

SP series

high precision

planetary reducer



減速機性能資料 Reducer Performance Information

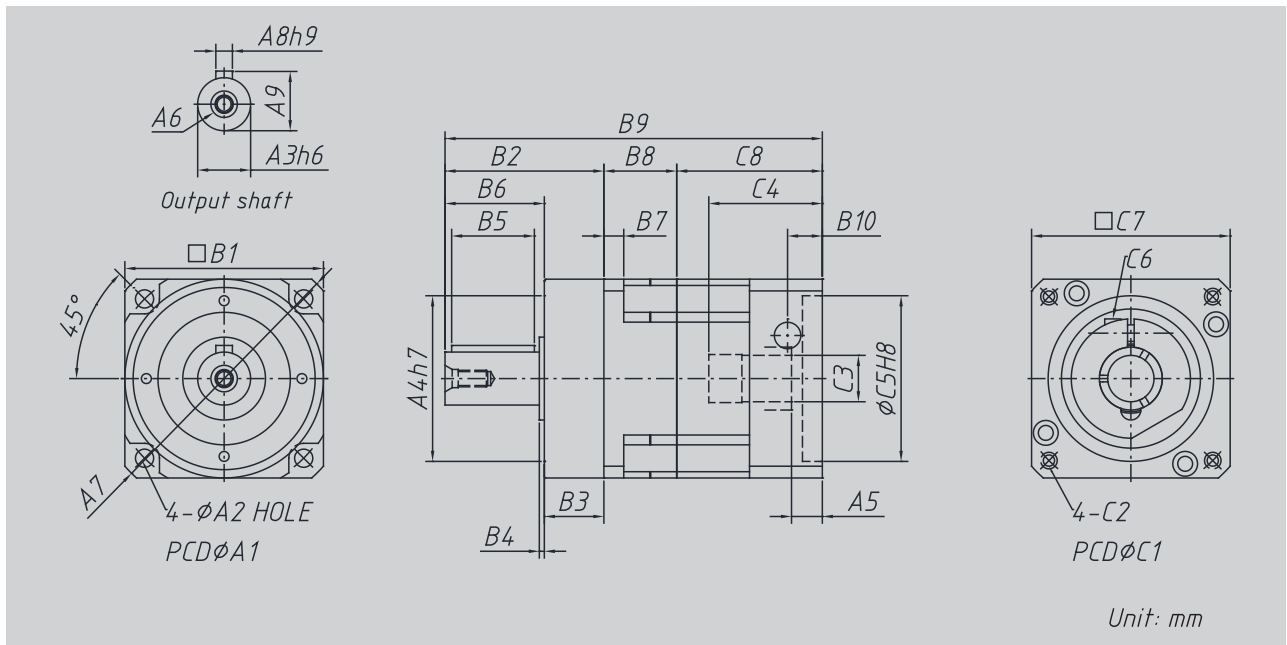
規格 Model NO.	單位 Unit	節數 Stage	減速比 Ratio	60	75	100	115	140	160	180	210	240
額定輸出力矩 T_{2N} Rated Output Torque	Nm	L1	3	17	47	120	168	200	380	530	1100	1500
			4	26	75	180	283	360	580	750	1500	2500
			5	26	75	175	280	360	580	750	1500	2500
			7	26	75	170	278	360	580	750	1400	2300
			10	17	52	120	168	220	505	750	1000	1700
		L2	16	26	75	180	283	360	580	750	1500	2500
			20	26	75	180	283	360	580	750	1500	2500
			25	26	75	175	280	360	580	750	1500	2500
			28	26	75	180	283	360	580	750	1500	2500
			35	26	75	175	280	360	580	750	1500	2500
			40	26	75	180	283	360	580	750	1500	2500
			50	26	75	175	280	360	580	750	1500	2500
			70	26	75	170	278	360	580	750	1400	2300
			100	17	52	120	168	220	505	750	1000	1700
最大輸入轉速 n_{1B} Max. Input Speed	rpm	L1/L2	3~100	6,000	6,000	4,500	4,000	4,000	3,200	3,500	2,500	2,500
額定輸入轉速 n_{1N} Rated Input Speed	rpm	L1	3~10	3,300	2,900	2,500	2,300	2,100	1,500	1,500	1,200	1,000
		L2	16~100	4,400	3,500	3,100	3,000	2,900	2,900	2,700	2,500	2,300
超精密背隙 P0 Backlash P0	arcmin	L1	3~10	≤ 3								
		L2	16~100	≤ 5								
精密背隙 P1 Backlash P1	arcmin	L1	3~10	≤ 5								
		L2	16~100	≤ 7								
標準背隙 P2 Backlash P2	arcmin	L1	3~10	≤ 7								
		L2	16~100	≤ 9								
最大加速扭矩 T_{2B} Max. Acceleration Torque	Nm	L1/L2	3~100	1.5倍額定輸出力矩 / 1.5 Times of nominal output torque								
最大輸出(急停)扭矩 T_{2NOT} Max. Output(Emergency Stop)Torque	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	3.5	10	31	25	53	145	175	400	500
容許徑向力 F_{2rB} Max. Radial Force	N	L1/L2	3~100	2800	4200	6600	6700	9900	14500	15400	21000	30000
容許軸向力 F_{2aB} Max. Axial Force	N	L1/L2	3~100	2400	3350	5650	3350	9870	7250	14150	30000	33000
使用壽命 Service Life	hr	L1/L2	3~100	20000								
使用溫度 Operation Temperature	°C	L1/L2	3~100	-10°C ~ 90°C								
效率 η Efficiency	%	L1	3~10	≥ 97								
		L2	16~100	≥ 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	≤ 58	≤ 60	≤ 64	≤ 65	≤ 65	≤ 67	≤ 67	≤ 67	≤ 67
		L2	16~100	≤ 58	≤ 60	≤ 64	≤ 65	≤ 65	≤ 67	≤ 67	≤ 67	≤ 67
防護等級 Protection Class	IP	L1/L2	3~100	65								
安裝方向 Mounting Position		L1/L2	3~100	任意方向 / Any direction								
重量 Weight	kg	L1	3~10	1.9	3.9	7.7	13.1	17.2	26.9	34	56	77
		L2	16~100	2	3.6	7.9	13.3	17	28	36.4	53	76

