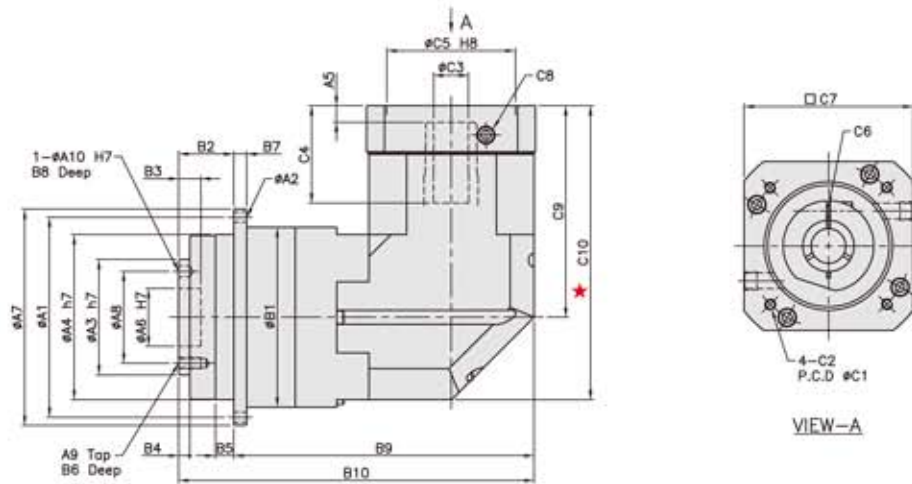


KSDL

ATG SERVOBOX Planetary Reducers



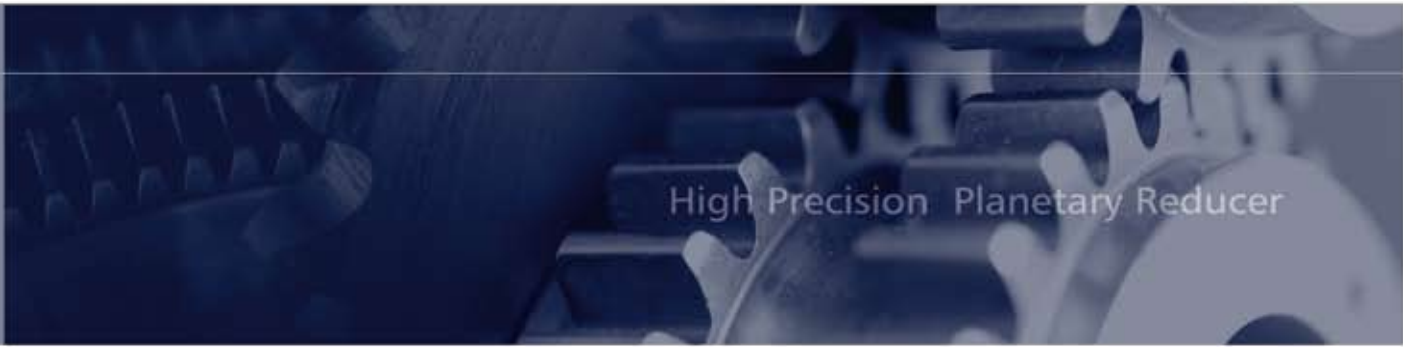
MODEL : KSDL
Single Reduction
RATIO : 4.5.7.10.14.20



