

SGR series High Precision Planetary Reducer



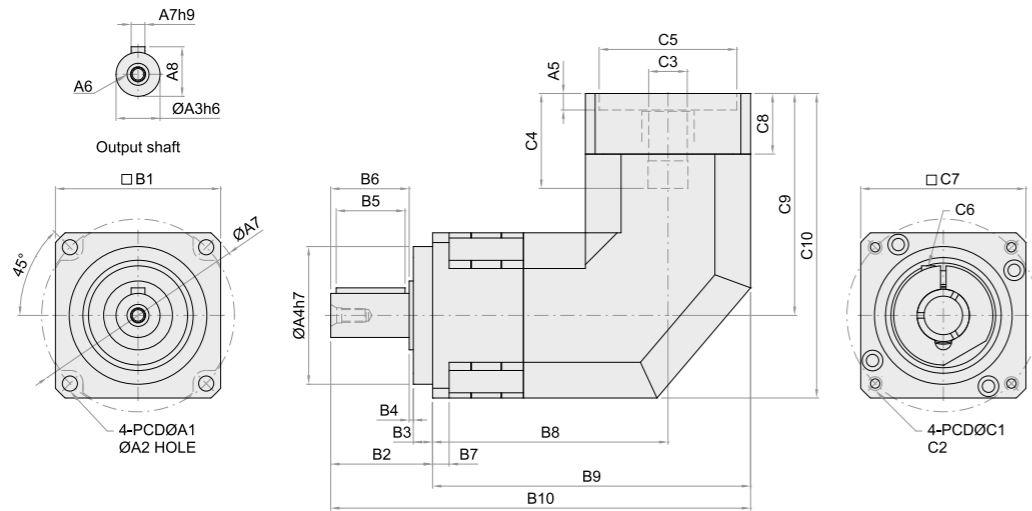
減速機性能資料 REDUCER PERFORMANCE INFORMATION

規格 Model NO.	符號 Symbol	單位 Unit	節數 Stage	減速比 Ratio	42	60	90	115	142
額定輸出力矩 Rated Output Torque	T _{2N}	Nm	L1	3	19	55	160	333	620
				4	16	51	143	295	530
				5	16	45	155	333	618
				6	13	43	153	318	583
				7	13	43	145	308	573
				8	12	40	140	290	553
				9	11	42	143	270	515
				10	12	40	138	294	545
				14	13	43	145	311	570
			L2	20	12	40	138	294	540
				25	16	45	155	333	610
				30	15	43	155	318	585
				35	15	43	145	308	568
				40	14	41	140	295	550
				50	16	45	155	333	610
				60	15	43	150	318	585
				70	15	43	148	295	568
				80	14	41	141	294	550
				90	13	42	143	274	510
100	14	41	138	291	540				
最大輸入轉速 Max. Input Speed	η _{1B}	rpm	L1 / L2	3~100	10,000	10,000	8,000	8,000	6,000
額定輸入轉速 Rated Input Speed	η _{1N}	rpm	L1 / L2	3~100	5,000	5,000	4,000	4,000	3,000
超精密背隙 PS Backlash PS	-	arcmin	L1	3~20	≤2				
			L2	25~100	≤4				
精密背隙 P0 Backlash P0	-	arcmin	L1	3~20	≤4				
			L2	25~100	≤7				
精密背隙 P1 Backlash P1	-	arcmin	L1	3~20	≤6				
			L2	25~100	≤9				
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	3	7	14	25	50
容許徑向力 Max. Radial Force	F _{2rB}	N	L1 / L2	3~100	780	1,530	3,250	6,700	9,400
容許軸向力 Max. Axial Force	F _{2aB}	N	L1 / L2	3~100	390	765	1,625	3,350	4,700
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	3~20	≤95				
			L2	25~100	≤92				
潤滑 Lubrication	-	-	L1 / L2	3~100	合成潤滑油脂 / Synthetic Lubrication Grease				
噪音值 Noise Level	-	dB	L1 / L2	3~100	≤61	≤63	≤65	≤68	≤70
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	3~20	1	2.3	6.6	13.2	24.5
			L2	25~100	1.2	3	8.2	14.2	27.5