減速機轉動慣量 Reducer Moment of inertia

規格 Model NO.	單位 Unit	節數 Stage	減速比 Ratio	60	75	100	115	140	160	180	210	240
轉動慣量 J_1	kg.cm ²	L1	3	0.61	2.4	11.1	21.3	29.5	28.98	58.2	139	260.2
			4	0.55	2.15	10.1	19.3	26.7	23.67	41.2	94.3	198.2
			5	0.52	2.05	9.68	18.5	25.6	23.29	35.3	76.9	163
			7	0.5	1.96	9.36	17.8	24.7	22.48	29.6	61.5	84.4
			10	0.49	1.91	9.14	17.5	24.2	22.51	26.5	53.1	70.8
		L2	16	0.17	0.55	2.18	6.55	10.3	7.42	28.1	34.5	39.2
			20	0.16	0.53	2.07	6.21	9.77	7.42	26.6	31.5	34.6
			25	0.16	0.52	2.05	6.18	9.73	7.42	26.3	30.8	33.2
			28	0.16	0.5	1.97	5.97	9.41	7.42	25.2	30	30.5
			35	0.16	0.5	1.96	5.95	9.39	7.42	25.1	29.7	29.7
			40	0.15	0.49	1.92	5.81	9.16	7.42	24.4	28.5	28.2
			50	0.15	0.49	1.91	5.8	9.15	7.03	24.3	28.3	27.9
			70	0.15	0.49	1.91	5.8	9.14	7.03	24.3	28.1	27.6
			100	0.15	0.49	1.91	5.8	9.14	7.03	24.3	28	27.5

MODEL : SP SERIES

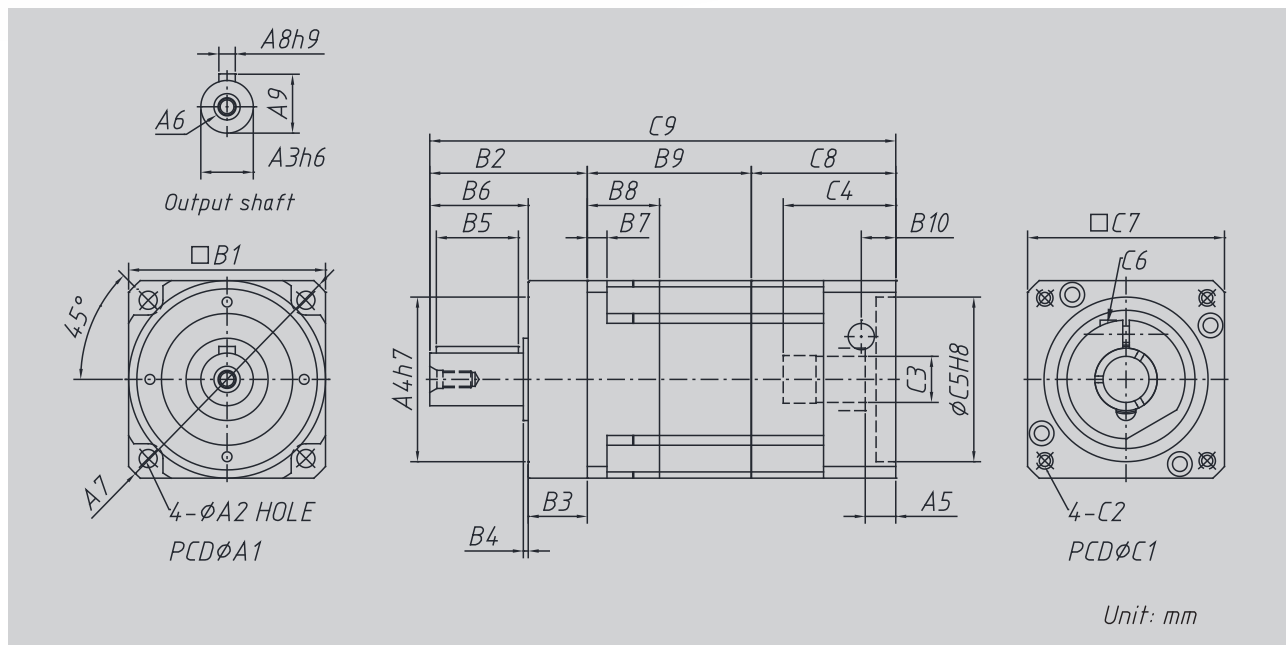
1-Stage (Ratio:3~10)



