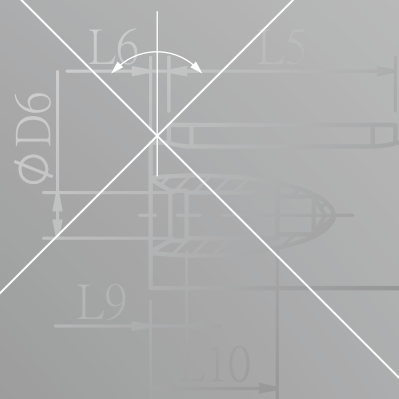
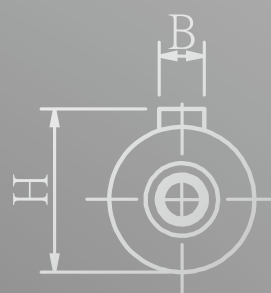
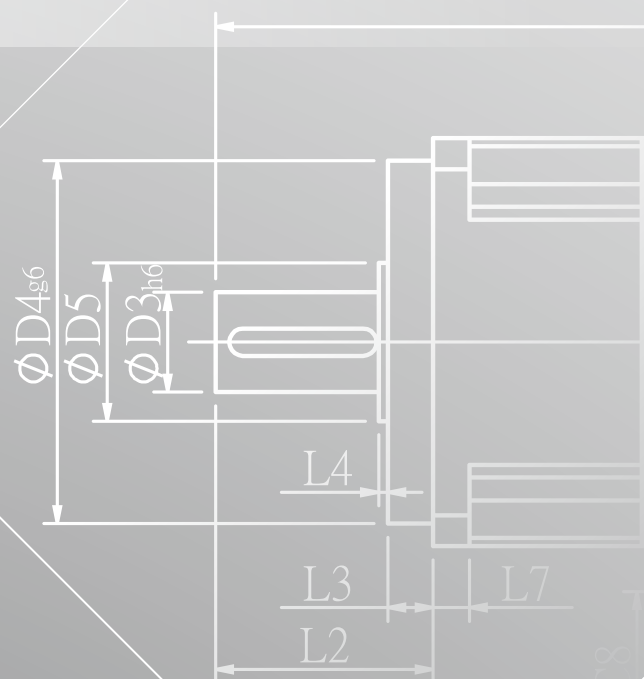
