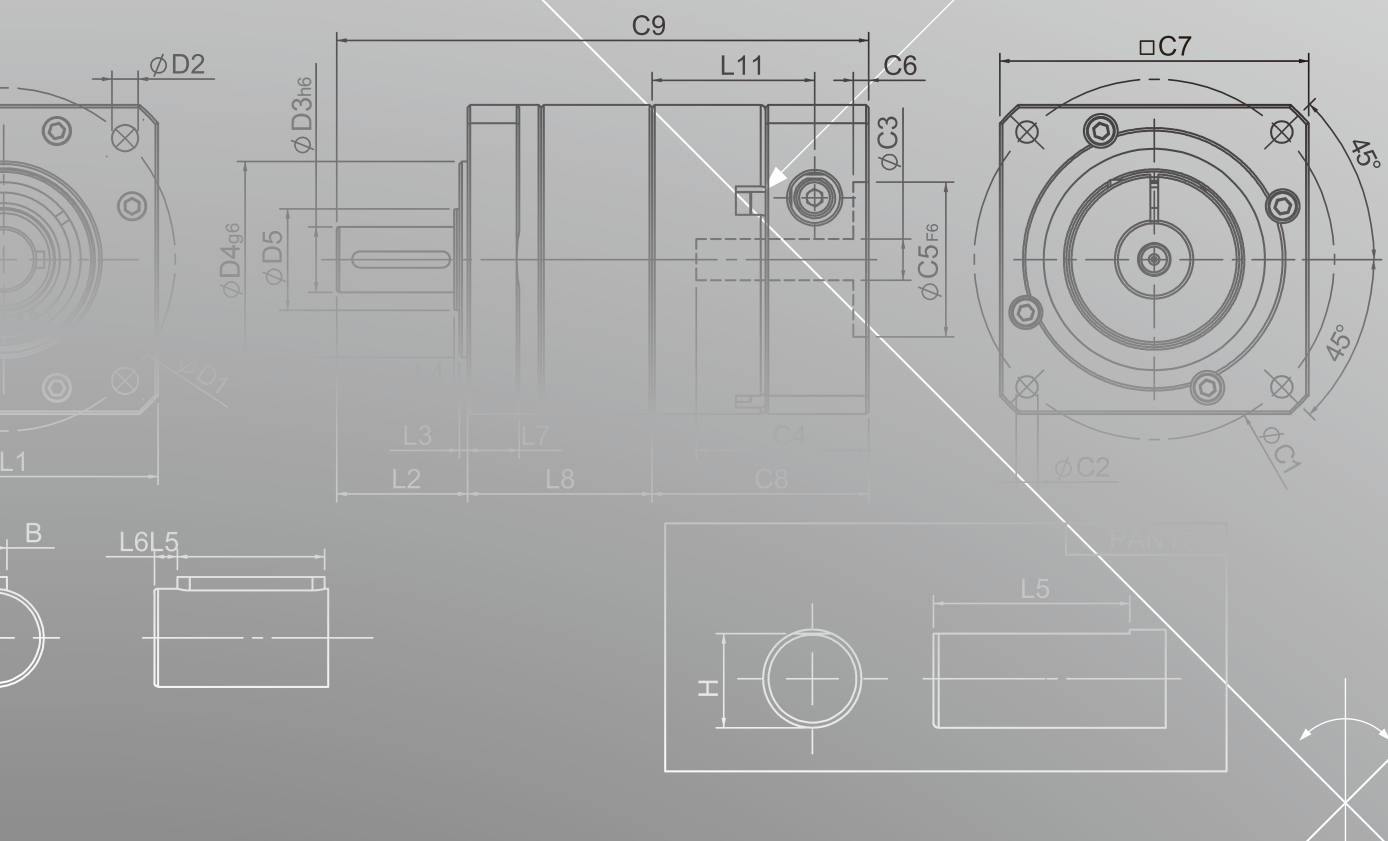
