PGW

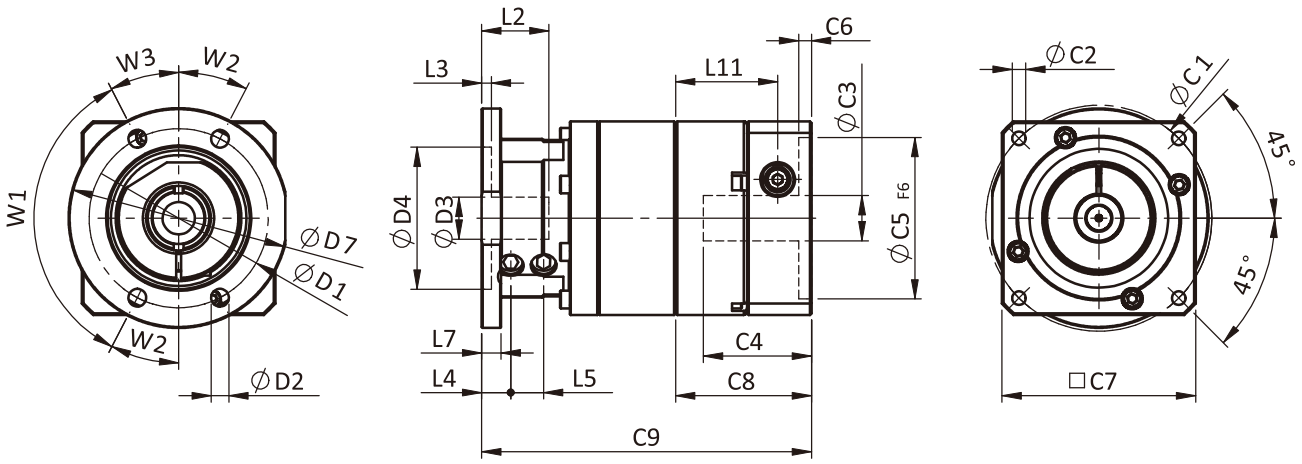
Sesame Motor PGW in-line planetary gearheads are designed to bolt-on linear actuator drive systems to shorten powertrain length. Dynamic balanced collar clamping mechanism to actuator and motor shaft ensuring interfaces concentrically and zero slip power transmission at high speed. High quality gears and components are utilized to create compact and rigid unit with low backlash and maintenance-free operation.

Frame Size (mm)	60, 90, 115
Ratio	3 : 1-1000:1
Nominal Input Speed (rpm)	2,500 - 4,000
Max Input Speed (rpm)	5,000 - 6,000
Backlash (arc-min)	1 Stage: 6 - 8 2 Stages: 8 - 10 3 Stages: 12
Noise Level (dBA / 1m)	63 - 67

Features

- ▶ In-line planetary gearhead with zero slip clamping mechanism.
- ▶ Hollow output shaft and flange are ready to mount to belt or ball screw modules.
- ▶ One-piece planet carrier/output shaft.
- ▶ Alloy steel precision gears.
- ▶ Ratios up to 1000:1.
- ▶ Lubricated for life and IP65 sealing.
- ▶ Low noise, low vibration, maintenance-free under normal operating conditions.