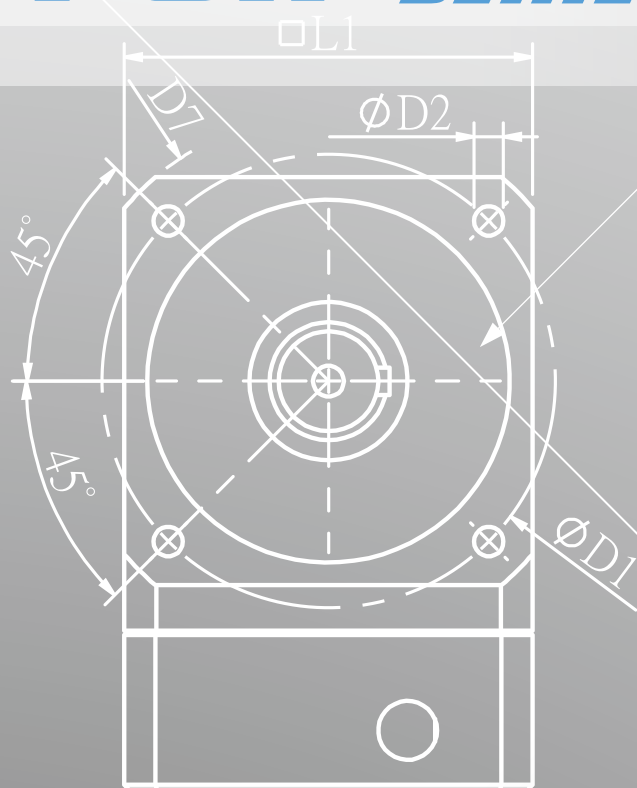
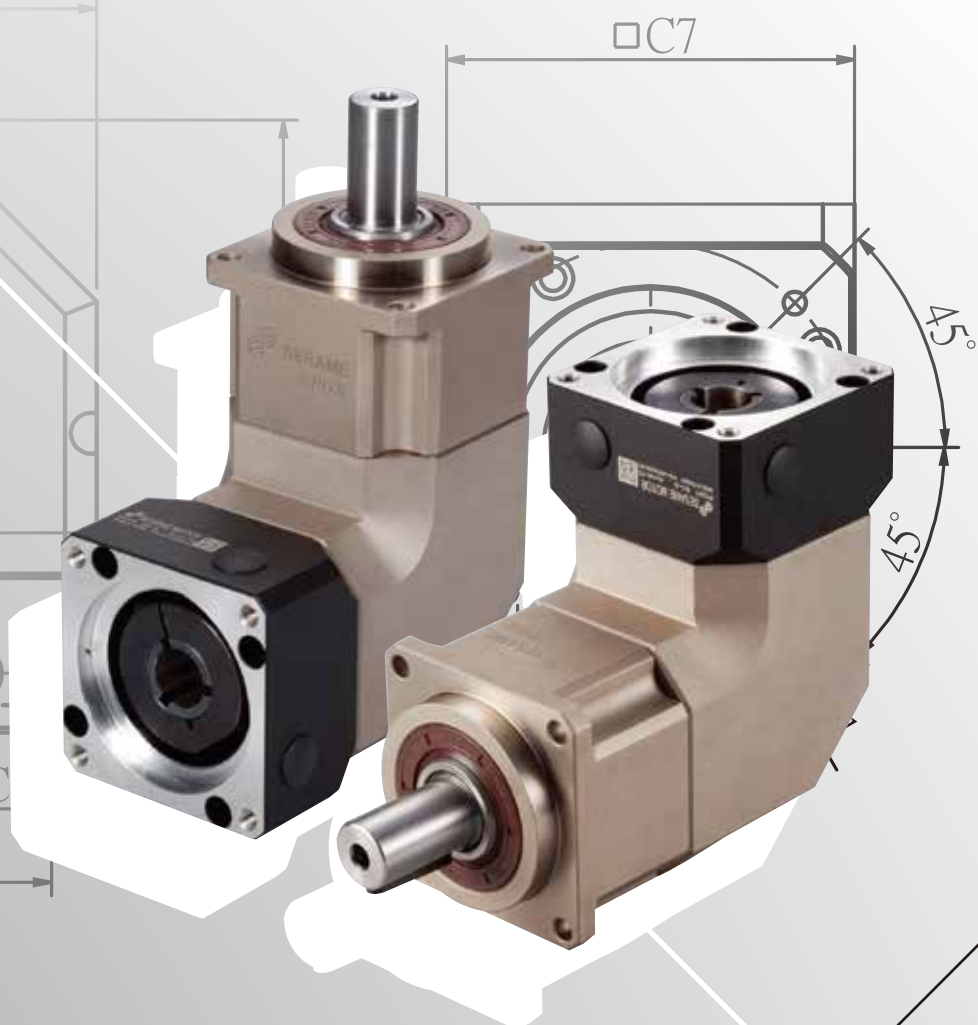


