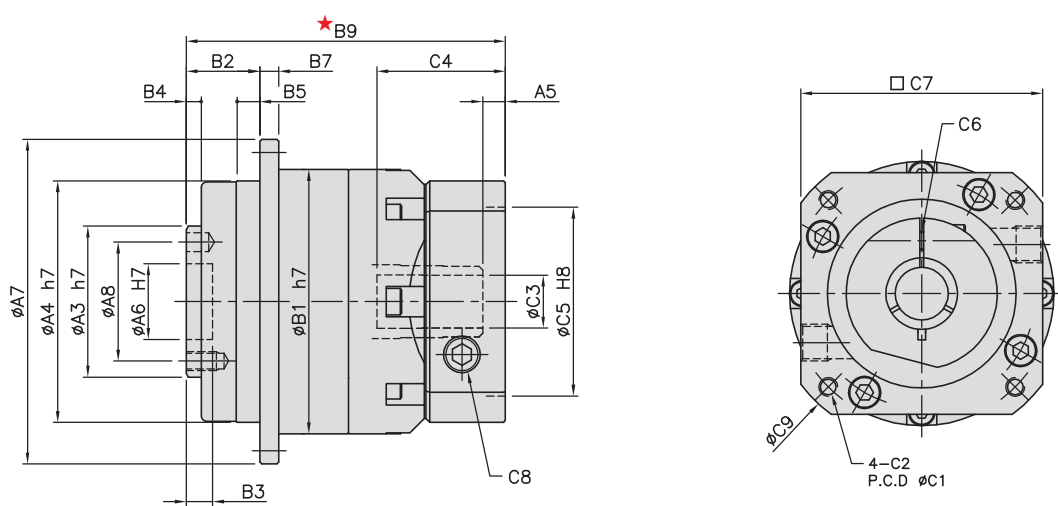


MODEL : KSD
Single Reduction
RATIO : 5, 7, 10



High Precision Planetary Reducer



unit:mm

Model code	unit:mm				
	47	64	90	110	140
A1	67	79	109	135	168
A2	8-3.4	8-4.5	8-5.5	8-5.5	12-6.8
A3	28	40	63	80	100
A4	47	64	90	110	140
A5	5	6	9, 23	10, 20	10
A6	12	20	31.5	40	50
A7	72	86	118	146	179
A8	20	31.5	50	63	80
A9	4-M3 x P0.5	7-M5 x P0.8	7-M6 x P1.0	11-M6 x P1.0	11-M8 x P1.25
A10	3	5	6	6	8
B1	59	70	98	125	156
B2	19.5	19.5	30	29	38
B3	5	7	12	12	12
B4	3	4	6	6	6
B5	5	6	10	10	15
B6	6.5	10	12	12	16
B7	4	5	7	8	10
B8	4	6	6	7	7
B9	73	84.5	133, 147.5	153, 163	186.5
C1	46, 60, 63	70, 75, 90	90, 100, 115, 145	115, 145, 165	145, 165, 200
C2	M3, M4, M5	M4, M5, M6	M5, M6, M8	M6, M8, M10	M8, M10, M12
C3	8,(11)	14,(19)	19,(22, 24)	24,(28, 32)	28, 32, 35
C4	30.5	34	45, 73	67, 77	84.5
C5	30, 40, 50	50, 60, 70	50, 70, 80, 95, 110	110, 130	110, 130, 180
C6	M3	M5	M6	M8	M10
C7	46, 55	64, 70, 80	92, 110, 130	122, 130, 150	146, 150, 190
C8	1/8"PT	1/8"PT	1/8"PT	1/4"PT	1/4"PT
C9	58, 74	80, 90, 105	116, 140, 165	138, 165, 190	170, 190, 245

■ Mass Moments of Inertia (kg · cm²)

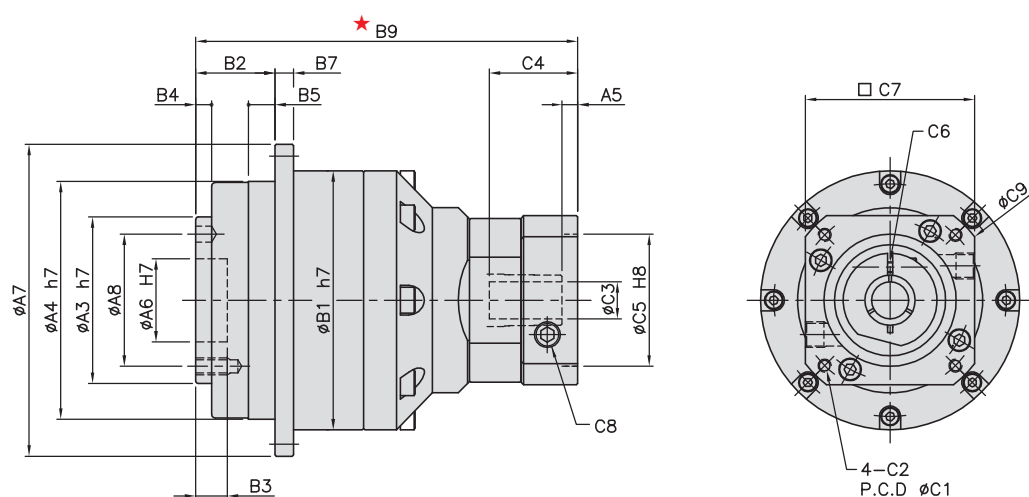
Ratio	47	64	90	110	140
5	0.03	0.12	0.45	2.70	7.41
7	0.03	0.12	0.45	2.64	7.12
10	0.03	0.12	0.43	2.56	7.01

