC-90
Nominal Output Torque $T_{2N}$	$N \cdot m$	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	PBC-50	PBC-70(T)	PBC-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	PBC-50	PBC-70(T)	PBC-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 $T_{2NOT}$	$N \cdot m$		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	$\leq 9$	$\leq 8$	$\leq 7$
		2	15-81	$\leq 12$	$\leq 10$	$\leq 9$
		3	125-729	$\leq 15$	$\leq 12$	$\leq 12$
Torsional Rigidity	$N \cdot m$ / arcmin	1,2,3	3-729	0.8	2.0	7.0
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	$\geq 95\%$		
		2	15-81	$\geq 90\%$		
		3	125-729	$\geq 85\%$		
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 <sup>2</sup>	dBA/1m	1,2,3	3-729	$\leq 62$	$\leq 64$	$\leq 67$
Protection Class	-	1,2,3	3-729	IP64		
Lubrication	-	1,2,3	3-729	Synthetic Lubricant		

\* 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.