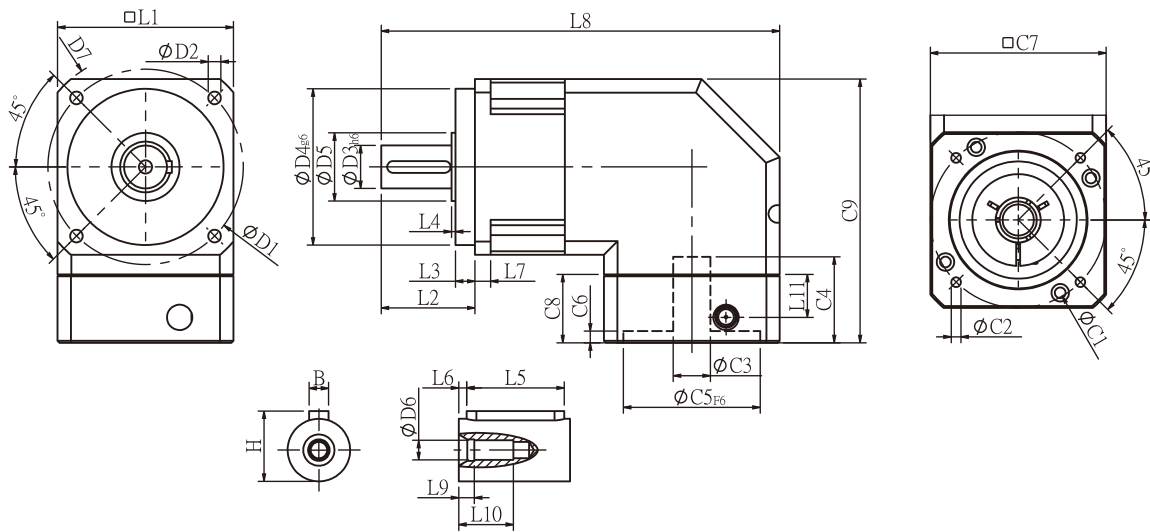
PGR SERIES



L8



PGR Single Stage Dimensions



Specifications

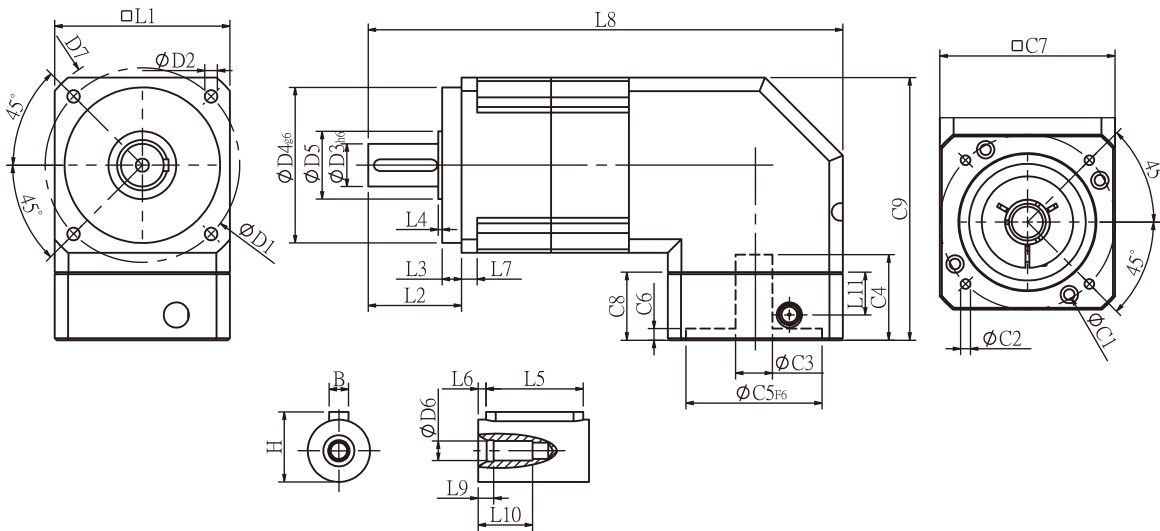
Unit:mm

Dimensions	PGR42	PGR60	PGR90	PGR115	PGR142
D1	50	70	100	130	165
D2	3.4	5.5	6.5	8.5	10.5
D3 h6	13	16	22	32	40
D4 g6	35	50	80	110	130
D5	15	25	35	45	50
D6	M4x0.7P	M5x0.8P	M8x1.25P	M12x1.75P	M16x2.0P
D7	56	80	118	148	186
L1	42.6	60	90	115	142
L2	26	37	48	62	93
L3	5.5	7	10	8	8
L4	1.5	1.5	1.5	3	6
L5	15	25	32	40	60
L6	2	2	3	5	5
L7	4	6	8	12	18
L8	103.6	148.7	204	244.5	330
L9	4	4	4.5	6	6
L10	14	16.5	20.5	30	38
L11	13.5	21.5	22	32	44.7
C1 ²	46	70	90	115	145
C2 ²	M4x0.7P	M5x0.8P	M6x1.0P	M8x1.25P	M8x1.25P
C3 ²	≤8	≤14	≤19/≤24	≤24/≤32	≤35
C4 ²	29	34	44	53	75
C5 ² F6	30	50	70	95	110
C6 ²	6	5	5	6	9
C7 ²	42.6	60	90	115	140
C8 ²	25	33	35	48	65
C9 ²	70.8	107.8	135	174.5	207
B	5	5	6	10	12
H	15	18	24.5	35	43

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

★ Specification subject to change without notice.