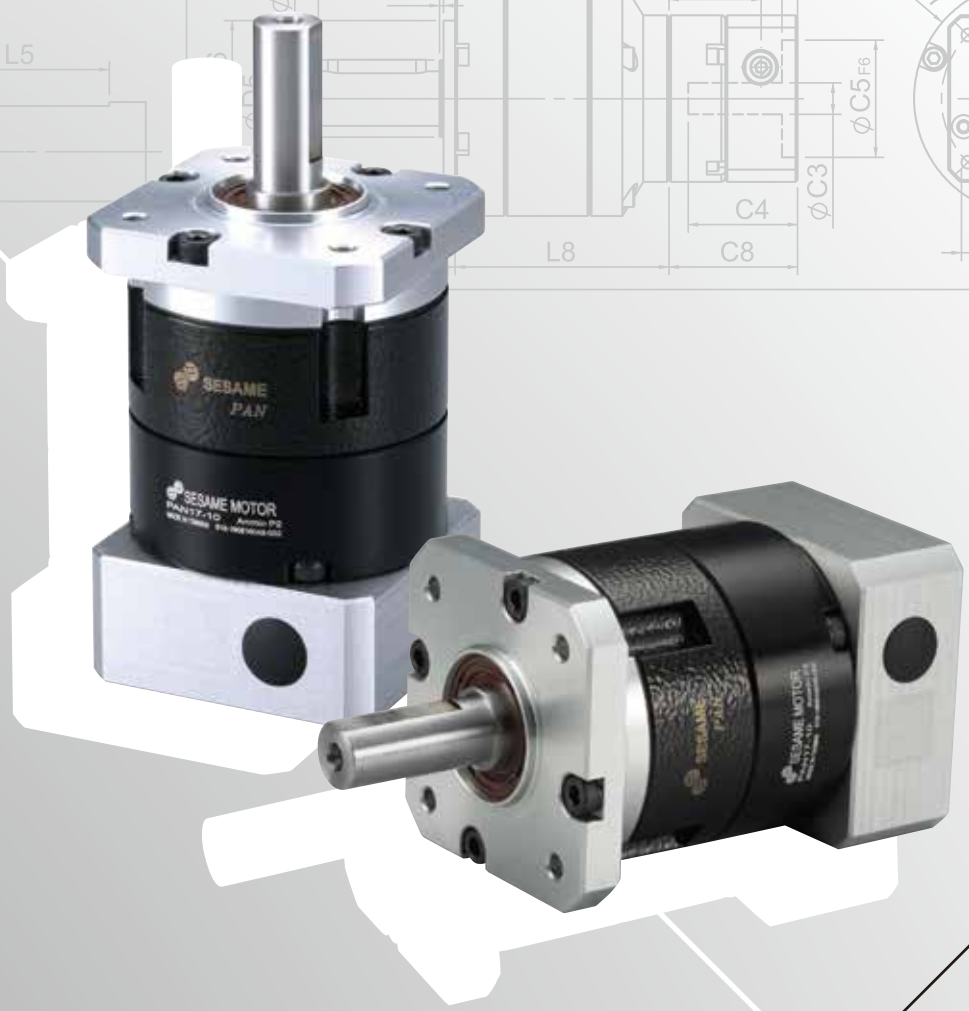
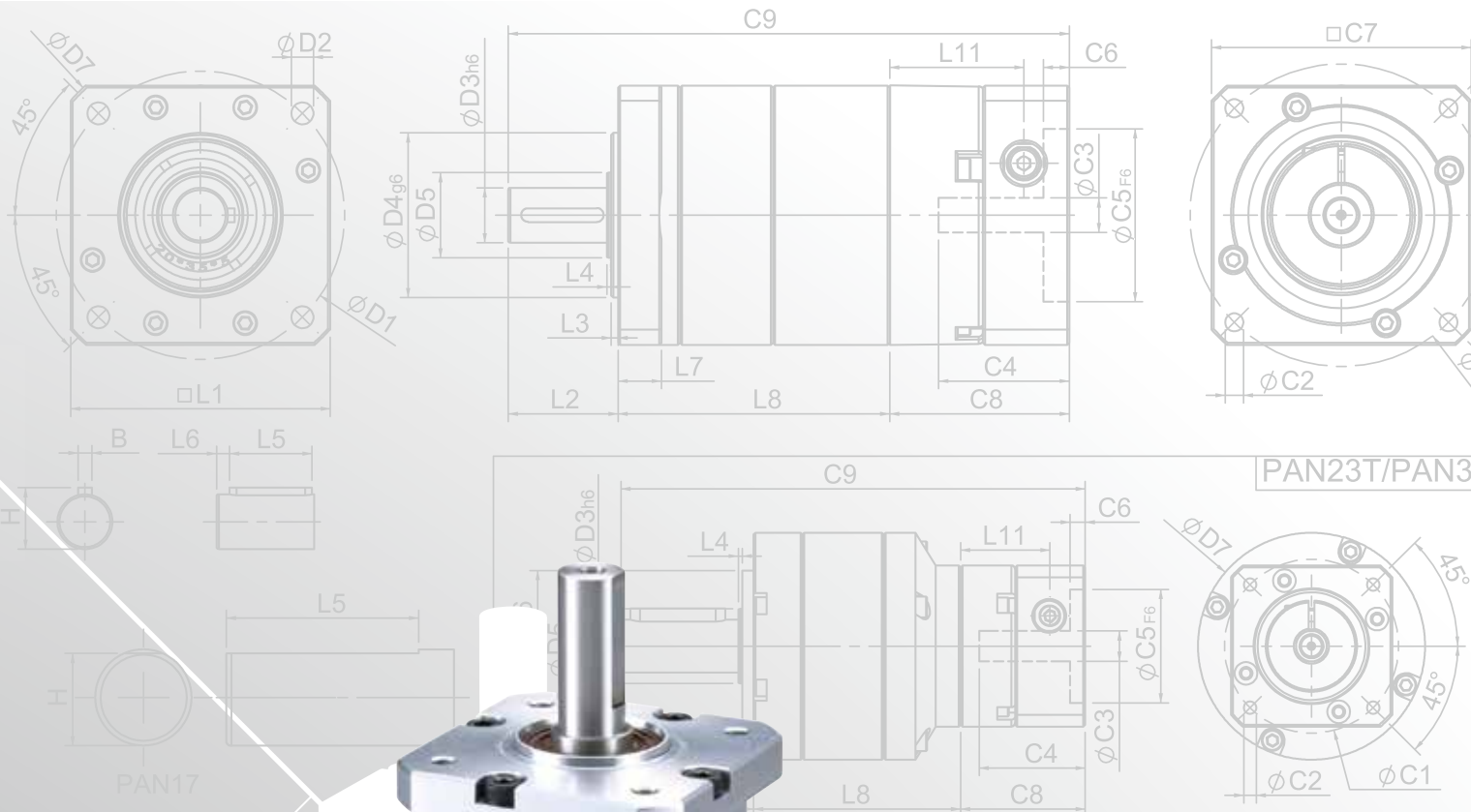