*Output Dimensions P.60 참조

unit:mm

Model code	47	64	90	110	140	200	255
A							
A1	67	79	109	135	168	233	280
A2	8-3.4	8-4.5	8-5.5	8-5.5	12-6.6	12-9	16-13.5
A3	28	40	63	80	100	160	180
A4	47	64	90	110	140	200	255
A5	6	6	9, 23.5	10, 20	10	12.5	12.5
A6	12	20	31.5	40	50	80	100
A7	72	86	118	146	179	248	300
A8	20	31.5	50	63	80	125	140
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	11-M10 x P1.5	12-M16 x P2.0
A10	3	5	6	6	8	10	12
B							
B1	59	70	98	125	156	212	255
B2	19.5	19.5	30	29	38	50	66
B3	5	7	12	12	12	16	20
B4	3	4	6	6	6	8	12
B5	5	6	10	10	15	15	20
B6	6.5	10	12	12	16	22	32
B7	4	5	7	8	10	12	18
B8	4	6	6	7	7	10	10
B9	82.5	105.5	163.6	203	227.5	313	332.5
B10	102	125	193.6	232	265.5	363	398.5
C							
C1	46, 60, 63	70, 75, 90	90, 100, 115, 145	115, 145, 165	145, 165, 215	200, 215, 265	200, 265, 300
C2	M3, M4, M5	M4, M5, M8	M5, M6, M8	M6, M8, M10	M8, M10, M12	M10, M12	M12, M16
C3	8, (11)	14, (19)	19, (24)	24, (32)	28, 35	38, 42, 48, 55	42, 48, 55
C4	27	33.5, 41.5	53, 67.5	66, 77	85	132	132
C5	30, 40, 50	50, 60, 70	70, 80, 95, 110	95, 110, 130	110, 130, 180	114.3, 180, 230	114.3, 230, 250
C6	M3 x P0.5	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M10 x P1.5	M10 x P1.5
C7	46, 55	64, 70, 80	92, 110, 130	122, 130, 150	146, 150, 190	182, 200, 250	222, 250, 265
C8	1/8"PT	1/8"PT	1/8"PT	1/4"PT	1/4"PT	3/8"PT	3/8"PT
C9	60	77, 85	115.3, 129.8	141, 151	174	235	235
C10	82	108, 116	160.3, 174.8	201, 211	245	341	362



High Precision Planetary Reducer

■ Mass Moments of Inertia (kg · cm²)

Ratio	47	64	90	110	140	200	255
4	0.09	0.36	2.28	6.85	23.5	68.1	134.8
5	0.09	0.36	2.28	6.85	23.5	68.1	134.8
7	0.09	0.36	2.28	6.85	23.5	68.1	134.8
10	0.09	0.36	2.28	6.85	23.5	68.1	134.8
14	0.03	0.08	1.88	6.20	21.8	66.5	120.2
20	0.03	0.08	1.88	6.20	21.8	66.3	118.8

Model No.		Unit	Ratio	47	64	90	110	140	200	255
Rated Output Torque (Nominal Output Torque)	T_{2N}	Nm	4	22	60	160	335	650	1,200	2,020
			5	20	50	155	333	618	1,189	2,010
			7	19	47	142	309	573	1,108	1,870
			10	16	43	136	294	549	1,059	1,779
			14	19	47	142	309	573	1,108	1,870
			20	16	43	136	294	549	1,059	1,779
Max. Acceleration Torque	T_{2B}	Nm	4~20	1.8 Times of Rated Output Torque						
Max. Output Torque Emergency Stop Torque	T_{2NOT}	Nm	4~20	3 Times of Rated Output Torque						
Rated Input Speed	n_{IN}	rpm	4~20	3,000	3,000	3,000	3,000	3,000	3,000	2,000
Max. Input Speed	n_{IB}	rpm	4~20	6,000	6,000	6,000	6,000	5,000	4,000	3,000
Backlash Ps		arcmin	4~20	-	≤2	≤2	≤2	≤2	≤2	≤2
Backlash P0		arcmin	4~20	≤4	≤4	≤4	≤4	≤4	≤4	≤4
Backlash P1		arcmin	4~20	≤6	≤6	≤6	≤6	≤6	≤6	≤6
Backlash P2		arcmin	4~20	≤8	≤8	≤8	≤8	≤8	≤8	≤8
Torsional Rigidity		Nm/arcmin	4~20	6	14	30	86	155	450	1,126
Max. Axial Force Ball Bearing	F_{2aB}	N	4~20	1,020	1,260	4,230	6,360	7,035	17,600	19,800
Max. Axial Force Taper Bearing	F_{2aB}	N	4~20	-	-	7,330	11,500	18,600	36,800	53,600
Service Life	L_{H1}	hr	4~20	20,000(Continuous Operation 10,000hrs)						
Efficiency	η	%	4~20	≥95						
Operating Temperature		°C	4~20	-25°C~ +90°C						
Lubrication			4~20	VIGO GREASE RE #0						
Protection Class			4~20	IP65						
Mounting Position			4~20	ANY						
Noise Level		dB	4~20	≤61	≤63	≤65	≤68	≤70	≤72	≤74
Weight ±3%		Kg	4~20	1.1	2.3	6.9	13.4	23	53.4	89.6

* 연속운전 사용시 본사와 상담후 선정바랍니다.

