



PG series High Precision Planetary Reducer

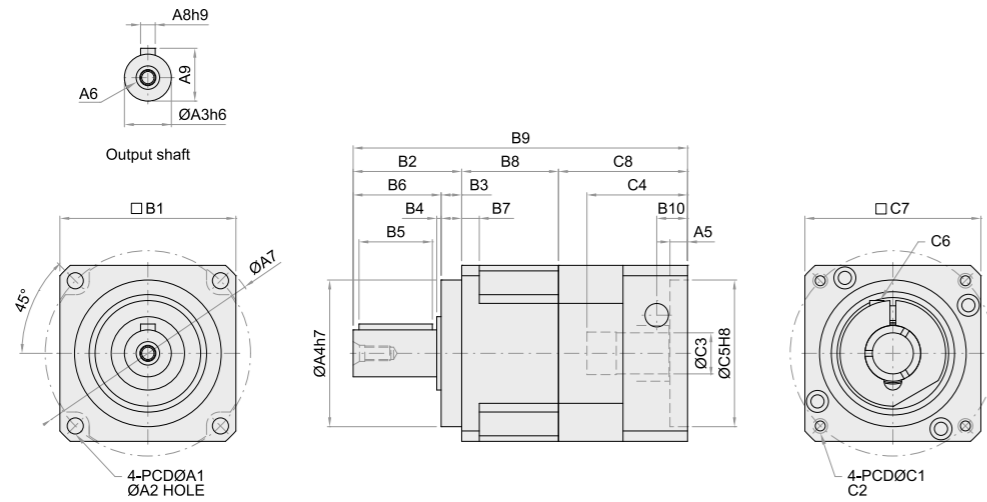
減速機性能資料 REDUCER PERFORMANCE INFORMATION

規格 Model NO.	符號 Symbol	單位 Unit	節數 Stage	減速比 Ratio	42	60	90	115	142	180	220
額定輸出力矩 Rated Output Torque	T _{2N}	Nm	L1	3	18	52	130	276	492	955	1,440
				4	16	47	116	246	436	875	1,320
				5	15	44	109	231	411	850	1,290
				7	14	41	103	216	383	805	1,200
			L2	10	13	39	97	206	366	775	1,160
				15	18	52	130	276	492	955	1,440
				20	16	47	116	246	436	875	1,320
				25	15	44	109	231	411	850	1,290
				30	18	52	130	276	492	955	1,440
				35	14	41	103	216	383	805	1,200
				40	16	47	116	246	436	875	1,320
				50	15	44	109	231	411	850	1,290
				70	14	41	103	216	383	805	1,200
				100	13	39	97	206	366	775	1,160
最大輸入轉速 Max. Input Speed	n _{1B}	rpm	L1 / L2	3~100	5,000	5,000	5,000	5,000	5,000	3,000	3,000
額定輸入轉速 Rated Input Speed	n _{1N}	rpm	L1 / L2	3~100	3,000	3,000	3,000	3,000	3,000	2,000	2,000
標準背隙 Backlash	-	arcmin	L1	≤8							
			L2	≤12							
最大加速扭矩 Max. Acceleration Torque	T _{2B}	Nm	L1 / L2	3~100	1.8倍額定輸出力矩 / 1.8 Times Of Nominal Output Torque						
最大輸出(急停)扭矩 Max. Output(Emergency Stop) Torque	T _{2NOT}	Nm	L1 / L2	3~100	3倍額定輸出力矩 / 3 Times Of Nominal Output Torque						
扭轉剛性 Torsional Rigidity	-	Nm/arcmin	L1 / L2	3~100	2.3	5	15	45	69	140	220
容許徑向力 Max. Radial Force	F _{2rB}	N	L1 / L2	3~100	750	1,180	3,000	6,500	9,100	11,150	35,000
容許軸向力 Max. Axial Force	F _{2aB}	N	L1 / L2	3~100	325	590	1,500	3,250	4,550	5,575	17,500
使用壽命 Service Life	hr	hr	L1 / L2	3~100	S5週期運轉 > 20,000 ; (S1連續運轉 > 10,000 hrs) S5 Cycle Operation ; > 20,000 (S1 Continuous Operation ; > 10,000 hrs)						
使用溫度 Operation Temperature	-	°C	L1 / L2	3~100	-25°C ~ 90°C						
效率 Efficiency	η	%	L1	≤97							
			L2	≤94							
潤滑 Lubrication	-	-	L1 / L2	3~100	合成潤滑油脂 / Synthetic Lubrication Grease						
噪音值 Noise Level	-	dB	L1	3~10	≤62	≤62	≤65	≤68	≤70	≤70	≤70
			L2	15~100	≤65	≤65	≤68	≤70	≤72	≤72	≤72
防護等級 Protection Class	-	IP	L1 / L2	3~100	IP 65						
安裝方向 Mounting Position	-	-	L1 / L2	3~100	任意方向 / Any Direction						
重量 Weight	-	kg	L1	3~10	0.5	1.2	3.5	7.5	15.5	38	54
			L2	15~100	0.8	1.8	5.2	11.2	22.5	48	75