減速機轉動慣量 REDUCER MOMENT OF INERTIA

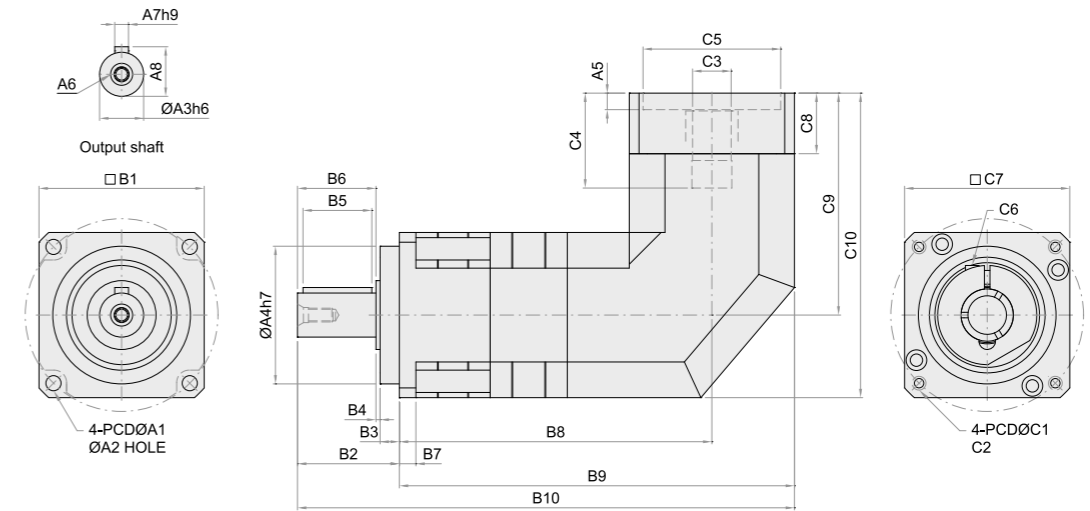
規格 Model NO.	符號 Symbol	單位 Unit	節數 Stage	減速比 Ratio	42	60	90	115	142
轉動慣量 Moment of Inertia	J ₁	kg.cm ²	L1	3	0.09	0.35	0.61	2.25	23.4
				4	0.09	0.35	0.48	2.25	23.4
				5	0.09	0.35	0.47	2.25	23.4
				6	0.09	0.35	0.45	2.25	23.4
				7	0.09	0.35	0.45	2.25	23.4
				8	0.09	0.35	0.44	2.25	23.4
				9	0.09	0.35	0.44	2.25	23.4
				10	0.09	0.35	0.44	2.25	23.4
				15	0.09	0.07	0.13	1.87	21.8
				20	0.09	0.07	0.13	1.87	21.8
			L2	25	0.09	0.09	0.13	0.35	6.84
				30	0.09	0.09	0.13	0.35	6.84
				35	0.09	0.09	0.13	0.35	6.84
				40	0.09	0.09	0.13	0.35	6.84
				50	0.09	0.09	0.13	0.35	6.84
				60	0.09	0.09	0.13	0.35	6.84
				70	0.09	0.09	0.13	0.35	6.84
				80	0.09	0.09	0.13	0.35	6.84
				90	0.09	0.09	0.13	0.35	6.84
				100	0.09	0.09	0.13	0.35	6.84

MODEL: SGR SERIES L1-Stage (Ratio: 3~20)



Model	Code	42	60	90	115	142	180
A1		50	70	100	130	165	215
A2		3.5	5.5	6.5	8.5	10.5	13.5
A3		13	16	22	32	40	55
A4		35	50	80	110	130	160
A5		6	6	6	7	7	8
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
A7		5	5	6	10	12	16
A8		15	18	24.5	35	43	59
B1		42.6	60	90	115	142	180
B2		26	37	48	65	97	104.5
B3		5.5	7	10	12	15	20
B4		1.6	1.5	1.5	2	3	2.5
B5		15	25	30	40	60	70
B6		18.9	28.5	36.5	51	79	82
B7		4	6	8	10	12	16
B8		76	85.5	122.1	140	178	223.88
B9		97	115.5	167.1	197.5	249	313.88
B10		123	152.5	215.1	262.5	346	418.38
C1		46	70	90	145	165	200
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
C3		8	14	19	24	35	42
C4		26.14	34.44	53	78.1	74.1	81.5
C5		30	50	70	110	130	114.3
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
C7		42.6	60	90	130	142	180
C8		20	22	25.5	45	35	55
C9		61	80.57	106.35	144.2	151	195
C10		82	110.57	151.35	201.7	222	285

MODEL: SGR SERIES L2-Stage (Ratio: 25~100)



Model	Code	42	60	90	115	142	180
A1		50	70	100	130	165	215
A2		3.5	5.5	6.5	8.5	10.5	13.5
A3		13	16	22	32	40	55
A4		35	50	80	110	130	160
A5		6	6	6	7	7	8
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
A7		5	5	6	10	12	16
A8		15	18	24.5	35	43	59
B1		42.6	60	90	115	142	180
B2		26	37	48	65	97	104.5
B3		5.5	7	10	12	15	20
B4		1.6	1.5	1.5	2	3	2.5
B5		15	25	30	40	60	70
B6		18.9	28.5	36.5	51	79	82
B7		4	6	8	10	12	16
B8		102	113.5	162.1	188	239	313.88
B9		123	143.5	207.1	245.5	325	423.88
B10		149	180.5	255.1	310.5	407	508.38
C1		46	70	90	145	165	200
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
C3		8	14	19	24	35	42
C4		26.14	34.44	53	78.1	74.1	81.5
C5		30	50	70	110	130	114.3
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
C7		42.6	60	90	130	142	180
C8		20	22	25.5	45	35	55
C9		61	80.57	106.35	144.2	151	195
C10		82	110.57	151.35	201.7	222	285