

SE series High Precision Planetary Reducer



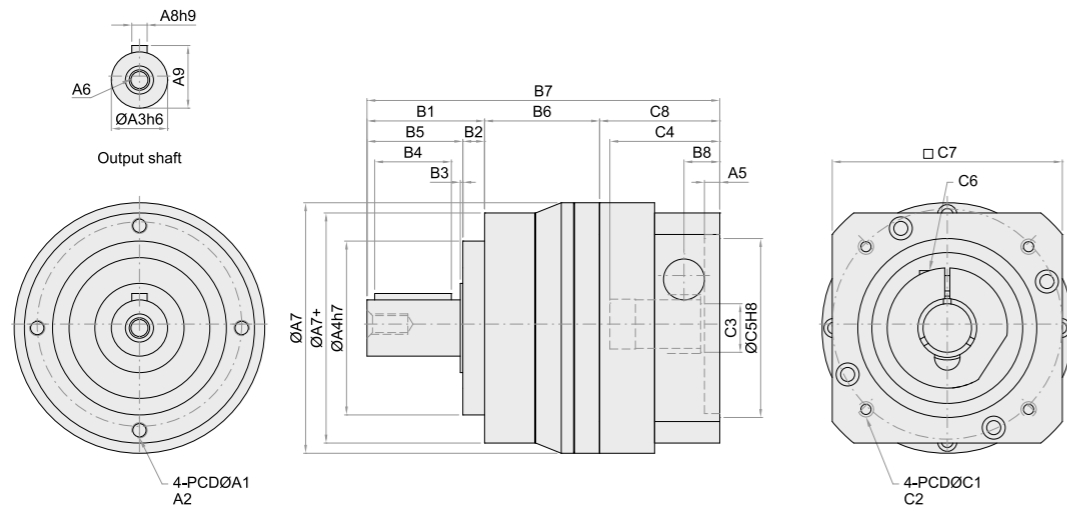
減速機性能資料 REDUCER PERFORMANCE INFORMATION

規格 Model NO.	符號 Symbol	單位 Unit	節數 Stage	減速比 Ratio	42	60	90	115	142	180	
額定輸出力矩 Rated Output Torque	T _{2N}	Nm	L1	3	21	57	160	333	620	1,200	
				4	20	52	145	298	552	1,065	
				5	23	62	158	338	615	1,215	
				6	21	57	155	318	610	1,115	
				7	20	52	145	308	580	1,115	
				8	18	47	140	288	555	1,060	
				9	15	42	143	270	520	980	
				10	15	42	138	285	548	1,050	
				L2	15	21	57	160	330	620	2,000
					20	20	52	145	298	552	1,800
			25		23	62	156	338	615	1,980	
			30		21	57	155	318	610	1,900	
			35		20	52	145	308	560	1,850	
			40		18	47	140	290	550	1,821	
			50		23	62	165	338	610	1,980	
			60		21	57	155	318	570	1,900	
			70		20	52	145	308	560	1,850	
			80	18	47	141	290	548	1,821		
			90	15	42	144	270	510	1,650		
100	15	42	138	288	540	1,700					
最大輸入轉速 Max. Input Speed	n _{1B}	rpm	L1 / L2	3~100	10,000	10,000	8,000	8,000	6,000	6,000	
額定輸入轉速 Rated Input Speed	n _{1N}	rpm	L1 / L2	3~100	5,000	5,000	4,000	4,000	3,000	3,000	
超精密背隙 PS Backlash PS	-	arcmin	L1 L2	3~10 15~100	≤1 ≤3						
高精密背隙 P0 Backlash P0	-	arcmin	L1 L2	3~10 15~100	≤3 ≤5						
精密背隙 P1 Backlash P1	-	arcmin	L1 L2	3~10 15~100	≤5 ≤7						
標準背隙 P2 Backlash P2	-	arcmin	L1 L2	3~10 15~100	≤8 ≤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	3	7	14	25	50	145	
容許徑向力 Max. Radial Force	F _{2rB}	N	L1 / L2	3~100	780	1,530	3,250	6,700	9,400	14,500	
容許軸向力 Max. Axial Force	F _{2aB}	N	L1 / L2	3~100	390	765	1,625	3,350	4,700	7,750	
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 L2	3~100 15~100	≤97 ≤94						
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 15~100	≤56 ≤56	≤60 ≤60	≤63 ≤63	≤63 ≤63	≤65 ≤65	≤67 ≤67	
防護等級 Protection Class	-	IP	L1 / L2	3~100	IP 65						
安裝方向 Mounting Position	-	-	L1 / L2	15~100	任意方向 / Any Direction						
重量 Weight	-	kg	L1 L2	3~100 15~100	0.6 0.9	1.4 1.6	3.3 4.7	6.9 8.7	13 17	30 35	