KSDL

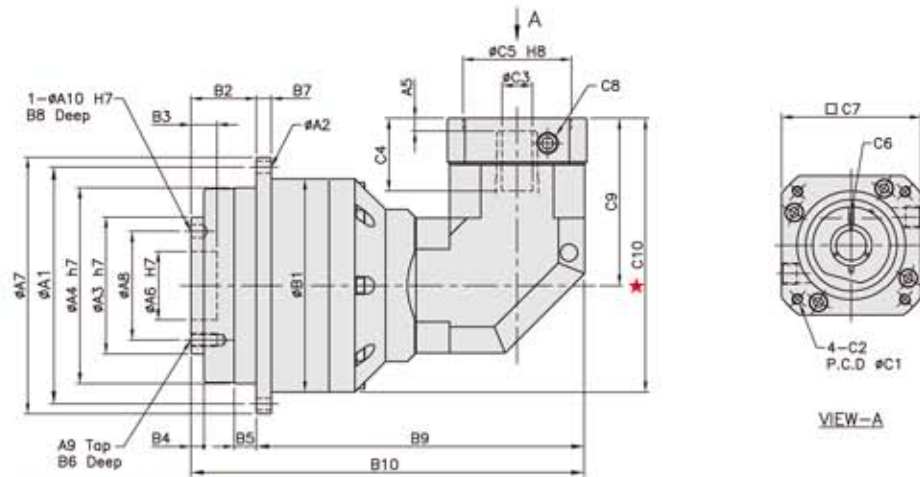
ATG SERVOBOX Planetary Reducers



MODEL : KSDL

Double Reduction

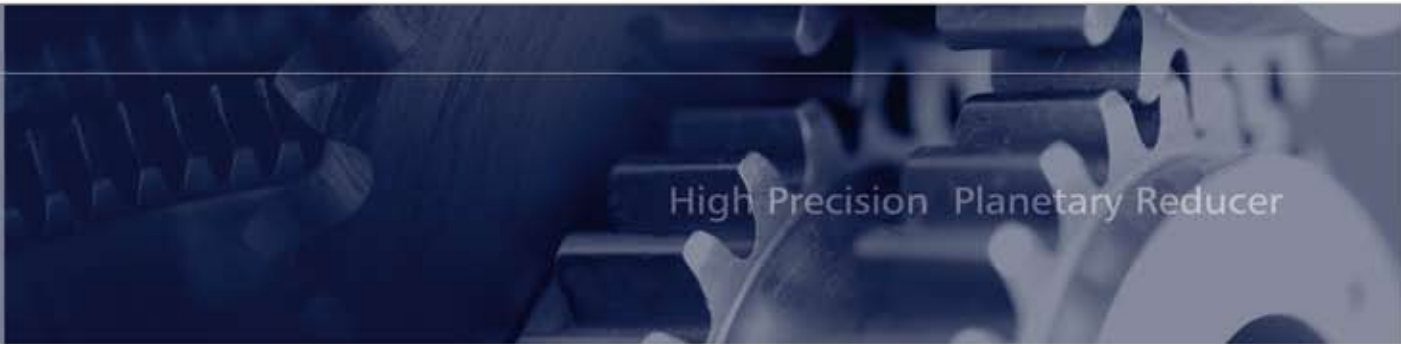
RATIO : 20. 25. 35. 40. 50. 70. 100. 140. 200