減速機轉動慣量 REDUCER MOMENT OF INERTIA

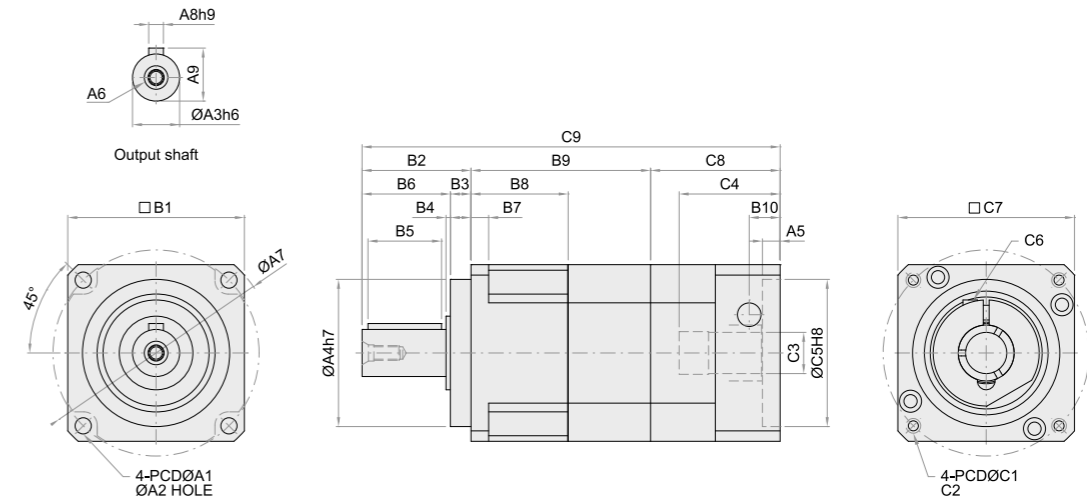
規格 Model NO.	符號 Symbol	單位 Unit	節數 Stage	減速比 Ratio	42	60	90	115	142	180	220
轉動慣量 Moment of Inertia	J ₁	kg.cm ²	L1	3	0.04	0.14	0.61	3.25	8.75	24.63	50.67
				4	0.04	0.13	0.48	2.74	7.16	20.12	46.21
				5	0.04	0.11	0.47	2.74	6.84	19.8	45.28
				7	0.04	0.11	0.44	2.58	6.78	19.21	43.32
			L2	10	0.04	0.11	0.44	2.57	6.68	19.13	42.98
				15	0.04	0.14	0.61	3.25	8.75	24.63	50.67
				20	0.04	0.13	0.48	2.74	7.16	20.12	46.21
				25	0.04	0.11	0.47	2.74	6.84	19.8	45.28
				30	0.04	0.14	0.61	3.25	8.75	24.63	50.67
				35	0.04	0.11	0.44	2.58	6.78	19.21	43.32
				40	0.04	0.11	0.48	2.74	7.16	20.12	46.21
				50	0.04	0.11	0.47	2.74	6.84	19.8	45.28
				70	0.04	0.11	0.44	2.58	6.78	19.21	43.32
				100	0.04	0.11	0.44	2.57	6.68	19.13	42.98

