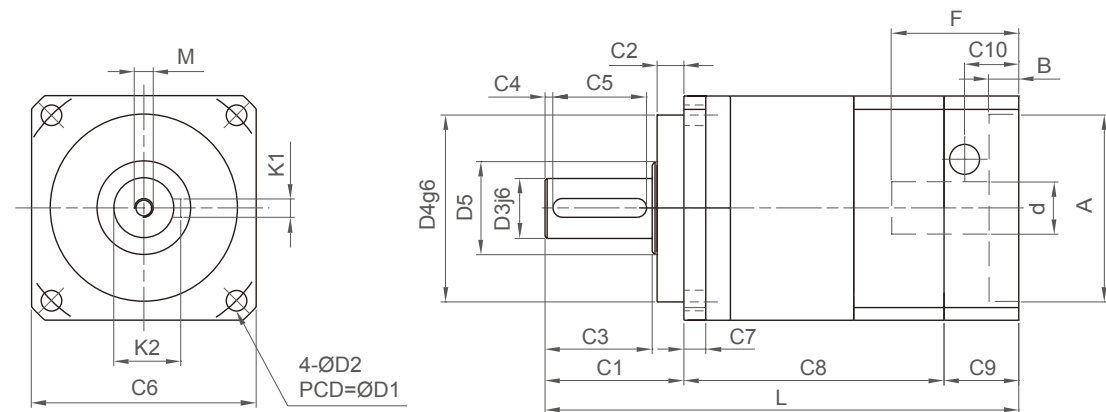
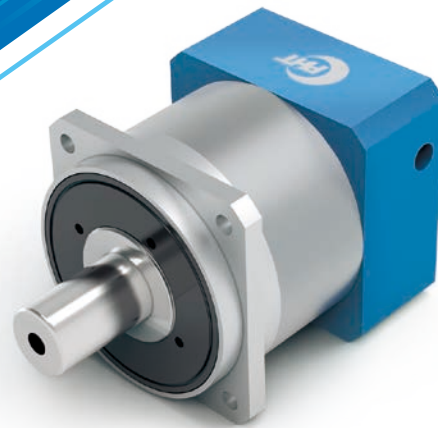




DG series

Standard Type /
Through-hole Output Cover



Unit: mm

Size	DG060	DG090	DG115	DG142	DG180	DG220
D1	70	100	130	165	215	250
D2	5.2	6.8	8.6	10.5	13	17
※ D3	16	22	32	40	55	75
D4	50	80	110	130	160	180
D5	25	35	65	65	100	80
C1	37	48	65	97	105	138
C2	7	10	12	15	20	30
C3	28.5	36.5	51	79	82	105
C4	2	3	5	5	6	7
C5	25	32	40	65	70	90
C6	60	90	115	142	180	220
C7	16	18	20	17	20	30
C8	L1	78	103.5	125.5	154.5	219.5
	L2	100	129.5	155.5	192.5	269.5
C9	20	25.5	25.5	34.5	35	44.5
C10	13	18	18	22.5	23	28.5
L	L1	135	177	216	286	402
	L2	157	203	246	324	452
M	M5xP0.8x12.5	M8xP1.25x20	M12xP1.75x30	M16xP2.0x40	M20xP2.5x50	M20xP2.5x50
K1	5	6	10	12	16	20
K2	18	24.5	35	43	59	79.5
d	≤19	≤24	≤32	≤38	≤55	≤55
△ A	50	80	110	130	160	200
B	6	10	10	10	11	12
△ F	≤33.5	≤46	≤53	≤66	≤82.5	≤88.5

※ : The reducer output shaft can be customized in size and length for customers.

△ : The special size indicated by this symbol varies according to customer needs and servo motors.

Note: Three-stage is not in this table, please contact our sales if it is needed.