*Output Dimensions P.60 참조

unit:mm

Model code	47	64	90	110	140	200	255
A							
A1	67	79	109	135	168	233	280
A2	8-3.4	8-4.5	8-5.5	8-5.5	12-6.6	12-9	16-13.5
A3	28	40	63	80	100	160	180
A4	47	64	90	110	140	200	255
A5	6	6	6	10, 24.5	10, 20	10	12.5
A6	12	20	31.5	40	50	80	100
A7	72	86	118	146	179	248	300
A8	20	31.5	50	63	80	125	140
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	11-M10 x P1.5	12-M16 x P2.0
A10	3	5	6	6	8	10	12
B							
B1	59	70	98	125	156	212	255
B2	19.5	19.5	30	29	38	50	66
B3	5	7	12	12	12	16	20
B4	3	4	6	6	6	8	12
B5	5	6	10	10	15	15	20
B6	6.5	10	12	12	16	22	32
B7	4	5	7	8	10	12	18
B8	4	6	6	7	7	10	10
B9	108.5	118.5	151	210.6	254.5	308.5	379.1
B10	128	138	181	239.6	292.5	358.5	445.1
C							
C1	46, 60, 63	46, 60, 63	70, 75, 90	90, 100, 115, 145	115, 145, 165	145, 165, 215	200, 215, 265
C2	M3, M4, M5	M3, M4, M5	M4, M5, M6	M5, M6, M8, M10	M6, M8, M10	M8, M10, M12	M10, M12
C3	8, (11)	8, (11)	14, (19)	19, (24)	24, (32)	35, (38)	38, 42, 48, 55
C4	27	27	33.5, 41.5	53, 67.5	67, 77	85	117
C5	30, 40, 50	30, 40, 50	50, 60, 70	70, 80, 95, 110	95, 110, 130	110, 130, 180	114.3, 180, 230
C6	M3 x P0.5	M3 x P0.5	M5 x P0.8	M6 x P1.0	M8 x P1.25	M10 x P1.5	M10 x P1.5
C7	46, 55	46, 55	64, 70, 80	92, 110, 130	122, 130, 150	146, 150, 190	182, 200, 250
C8	1/8"PT	1/8"PT	1/8"PT	1/8"PT	1/4"PT	3/8"PT	3/8"PT
C9	61	61	77, 85	115.3, 129.8	141, 151	165.7	235
C10	90.5	96	126, 134	177.8, 192.3	219, 229	271.7	362.5



High Precision Planetary Reducer

■ Mass Moments of Inertia (kg · cm²)

Ratio	47	64	90	110	140	200	255
20	0.09	0.09	0.36	2.28	6.85	22.8	68.2
25	0.09	0.09	0.36	2.28	6.85	22.8	68.2
35	0.09	0.09	0.36	2.28	6.85	22.8	68.2
40	0.09	0.09	0.36	2.28	6.85	22.8	68.2
50	0.09	0.09	0.36	2.28	6.85	22.8	68.2
70	0.09	0.09	0.36	2.28	6.85	22.8	68.2
100	0.09	0.09	0.36	2.28	6.85	22.8	68.2
140	0.03	0.03	0.08	1.88	6.20	21.1	64.9
200	0.03	0.03	0.08	1.88	6.20	21.1	64.9

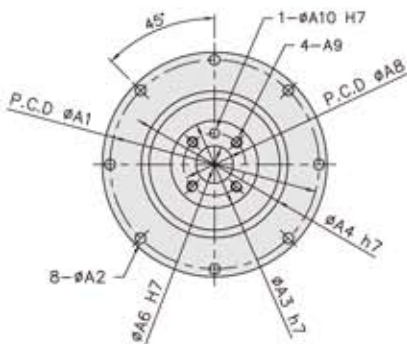
Model No.		Unit	Ratio	47	64	90	110	140	200	255
Rated Output Torque (Nominal Output Torque)	T_{2N}	Nm	20	22	60	160	335	650	1,200	2,020
			25	20	50	155	333	618	1,189	2,010
			35	19	47	142	309	573	1,108	1,870
			40	22	60	160	335	650	1,200	2,020
			50	20	50	155	333	618	1,189	2,010
			70	19	47	142	309	573	1,108	1,870
			100	16	43	136	294	549	1,059	1,779
			140	19	47	142	309	573	1,108	1,870
			200	16	43	136	294	549	1,059	1,779
Max. Acceleration Torque	T_{2B}	Nm	20~200	1.8 Times of Rated Output Torque						
Max. Output Torque Emergency Stop Torque	T_{2NOT}	Nm	20~200	3 Times of Rated Output Torque						
Rated Input Speed	n_{IN}	rpm	20~200	3,000	3,000	3,000	3,000	3,000	3,000	2,000
Max. Input Speed	n_{in}	rpm	20~200	6,000	6,000	6,000	6,000	5,000	4,000	3,000
Backlash Ps		arcmin	20~200	-	-	≤4	≤4	≤4	≤4	≤4
Backlash P0		arcmin	20~200	≤7	≤7	≤7	≤7	≤7	≤7	≤7
Backlash P1		arcmin	20~200	≤9	≤9	≤9	≤9	≤9	≤9	≤9
Backlash P2		arcmin	20~200	≤12	≤12	≤12	≤12	≤12	≤12	≤12
Torsional Rigidity		Nm/arcmin	20~200	6	14	30	86	155	450	1,126
Max. Axial Force Ball Bearing	F_{2aB}	N	20~200	1,020	1,260	4,230	6,360	7,035	17,600	19,800
Max. Axial Force Taper Bearing	F_{2aB}	N	20~200	-	-	7,330	11,500	18,600	36,800	53,600
Service Life	L_{H1}	hr	20~200	20,000(Continuous Operation 10,000hrs)						
Efficiency	η	%	20~200	≥92						
Operating Temperature		°C	20~200	-25°C~ +90°C						
Lubrication			20~200	VIGO GREASE RE #0						
Protection Class			20~200	IP65						
Mounting Position			20~200	ANY						
Noise Level		dB	20~200	≤56	≤58	≤60	≤63	≤65	≤67	≤70
Weight ±3%		Kg	20~200	1.08	2	6	11.8	22.3	47.6	90.1