MODEL: PG SERIES L1-Stage (Ratio: 3~10)



Model	Code	42	60	90	115	142	180	220
A1		50	70	100	130	165	215	250
A2		3.5	5.5	6.5	8.5	10.5	13.5	17
A3		13	16	22	32	40	55	75
A4		35	50	80	110	130	160	180
A5		6	6	6	7	7	8	10
A6		M4 x P0.7	M5 x P0.8	M8 x P1.25	M12 x P1.75	M16 x P2.0	M20 x P2.5	M20 x P2.5
A7		56	80	116	148	185	240	292
A8		5	5	6	10	12	16	20
A9		15	18	24.5	35	43	59	79.5
B1		42.6	60	90	115	142	180	220
B2		26	37	48	65	97	104.5	150
B3		5.5	7	10	12	15	20	30
B4		1.6	1.5	1.5	2	3	2.5	15
B5		15	25	30	40	60	70	90
B6		20.5	30	38	53	82	84.5	120
B7		4	6	8	10	12	16	20
B8		28.3	33	43	54	72	87.5	97.4
B9		88.65	114	138	190	251	292	391.4
B10		11	10.5	14	30	23	27.5	45
C1		46	70	90	145	165	200	265
C2		M4 x P0.7	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M14 x P2.0
C3		8	14 19	19 24	24 35	35 42	42	55
C4		26.15	34.3	43	68.2	68.1	81.5	116
C5		30	50	70	110	130	114.3	230
C6		M3 x P0.5	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M12 x P1.75
C7		42.6	60	90	130	142	180	250
C8		34.35	44	47	71	82	100	144
C9		114.65	142	178	238	312	382	505.4

MODEL: PG SERIES L2-Stage (Ratio: 15~100)



Model	Code	42	60	90	115	142	180	220
A1		50	70	100	130	165	215	250
A2		3.5	5.5	6.5	8.5	10.5	13.5	17
A3		13	16	22	32	40	55	75
A4		35	50	80	110	130	160	180
A5		6	6	6	7	7	8	10
A6		M4 x P0.7	M5 x P0.8	M8 x P1.25	M12 x P1.75	M16 x P2.0	M20 x P2.5	M20 x P2.5
A7		56	80	116	148	185	240	292
A8		5	5	6	10	12	16	20
A9		15	18	24.5	35	43	59	79.5
B1		42.6	60	90	115	142	180	220
B2		26	37	48	65	97	104.5	150
B3		5.5	7	10	12	15	20	30
B4		1.6	1.5	1.5	2	3	2.5	15
B5		15	25	30	40	60	70	90
B6		20.5	30	38	53	82	84.5	120
B7		4	6	8	10	12	16	20
B8		28.3	33	43	54	72	87.5	97.4
B9		88.65	114	138	190	251	292	391.4
B10		11	10.5	14	30	23	27.5	45
C1		46	70	90	145	165	200	265
C2		M4 x P0.7	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M14 x P2.0
C3		8	14 19	19 24	24 35	35 42	42	55
C4		26.15	34.3	43	68.2	68.1	81.5	116
C5		30	50	70	110	130	114.3	230
C6		M3 x P0.5	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M12 x P1.75	M12 x P1.75
C7		42.6	60	90	130	142	180	250
C8		34.35	44	47	71	82	100	144
C9		114.65	142	178	238	312	382	505.4