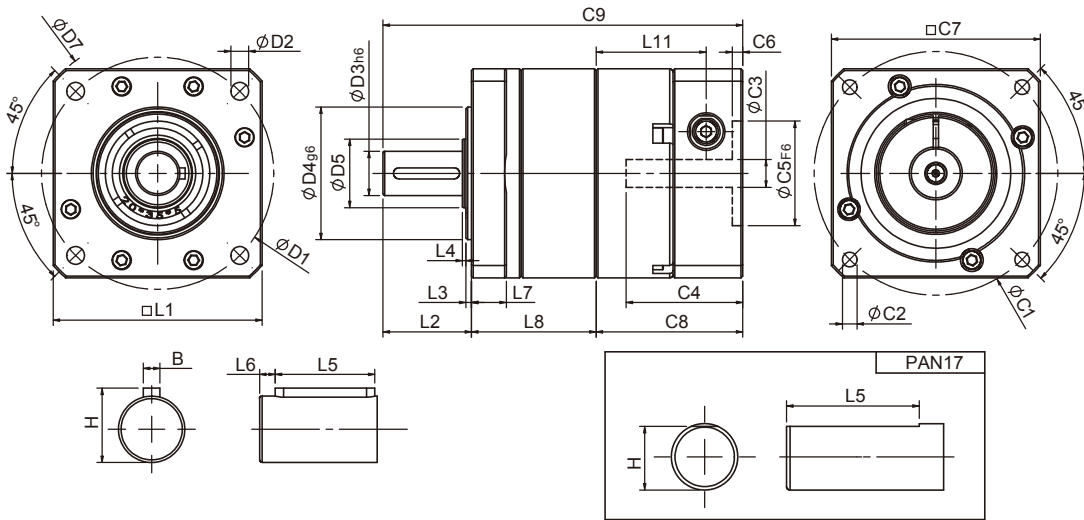