PGW Single Stage Dimensions



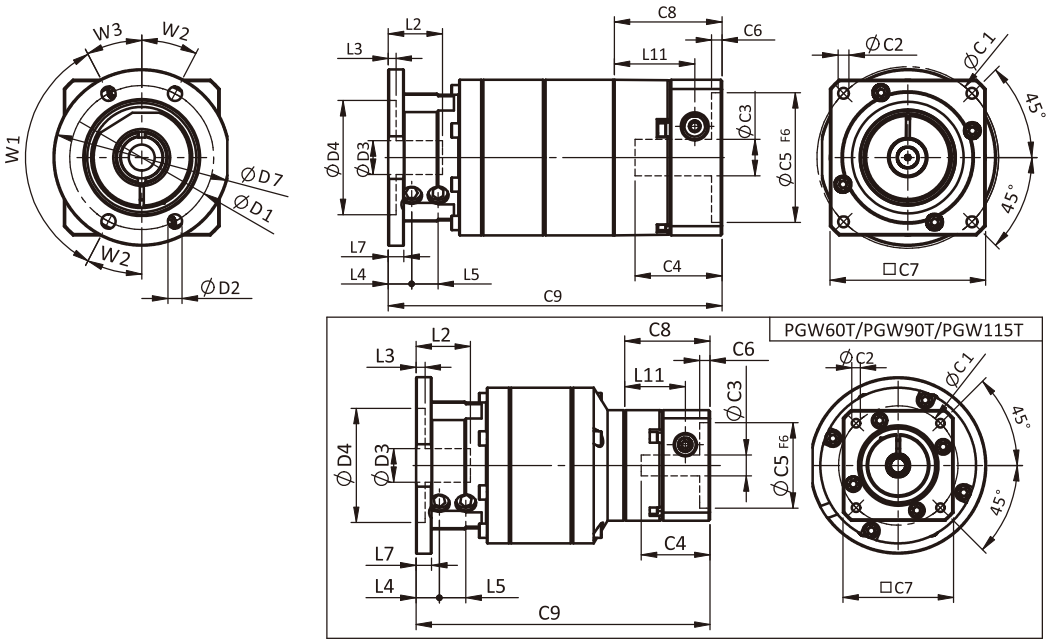
Specifications Unit:mm

Dimensions	PGW60	PGW90	PGW115
D1	55.5	73	105
D2	5.5	5.5	6.6
D3	16	20	30
D4	44	60	80
D7	70	84	118
L2	31	31	37
L3	3.5	3.5	3.5
L4	9	10.2	12.5
L5	10.2	10.9	13
L7	6	6	10
L11	31.6	37.3	51.8
W1	125°	90°	90°
W2	27.5°	22.5°	22.5°
W3	27.5°	67.5°	67.5°
C1[2]	70	90	145
C2[2]	M5x0.8P	M6x1.0P	M8x1.25P
C3[2]	≦14/≦19	≦19/≦24/≦28	≦24/≦32/≦38
C4[2]	33.5	41	51.5
C5[2]F6	50	70	110
C6[2]	4	6	6
C7[2]	60	90	130
C8[2]	42.1	51.5	68
C9[2]	102.2	126.5	172

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

★ Specification subject to change without notice.

PGW Double Stage Dimensions



Specifications

Unit:mm

Dimensions	PGW60	PGW60T	PGW90	PGW90T	PGW115T
D1	55.5		73		105
D2	5.5		5.5		6.6
D3	16		20		30
D4	44		60		80
D7	70		84		118
L2	31		31		37
L3	3.5		3.5		3.5
L4	9		10.2		12.5
L5	10.2		10.9		13
L7	6		6		10
L11	31	23.4	37.3	31	37.3
W1	125°		90°		90°
W2	27.5°		22.5°		22.5°
W3	27.5°		67.5°		67.5°
C1[2]	70	46	90	70	90
C2[2]	M5x0.8P	M4x0.7P	M6x1.0P	M5x0.8P	M6x1.0P
C3[2]	≦14/≦19	≦8/≦11	≦19/≦24/≦28	≦14/≦19	≦19/≦24/≦28
C4[2]	33.5	26.5	41	33.5	41
C5[2]F6	50	30	70	50	70
C6[2]	4	4	6	4	6
C7[2]	60	42.6	90	60	90
C8[2]	41.5	32.9	51.5	41.5	51.5
C9[2]	128.6	113.3	160.3	145.8	193.6

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

★ Specification subject to change without notice.

PGW Specifications

Specifications		Stage	Ratio	PGW60	PGW90	PGW115
Nominal Output Torque T_{2N}	N•m	1	3	28	85	200
			4	32	80	215
			5	35	95	215
			7	28	85	200
			9	23	75	195
			10	21	65	180
		Stage	Ratio	PGW60/PGW60T	PGW90/PGW90T	PGW115T
		2	15	35/24	95/68	168
			20	35/31	95/95	215
			25	35/30	95/95	215
			35	35/28	95/95	215
			45	35/27	95/92	215
			50	35/27	95/82	205
			70	28/28	85/85	200
			90	23/23	75/75	195
			100	21/21	65/65	180
		Stage	Ratio	PGW60T	PGW90T	PGW115T
		3	125	35	95	215
			175	35	95	215
			225	35	95	215
			245	35	95	215
			315	35	95	215
			405	35	95	215
			567	28	85	200
			729	23	75	195
			1000	21	65	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	3000	2500
Max. Input Speed n_{1max}	rpm	1,2,3	3-1000	6000	6000	5000
Standard Backlash P2	arcmin	1	3-10	≦8	≦7	≦6
		2	15-100	≦10	≦9	≦8
		3	125~1000	≦12	≦12	≦12
Operating Temp.	℃	1,2,3		-10℃ ~ +90℃		
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	1.2	2.9	6.4
		2	15-100	1.6/1.4	4.3/3.2	8.0
		3	125~1000	1.8	4.6	9.4
Mounting Position	-	1,2,3	3-1000	Any Direction		
Noise Level [2]	dBA/1m	1,2,3	3-1000	63	66	67
Protection Class	-	1,2,3	3-1000	IP65		
Lubrication	-	1,2,3	3-1000	Synthetic Lubricant		

Inertia (J1)

Stage	Ratio	unit	PGW60(ϕ14)	PGW90(ϕ19)	PGW115(ϕ24)
1	3	kg•cm²	0.23	0.77	2.30
	4		0.21	0.67	1.92
	5~10		0.21	0.61	1.71
Stage	Ratio		PGW60(ϕ14)/ PGW60T(ϕ8)	PGW90(ϕ19)/ PGW90T(ϕ14)	PGW115T(ϕ19)
2	15		0.23/(0.04)	0.77/(0.23)	0.77
	Other Ratios		0.21/(0.03)	0.61/(0.21)	0.61
Stage	Ratio		PGW60T(ϕ8)	PGW90T(ϕ14)	PGW115T(ϕ19)
3	All Ratios		0.03	0.21	0.61

* 1. Applied to the output shaft center at 100 rpm.
* 2. Environment noise level 30 dB; distance 1m; measured under free loading with input speed 3000 rpm; ratio = 10 (1-stage) or ratio = 100 (2-stage).

※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.