減速機轉動慣量 REDUCER MOMENT OF INERTIA

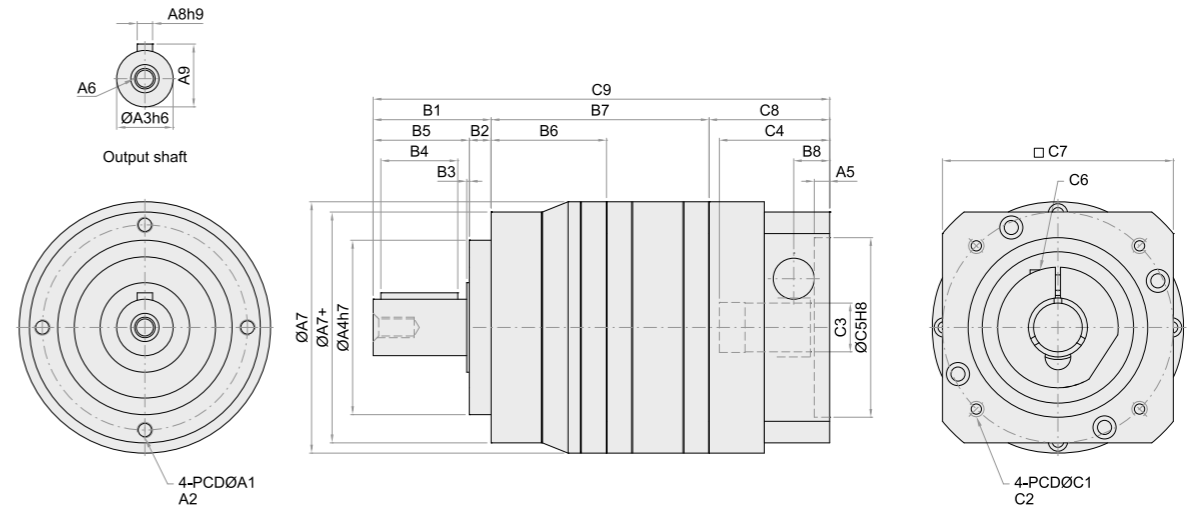
規格 Model NO.	符號 Symbol	單位 Unit	節數 Stage	減速比 Ratio	42	60	90	115	142	180	
轉動慣量 Moment of Inertia	J1	kg.cm ²	L1	3	0.03	0.16	0.61	3.25	9.21	28.98	
				4	0.03	0.14	0.48	2.74	7.54	23.67	
				5	0.03	0.13	0.47	2.71	7.42	23.29	
				6	0.03	0.13	0.45	2.65	7.25	22.75	
				7	0.03	0.13	0.45	2.62	7.14	22.48	
				8	0.03	0.13	0.44	2.58	7.07	22.59	
				9	0.03	0.13	0.44	2.57	7.04	22.53	
				10	0.03	0.13	0.44	2.57	7.03	22.51	
				L2	15	0.03	0.03	0.13	0.47	2.71	7.42
					20	0.03	0.03	0.13	0.47	2.71	7.42
			25		0.03	0.03	0.13	0.47	2.71	7.42	
			30		0.03	0.03	0.13	0.47	2.71	7.42	
			35		0.03	0.03	0.13	0.47	2.71	7.42	
			40		0.03	0.03	0.13	0.47	2.71	7.42	
			50		0.03	0.03	0.13	0.44	2.57	7.03	
			60		0.03	0.03	0.13	0.44	2.57	7.03	
			70		0.03	0.03	0.13	0.44	2.57	7.03	
			80		0.03	0.03	0.13	0.44	2.57	7.03	
			90	0.03	0.03	0.13	0.44	2.57	7.03		
			100	0.03	0.03	0.13	0.44	2.57	7.03		

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



Model	Code	42	60	90	115	142	180
A1		44	62	80	108	140	184
A2		M4 x P0.7	M5 x P0.8	M6 x P1	M6 x P1	M10 x P1.25	M12 x P1.75
A3		13	16	22	32	40	55
A4		35	52	68	90	120	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		59	70	98	125	156	213
A7+		50	70	90	120	156	213
A8		5	5	6	10	12	16
A9		15	18	24.5	35	43	59
B1		24.5	36.5	46	70	97	104.5
B2		4	6.5	8.5	17	15	20
B3		1.6	1.5	1	2	3	2.5
B4		15	25	30	40	60	70
B5		20.5	30	37.5	53	82	84.5
B6		29.8	33.5	45	49	72	87.5
B7		88.8	114	138	190	251	292
B8		11	10.5	14	30	23	27.5
C1		46	70	90	145	165	200
C2		M4 x P0.7	M5 x P0.8	M6 x P1	M8 x P1.25	M10 x P1.5	M12 x P1.75
C3		8	14 19	19 24	24 35	35 42	42
C4		26.3	34.3	43	68.2	69	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		34.5	44	47	71	82	100

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



Model	Code	42	60	90	115	142	180
A1		44	62	80	108	140	184
A2		M4 x P0.7	M5 x P0.8	M6 x P1	M6 x P1	M10 x P1.25	M12 x P1.75
A3		13	16	22	32	40	55
A4		35	52	68	90	120	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		59	70	98	125	156	213
A7+		50	70	90	120	156	213
A8		5	5	6	10	12	16
A9		15	18	24.5	35	43	59
B1		24.5	36.5	46	70	97	104.5
B2		4	6.5	8.5	17	15	20
B3		1.6	1.5	1	2	3	2.5
B4		15	25	30	40	60	70
B5		20.5	30	37.5	53	82	84.5
B6		29.8	33.5	45	49	72	87.5
B7		55.8	61.5	85	97	148	177.5
B8		11	10.5	14	30	23	27.5
C1		46	70	90	145	165	200
C2		M4 x P0.7	M5 x P0.8	M6 x P1	M8 x P1.25	M10 x P1.5	M12 x P1.75
C3		8	14 19	19 24	24 35	35 42	42
C4		26.3	34.3	43	68.2	69	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		34.5	44	47	71	82	100
C9		114.8	142	178	238	312	382