PAN SERIES





PAN Single Stage Dimensions



Specifications

Unit:mm

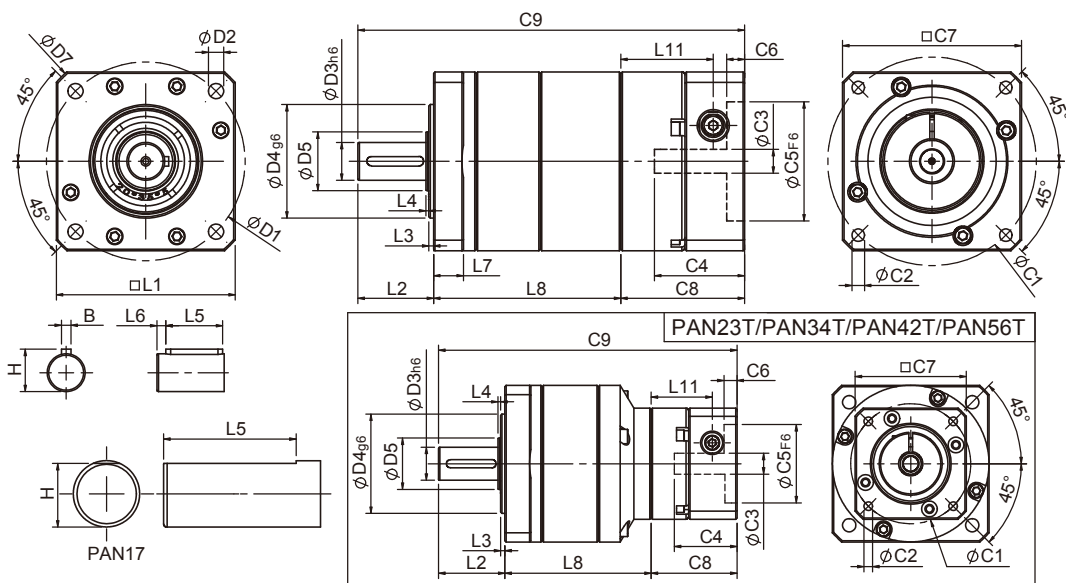
Dimensions	PAN17	PAN23	PAN34	PAN42	PAN56
D1	43.8	66.67	98.425	125.73	177.8
D2	3.25	5.1	5.6	7.1	10.2
D3 _{h6}	9.525	12.7	19.05	25	25
D4 _{g6}	21.97	38.1	73.025	55.55	114.3
D5	12	20	35	32	-
D7	56	80	118	148	195
L1	42.6(44)	60	90	115	145
L2	25.4	25.4	31.75	42	41
L3	1.6	1.6	1.7	2.4	4
L4	1	1	1	2	-
L5	19.05	19.05	25.4	32	32
L6	-	3	3	4	4
L7	6.5	10	12	19	20
L8	28.8	35.8	43.5	67.4	68.4
L11	26.9	31.6	37.3	51.8	51.8
C1 ²	46	70	90	145	145
C2 ²	M4x0.7P	M5x0.8P	M6x1.0P	M8x1.25P	M8x1.25P
C3 ²	≤8/≤11	≤14/≤19	≤19/≤24/≤28	≤24/≤32/≤38	≤24/≤32/≤38
C4 ²	26.5	33.5	41	51.5	51.5
C5 ² _{F6}	30	50	70	110	110
C6 ²	4	4	6	6	6
C7 ²	42.6	60	90	130	130
C8 ²	36.4	42.1	51.5	68	68
C9 ²	90.6	103.3	126.75	177.4	177.4
B	-	3.175	4.763	8	8
H	9.14	14.1	21.1	28	28

★ 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.