Code	Model	60	75	100	115	140	160	180	210	240
A1		68	85	120	130	165	190	215	250	290
A2		5.5	6.5	9	8.5	10.5	13	13.5	17	17
A3		16	22	32	35	40	50	55	75	85
A4		60	70	90	110	130	145	160	180	200
A5		6	6	7.5	22.5	11	11	12	35	35
A6		M5xP0.8	M8xP1.25	M12xP1.75	M12xP1.75	M16xP2.0	M16xP2.0	M20xP2.5	M20xP2.5	M20xP2.5
A7		80	95	135	148	185	215	240	292	320
A8		5	5	10	10	12	14	16	20	22
A9		18	24	35	38	43	53.5	59	79.5	90
B1		60	76	100	115	142	160	180	220	240
B2		48	56	88	100	112	112	112	143	170
B3		18	18.5	28.5	28	27	27	27.5	23	25
B4		1.5	1.5	1.5	2	3	0	2.5	15	15
B5		25	30	50	60	70	70	70	90	125
B6		30	37.5	59.5	72	85	85	84.5	120	145
B7		6	7	10	10	12	13.5	15	17	20
B8		22	21.5	24.5	38	60	60	80	104.4	102.4
B9		114	130.5	159.5	209	254	254	292	391.4	416.4
B10		13.5	13.5	14	15、30、40	23	23	27.5、72.5	45	45
C1		70	70	90	145	165	165	200	265	265
C2		M5xP0.8	M5xP0.8	M6xP1.0	M8xP1.25	M10xP1.5	M10xP1.5	M12xP1.75	M14xP2.0	M14xP2.0
C3		14、19	14、19	19、24	24、38	35、42	35、42	42	55	55
C4		34	34	43	67.5	68	68	72.5	121	121
C5		50	50	70	110	130	130	114.3	230	230
C6		M5xP0.8	M5xP0.8	M6、M5	M8xP1.25	M10xP1.5	M10xP1.5	M12xP1.75	M12xP1.75	M12xP1.75
C7		60	60	90	130	142	142	180	250	250
C8		44	44	47	71	82	82	100	144	144

MODEL : SP SERIES

2-Stage (Ratio:15~100)



Code	Model	60	75	100	115	140	160	180	210	240
A1		68	85	120	130	165	190	215	250	290
A2		5.5	6.5	9	8.5	10.5	13	13.5	17	17
A3		16	22	32	35	40	50	55	75	85
A4		60	70	90	110	130	145	160	180	200
A5		6	6	7.5	22.5	11	11	12	35	35
A6		M5xP0.8	M8xP1.25	M12xP1.75	M12xP1.75	M16xP2.0	M16xP2.0	M20xP2.5	M20xP2.5	M20xP2.5
A7		80	95	135	148	185	215	240	292	320
A8		5	5	10	10	12	14	16	20	22
A9		18	24	35	38	43	53.5	59	79.5	90
B1		60	76	100	115	142	160	180	220	240
B2		48	56	88	100	112	112	112	143	170
B3		18	18.5	28.5	28	27	27	27.5	23	25
B4		1.5	1.5	1.5	2	3	0	2.5	15	15
B5		25	30	50	60	70	70	70	90	125
B6		30	37.5	59.5	72	85	85	84.5	120	145
B7		6	7	10	10	12	13.5	15	17	20
B8		22	21.5	24.5	38	60	60	80	104.4	102.4
B9		50	49.5	64.5	86	121	121	170	218.4	218.4
B10		13.5	13.5	14	15、30、40	23	23	27.5、72.5	45	45
C1		70	70	90	145	165	165	200	265	265
C2		M5xP0.8	M5xP0.8	M6xP1.0	M8xP1.25	M10xP1.5	M10xP1.5	M12xP1.75	M14xP2.0	M14xP2.0
C3		14、19	14、19	19、24	24、38	35、42	35、42	42	55	55
C4		34	34	43	67.5	68	68	72.5	121	121
C5		50	50	70	110	130	130	114.3	230	230
C6		M5xP0.8	M5xP0.8	M6、M5	M8xP1.25	M10xP1.5	M10xP1.5	M12xP1.75	M12xP1.75	M12xP1.75
C7		60	60	90	130	142	142	180	250	250
C8		44	44	47	71	82	82	100	144	144
C9		142	158.5	199.5	257	315	315	382	505.4	530.4