Technical Information

Specification	Stage	Ratio	DG060	DG090	DG115	DG142	DG180	DG220
Rated output torque (Nm)	1	3	55	130	208	342	588	1140
		4	50	140	290	542	1050	1700
		5	60	160	330	650	1200	2000
		6	55	150	310	600	1100	1900
		7	50	140	300	550	1100	1800
		8	43	114	247	475	950	1520
		10	40	100	230	450	900	1500
	2	9	55	130	208	342	588	1140
		12	50	140	290	542	1050	1700
		15	55	130	208	342	588	1140
		16	50	140	290	542	1050	1700
		20	50	140	290	542	1050	1700
		25	60	160	330	650	1200	2000
		28	50	140	300	550	1100	1800
		30	55	150	310	600	1100	1900
		32	43	114	247	475	950	1520
		35	50	140	300	550	1100	1800
		40	43	114	247	475	950	1520
		50	60	160	330	650	1200	2000
		60	55	150	310	600	1100	1900
		70	50	140	300	550	1100	1800
		80	43	114	247	475	950	1520
		100	40	100	230	450	900	1500
Instant maximum output torque (Nm)	1, 2	3~100	3 times rated output torque					
Backlash (arc min)	1	3~10	≤5	≤5	≤5	≤5	≤5	≤5
	2	9~100	≤7	≤7	≤7	≤7	≤7	≤7
Rated input speed (RPM)	1, 2	3~100	5000	4000	4000	3000	3000	2000
Maximum input speed (RPM)			10000	8000	8000	6000	6000	4000
Weight (kg)	1	3~10	1.5	4.5	9	17	34	53
	2	9~100	2.2	6	11	21	40	74
Torsional rigidity (Nm/arc min)	1, 2	3~100	2.5	5	10	25	70	115
Allowable radial force (N) ^A			920	1800	3350	4200	5800	17500
Allowable axial force (N) ^A			460	890	1700	2100	2900	8750
Noise value (dB) ^B			≤58	≤60	≤63	≤65	≤67	≤70
Service life (hrs) ^C			20000					
Use efficiency at full load (%)	1	3~10	≥97					
	2	9~100	≥94					
Operating temperature range (°C)	1, 2	3~100	-10°C~+90°C					
Protection level			IP64					
Lubricating oil			Synthetic lubricating oil					
Moment of inertia (kg X cm ²)	1	3	0.16	0.61	3.25	9.21	28.98	69.61
		4	0.14	0.48	2.74	7.54	23.67	54.37
		5	0.13	0.47	2.71	7.42	23.29	53.27
		6	0.13	0.45	2.65	7.25	22.75	51.72
		7	0.13	0.45	2.62	7.14	22.48	50.97
		8	0.13	0.44	2.58	7.07	22.59	50.84
		10	0.13	0.44	2.57	7.03	22.14	50.56
	2	9	0.16	0.61	3.25	9.21	28.98	69.61
		12	0.16	0.61	3.25	9.21	28.98	69.61
		15	0.16	0.61	3.25	9.21	28.98	69.61
		16	0.14	0.48	2.74	7.54	23.67	54.37
		20	0.14	0.48	2.74	7.54	23.67	54.37
		25	0.13	0.47	2.71	7.42	23.29	53.27
		28	0.14	0.48	2.74	7.54	23.67	54.37
		30	0.16	0.61	3.25	9.21	28.98	69.61
		32	0.14	0.48	2.74	7.54	23.67	54.37
		35	0.13	0.47	2.71	7.42	23.29	53.27
		40	0.14	0.48	2.74	7.54	23.67	54.37
		50	0.13	0.47	2.71	7.42	23.29	53.27
		60	0.13	0.45	2.65	7.25	22.75	51.72
		70	0.13	0.45	2.62	7.14	22.48	50.97
		80	0.13	0.44	2.58	7.07	22.59	50.84
		100	0.13	0.44	2.57	7.03	22.14	50.56

A. When the output speed is 100RPM, the load acts on the center position of the output shaft.

B. The smaller the reduction ratio or the higher the speed, the greater the noise value. (3000RPM, no load, reduction ratio=10)

C. The service life of continuous operation is 15,000 hours.

Note: Ratio100 uses three-stage (L3) style, and the strength is stronger than that at two-stage (L2).