PAN Double Stage Dimensions



Specifications

Unit:mm

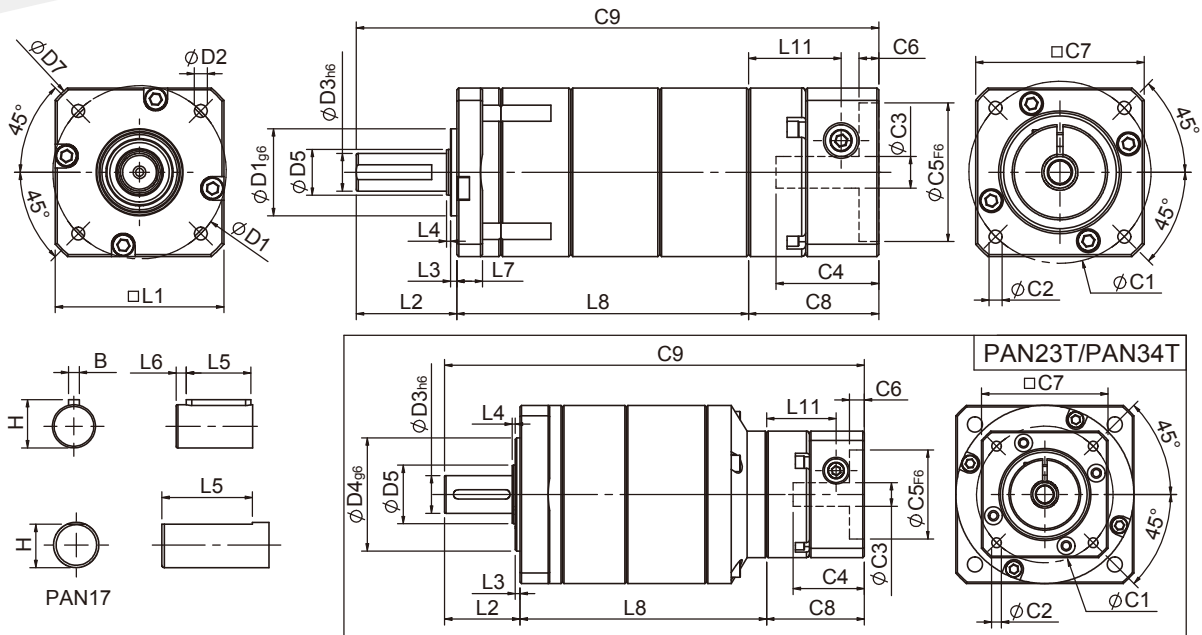
Dimensions	PAN17	PAN23	PAN23T	PAN34	PAN34T	PAN42T	PAN56T
D1	43.8	66.67		98.425		125.73	177.8
D2	3.25	5.1		5.6		7.1	10.2
D3 _{h6}	9.525	12.7		19.05		25	25
D4 _{g6}	21.97	38.1		73.025		55.55	114.3
D5	12	20		35		32	-
D7	56	80		118		148	195
L1	42.6(44)	60		90		115	145
L2	25.4	25.4		31.75		42	41
L3	1.6	1.6		1.7		2.4	4
L4	1	1		1		2	-
L5	19.05	19.05		25.4		32	32
L6	-	3		3		4	4
L7	6.5	10		12		19	20
L8	51.25	62.8	56.1	77.3	72.8	105.5	106.5
L11	23.4	31	23.4	37.3	31	37.3	37.3
C1 ²	46	70	46	90	70	90	90
C2 ²	M4x0.7P	M5x0.8P	M4x0.7P	M6x1.0P	M5x0.8P	M6x1.0P	M6x1.0P
C3 ²	≤8/≤11	≤14/≤19	≤8/≤11	≤19/≤24/≤28	≤14/≤19	≤19/≤24/≤28	≤19/≤24/≤28
C4 ²	26.5	33.5	26.5	41	33.5	41	41
C5 ² _{F6}	30	50	30	70	50	70	70
C6 ²	4	4	4	6	4	6	6
C7 ²	42.6	60	42.6	90	60	90	90
C8 ²	32.9	41.5	32.9	51.5	41.5	51.5	51.5
C9 ²	109.55	129.7	114.4	160.55	146.05	199	199
B	-	3.175		4.763		8	8
H	9.14	14.1		21.1		28	28

★ L1=44 when gear ratio is 100.

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

★ Specification subject to change without notice.

PAN Triple Stage Dimensions



Specifications

Unit:mm

Dimensions	PAN17	PAN23T	PAN34T
D1	43.8	66.67	98.425
D2	3.25	5.1	5.6
D3 _{h6}	9.525	12.7	19.05
D4 _{g6}	21.97	38.1	73.025
D5	12	20	35
D7	56	80	118
L1	42.6(44)	60	90
L2	25.4	25.4	31.75
L3	1.6	1.6	1.7
L4	1	1	1
L5	19.05	19.05	25.4
L6	-	3	3
L7	6.5	10	12
L8	73.7	83.1	106.6
L11	23.4	23.4	31
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	32.9	32.9	41.5
C9 ²	132	141.4	179.85
B	-	3.175	4.763
H	9.14	14.1	21.1

★ L1=44 when gear ratio is 1000.

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

★ Specification subject to change without notice.