PGR Double Stage Dimensions-1



Specifications

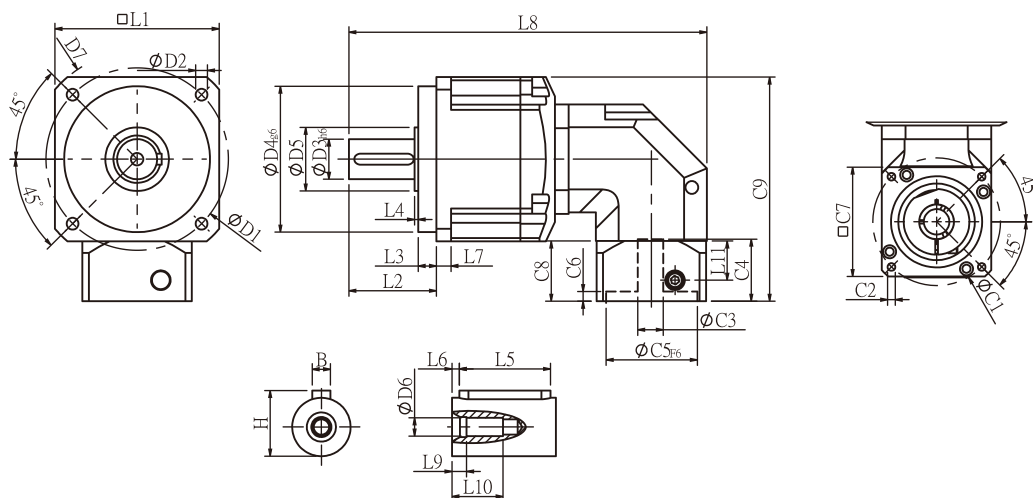
Unit:mm

Dimensions	PGR42	PGR60	PGR90	PGR115	PGR142
D1	50	70	100	130	165
D2	3.4	5.5	6.5	8.5	10.5
D3 _{h6}	13	16	22	32	40
D4 _{g6}	35	50	80	110	130
D5	15	25	35	45	50
D6	M4x0.7P	M5x0.8P	M8x1.25P	M12x1.75P	M16x2.0P
D7	56	80	118	148	186
L1	42.6	60	90	115	142
L2	26	37	48	62	93
L3	5.5	7	10	8	8
L4	1.5	1.5	1.5	3	6
L5	15	25	32	40	60
L6	2	2	3	5	5
L7	4	6	8	12	18
L8	129.6	176.7	244	292.5	391
L9	4	4	4.5	6	6
L10	14	16.5	20.5	30	38
L11	13.5	21.5	22	32	44.7
C1 ²	46	70	90	115	145
C2 ²	M4x0.7P	M5x0.8P	M6x1.0P	M8x1.25P	M8x1.25P
C3 ²	≤8	≤14	≤19/≤24	≤24/≤32	≤35
C4 ²	29	34	44	53	75
C5 ² _{F6}	30	50	70	95	110
C6 ²	6	5	5	6	9
C7 ²	42.6	60	90	115	140
C8 ²	25	33	35	48	65
C9 ²	70.8	107.8	135	174.5	207
B	5	5	6	10	12
H	15	18	24.5	35	43

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

* Specification subject to change without notice.

PGR Double Stage Dimensions-2



Specifications

Unit:mm

Dimensions	PGR60T	PGR90T	PGR115T	PGR142T
D1	70	100	130	165
D2	5.5	6.5	8.5	10.5
D3 h6	16	22	32	40
D4 g6	50	80	110	130
D5	25	35	45	50
D6	M5x0.8P	M8x1.25P	M12x1.75P	M16x2.0P
D7	80	118	148	186
L1	60	90	115	142
L2	37	48	62	93
L3	7	10	8	8
L4	1.5	1.5	3	6
L5	25	32	40	60
L6	2	3	5	5
L7	6	8	12	18
L8	145.1	196.2	269.4	343.5
L9	4	4.5	6	6
L10	16.5	20.5	30	38
L11	13.5	21.5	22	32
C1 ²	46	70	90	115
C2 ²	M4x0.7P	M5x0.8P	M6x1.0P	M8x1.25P
C3 ²	≤8	≤14	≤19/≤24	≤24/≤32
C4 ²	29	34	44	53
C5 ² F6	30	50	70	95
C6 ²	6	5	5	6
C7 ²	42.6	60	90	115
C8 ²	25	33	35	48
C9 ²	79.5	122.8	147.5	188
B	5	6	10	12
H	18	24.5	35	43

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

★ Specification subject to change without notice.