* 연속운전 사용시 본사와 상담후 선정바랍니다.

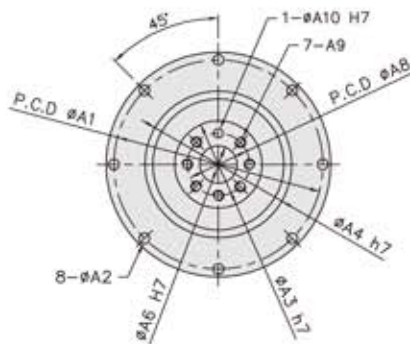


KSD Output Frame Dimension

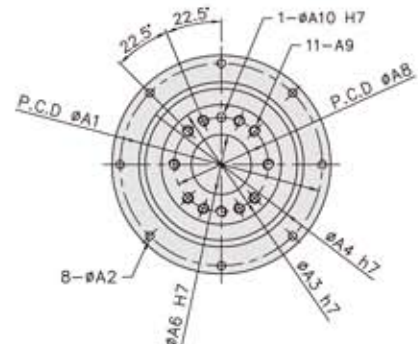
KSD47
KSDL47



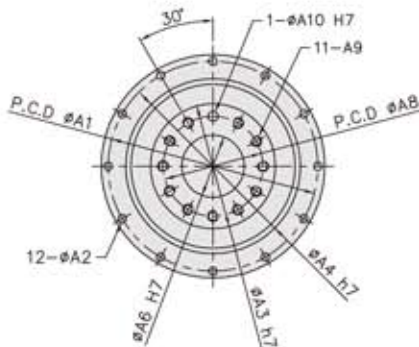
KSD64/90
KSDL64/90



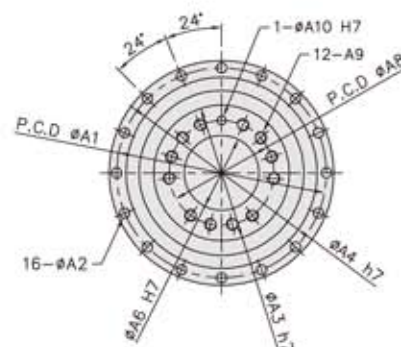
KSD110
KSDL110



KSD140/200
KSDL140/200



KSD255
KSDL255



unit:mm

Model code	KSD47 KSDL47	KSD64 KSDL64	KSD90 KSDL90	KSD110 KSDL110	KSD140 KSDL140	KSD200 KSDL200	KSD255 KSDL255
A1	67	79	109	135	168	233	280
A2	3.4	4.5	5.5	5.5	6.6	9	13.5
A3	28	40	63	80	100	160	180
A4	47	64	90	110	140	200	255
A6	12	20	31.5	40	50	80	100
A8	20	31.5	50	63	80	125	140
A9	M3 x P0.5	M5 x P0.8	M6 x P1.0	M6 x P1.0	M8 x P1.25	M10 x P1.5	M16 x P2.0
A10	3	5	6	6	8	10	12