PAN Specifications Table

Specifications	Stage	Ratio	PAN-17	PAN-23	PAN-34	PAN-42	PAN-56	
Nominal Output Torque T_{2N}	1	3	9	28	85	200	200	
		4	10	32	80	215	215	
		5	11	35	95	215	215	
		7	10	28	85	200	200	
		9	8	23	75	195	195	
	10	8	21	65	180	180		
	2	Stage	Ratio	PAN-17	PAN-23 / PAN-23T	PAN-34 / PAN-34T	PAN-42T	PAN-56T
		15	11	35/24	95/68	168	168	
		20	11	35/31	95/95	215	215	
		25	11	35/30	95/95	215	215	
		35	11	35/28	95/95	215	215	
		45	11	35/27	95/92	215	215	
		50	(Ratio 49) : 10	35/27	95/82	205	205	
		70	(Ratio 63) : 10	28/28	85/85	200	200	
		90	(Ratio 81) : 8	23/23	75/75	195	195	
		100	8	21/21	65/65	180	180	
	3	Stage	Ratio	PAN-17	PAN-23T	PAN-34T	PAN-42T	PAN-56T
		125	11	35	95	215	215	
		175	11	35	95	215	215	
		225	11	35	95	215	215	
		245	11	35	95	215	215	
		315	11	35	95	215	215	
		405	11	35	95	215	215	
		567	10	28	85	200	200	
	729	8	23	75	195	195		
	1000	8	21	65	180	180		
	Emergency Stop Torque T_{2NOT}	N • m	(2.5 times of Nominal Output Torque) (* Max. Output Torque T_{2B} =60% of Emergency Stop Torque)					
Nominal Input Speed n_{1N}	rpm	1,2,3	3-1000	4000	4000	3000	2500	2500
Max. Input Speed n_{1max}	rpm	1,2,3	3-1000	6000	6000	6000	5000	5000
Standard Backlash P2	arcmin	1	3-10	≤ 9	≤ 8	≤ 7	≤ 6	≤ 6
		2	15-100	≤ 12	≤ 10	≤ 9	≤ 8	≤ 8
		3	125~1000	≤ 15	≤ 12	≤ 12	≤ 12	≤ 12
Torsional Rigidity	N • m /arcmin	1,2,3	3-1000	1.2	3.5	8.5	17	17
Max. Radial Load F_{2rB}^{-1}	N	1,2,3	3-1000	580	960	2160	4760	4760
Max. Axial Load F_{2aB}^{-1}	N	1,2,3	3-1000	410	430	1100	2630	2630
Operating Temp.	°C	1,2,3	3-1000	-10°C ~ +90°C				
Service Life	hr	1,2,3	3-1000	20,000(10,000 Continuous operation)				
Efficiency	%	1	3-10	≥ 95%				
		2	15-100	≥ 90%				
		3	125~1000	≥ 85%				
Weight	kg	1	3-10	0.5	1.1	2.8	6.3	6.6
		2	15-100	0.7	1.5/1.3	4.2/3.1	7.9	8.2
		3	125~1000	0.8	1.7	4.5	9.3	9.6
Mounting Position	-	1,2,3	3-1000	Any direction				
Noise Level ²	dBA/1m	1,2,3	3-1000	60	63	66	67	67
Protection Class	-	1,2,3	3-1000	IP 65				
Lubrication	-	1,2,3	3-1000	Synthetic Lubricant				
Inertia (J1)								
Stage	Ratio	unit	PAN-17(ψ8)	PAN-23(ψ14)	PAN-34(ψ19)	PAN-42(ψ24)	PAN-56(ψ24)	
1	3	Kg • cm ²	0.04	0.23	0.77	2.30	2.30	
	4		0.03	0.21	0.67	1.92	1.92	
	5~10		0.03	0.21	0.61	1.71	1.71	
2	15		PAN-17(ψ8)	PAN-23(ψ14) / PAN-23T(ψ8)	PAN-34(ψ19) / PAN-34T(ψ14)	PAN-42T(ψ19)	PAN-56T(ψ19)	
	Other ratios		0.04	0.23(0.04)	0.77(0.23)	0.77	0.77	
			0.03	0.21(0.03)	0.61(0.21)	0.61	0.61	
3	All ratios		PAN-17(ψ8)	PAN-23T(ψ8)	PAN-34T(ψ14)	PAN-42T(ψ19)	PAN-56T(ψ19)	
			0.03	0.03	0.21	0.61	0.61	

* 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.
※ 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.