Model No.	Unit	Ratio	47	64	90	110	140
Rated Output Torque	Nm	5	20	50	155	333	618
		7	19	47	142	309	573
		10	16	43	136	294	549
Max. Output Torque	Nm	5~10	3 Times of Rated Output Torque				
Rated Input Speed	rpm	5~10	3,000	3,000	3,000	3,000	3,000
Max. Input Speed	rpm	5~10	6,000	6,000	6,000	6,000	6,000
Backlash P0	arc min	5~10	≤3	≤3	≤3	≤3	≤3
Backlash P1	arc min	5~10	≤5	≤5	≤5	≤5	≤5
Backlash P2	arc min	5~10	≤7	≤7	≤7	≤7	≤7
Torsional Rigidity	Nm/arc min	5~10	6	14	30	86	155
Max. Axial Force Ball Bearing	N	5~10	1020	1260	4230	6360	7035
Max. Axial Force Taper Bearing	N	5~10	-	-	7330	11,500	18,600
Service Life	hr	5~10	10,000 (4,000 / Continuous operation)				
Efficiency	%	5~10	≥97%				
Operating Temperature	°C	5~10	-25° C ~ +95° C				
Lubrication		5~10	Vigo Grease Re #0				
Gearbox Protection Degree		5~10	IP65				
Mounting Position		5~10	Any				
Noise Level	dB	5~10	≤56	≤58	≤60	≤63	≤65
Weight ±3%	Kg	5~10	0.65	1.3	3.85	7.65	13.2

MODEL : KSD
Double Reduction
RATIO : 25, 35, 50, 70, 100



High Precision Planetary Reducer



unit:mm

Model code	47	64	90	110	140
A					
A1	67	79	109	135	168
A2	8-3.4	8-4.5	8-5.5	8-5.5	12-6.8
A3	28	40	63	80	100
A4	47	64	90	110	140
A5	5	5	6	9, 23	10, 20
A6	12	20	31.5	40	50
A7	72	86	118	146	179
A8	20	31.5	50	63	80
A9	4-M3 x P0.5	7-M5 x P0.8	7-M6 x P1.0	11-M6 x P1.0	11-M8 x P1.25
A10	3	5	6	6	8
B					
B1	59	70	98	125	156
B2	19.5	19.5	30	29	38
B3	5	7	12	12	12
B4	3	4	6	6	6
B5	5	6	10	10	15
B6	6.5	10	12	12	16
B7	4	5	7	8	10
B8	4	6	6	7	7
B9	99	109	144.5	189, 203.5	224.5, 234.5
C					
C1	46, 60, 63	46, 60, 63	70, 75, 90	90, 100, 115, 145	115, 145, 165
C2	M3, M4, M5	M3, M4, M5	M4, M5, M6	M5, M6, M8	M6, M8, M10
C3	8,(11)	8,(11)	14,(19)	19,(22, 24)	24,(28, 32)
C4	30.5	32	33.5	59, 73.5	67, 77
C5	30, 40, 50	30, 40, 50	50, 60, 70	70, 80, 95, 110	95, 110, 130
C6	M3	M3	M5	M6	M8
C7	46, 55	46, 55	64, 70, 80	92, 110, 130	122, 130, 150
C8	1/8"PT	1/8"PT	1/8"PT	1/8"PT	1/4"PT
C9	58, 74	58, 74	80, 90, 105	116, 140, 165	138, 165, 190

■ Mass Moments of Inertia (kg · cm²)

Ratio	47	64	90	110	140
25	0.03	0.03	0.15	0.45	2.70
35	0.03	0.03	0.15	0.45	2.70
50	0.03	0.03	0.14	0.40	2.60
70	0.03	0.03	0.14	0.40	2.60
100	0.03	0.03	0.14	0.40	2.60

Model No.	Unit	Ratio	47	64	90	110	140
Rated Output Torque	Nm	25	20	50	155	333	618
		35	19	47	142	309	573
		50	20	50	155	333	618
		70	19	47	142	309	573
		100	16	43	136	294	549
Max. Output Torque	Nm	25~100	3 Times of Rated Output Torque				
Rated Input Speed	rpm	25~100	3,000	3,000	3,000	3,000	3,000
Max. Input Speed	rpm	25~100	6,000	6,000	6,000	6,000	6,000
Backlash P0	arc min	25~100	≤5	≤5	≤5	≤5	≤5
Backlash P1	arc min	25~100	≤7	≤7	≤7	≤7	≤7
Backlash P2	arc min	25~100	≤9	≤9	≤9	≤9	≤9
Torsional Rigidity	Nm/arc min	25~100	6	14	30	86	155
Max. Axial Force Ball Bearing	N	25~100	1,020	1,260	4,230	6,360	7,035
Max. Axial Force Taper Bearing	N	25~100	-	-	7,330	11,500	18,600
Service Life	hr	25~100	10,000 (4,000 / Continuous operation)				
Efficiency	%	25~100	≥94%				
Operating Temperature	°C	25~100	-25° C ~ +90° C				
Lubrication		25~100	Vigo Grease Re #0				
Gearbox Protection Degree		25~100	IP65				
Mounting Position		25~100	Any				
Noise Level	dB	25~100	≤56	≤58	≤60	≤63	≤65
Weight ±3%	Kg	25~100	0.98	1.82	4.45	10.3	17.6