PGR Specifications Table

Specifications		Stage	Ratio	PGR-42	PGR-60	PGR-90	PGR-115	PGR-142
Nominal Output Torque T _{2N}	N • m	1	3	13.8	35.3	76.2	220	380
			4	11.9	35.9	74.6	249	450
			5	13.8	43.0	95.2	283	473
			6	12.5	39.4	90.9	266	436
			7	11.9	36.0	85.6	219	400
			8	10.9	32.4	85.0	216	363
			9	9.8	28.7	80.0	210	320
			10	10.1	25.0	75.0	210	320
		Stage	Ratio	PGR-42	PGR-60 (T)	PGR-90(T)	PGR-115(T)	PGR-142(T)
		2	15	13.8	44.2	95.2	283	482
			20	11.9	35.9	74.6	249	490
			25	13.8	43.0	95.2	283	473
			30	13.8	43.0	95.2	283	473
			35	13.8	43.0	95.2	283	473
			40	13.8	43.0	95.2	283	473
			45	13.8	43.0	95.2	283	473
			50	13.8	43.0	95.2	283	473
			60	12.5	39.4	90.9	266	436
			70	11.9	36.0	85.6	219	400
			80	10.9	32.4	85.0	216	363
			90	9.8	28.7	80.0	210	320
		100	10.1	25.0	75.0	210	320	
Emergency Stop Torque T _{2NOT}	N • 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	3-100	3000	3000	3000	2500	2000
Max. Input Speed n _{1max}	rpm	1,2	3-100	6000	6000	6000	5000	4000
Micro Backlash P0	arcmin	1 2	3-10 12-100	- -	- -	- -	≤ 4 ≤ 6	≤ 4 ≤ 6
Precision Backlash P1	arcmin	1 2	3-10 12-100	- -	- -	≤ 6 ≤ 9	≤ 6 ≤ 8	≤ 6 ≤ 8
Standard Backlash P2	arcmin	1 2	3-10 12-100	≤ 12 ≤ 15	≤ 9 ≤ 12	≤ 9 ≤ 12	≤ 9 ≤ 11	≤ 9 ≤ 11
Torsional Rigidity	N • m /arcmin	1,2	3-100	1.0	2.8	7.5	15.5	30
Max. Radial Load F _{2rB} ¹	N	1,2	3-100	350	960	1630	3380	6150
Max. Axial Load F _{2aB} ¹	N	1,2	3-100	320	900	1420	2930	5510
Operating Temp.	°C		3-100	-10 °C ~ +90 °C				
Service Life	hr		3-100	20,000 (10,000/ Continuous operation)				
Efficiency	%	1 2	3-10 12-100	≥ 94% ≥ 90%				
Weight	kg	1 2	3-10 12-100	1.0 1.3	2.5 3.2/2.8	6.5 8.6/6.9	13.2 17.7/14.5	24.6 29.7/26.2
Mounting Position	-	1,2	3-100	Any direction				
Noise Level ²	dBA/1m	1,2	3-100	65	67	70	70	75
Protection Class	-	1,2	3-100	IP65				
Lubrication	-	1,2	3-100	Synthetic Lubricant				
Inertia(J1)								
Stage	Ratio	unit		PGR-42	PGR-60	PGR-90	PGR-115	PGR-142
1	3/4/5/7/9	Kg • cm ²		0.06	0.40	2.28	6.87	24.2
	6/8/10			0.05	0.30	1.45	4.76	14.5
Stage	Ratio			PGR-42	PGR-60(T)	PGR-90(T)	PGR-115(T)	PGR-142(T)
2	15/20/25/35/45			0.06	0.40(0.08)	2.28(0.72)	6.87(3.02)	24.2(7.83)
	others			0.05	0.30(0.06)	1.45(0.38)	4.76(1.64)	14.5(5.00)
* 1. Applied to the output shaft center @100rpm. * 2.Measured at 3000rpm with no load. * 3. PGR115T - □□ - P0 is not applicable. ※ The above figures/specifications are subject to change without prior notice.								

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

* 2. Measured at 3000rpm with no load. * 3. PGR115T - □□ - P0 is not applicable.

※ 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.