

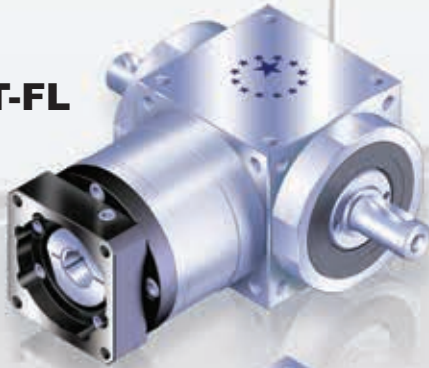


AT / ATB Series

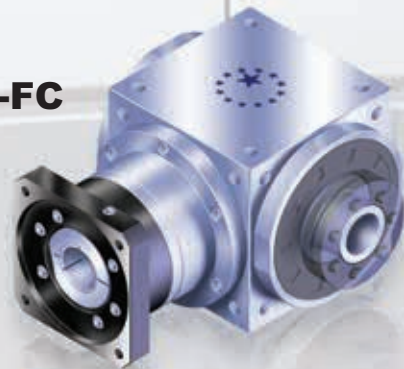
High Precision Spiral
Bevel Gearboxes



AT-FL



AT-FC



AT-C



AT-H



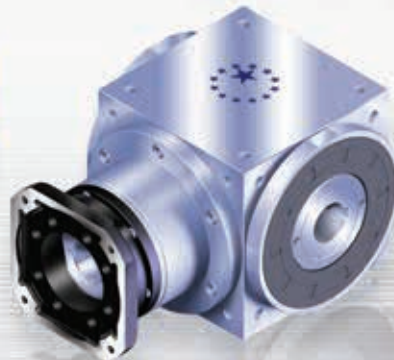
AT-4M



AT-L



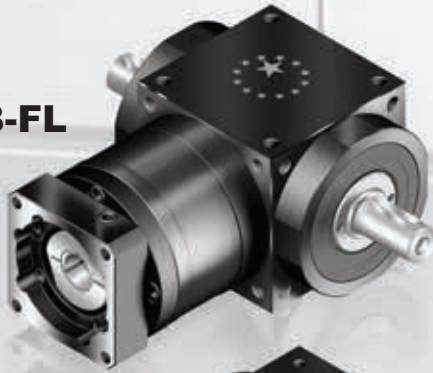
AT-FH



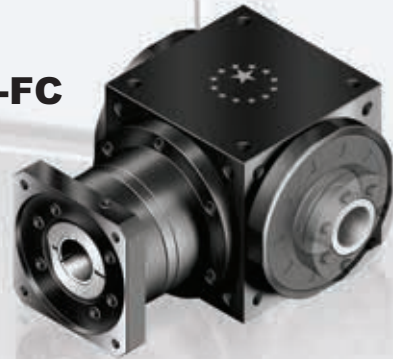
Stainless

"World No.1 APEX DYNAMICS!"

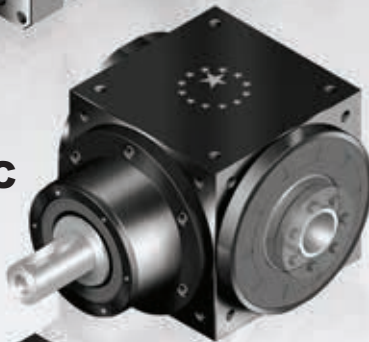
ATB-FL



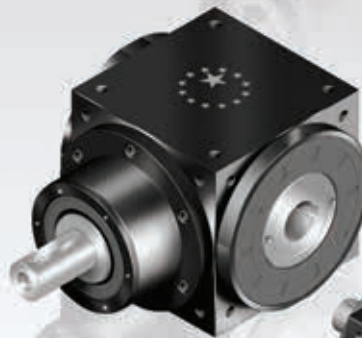
ATB-FC



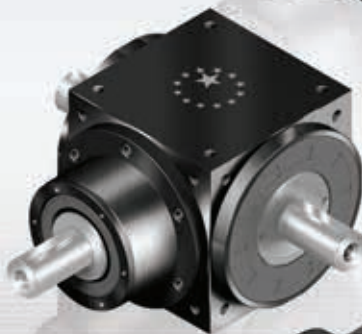
ATB-C



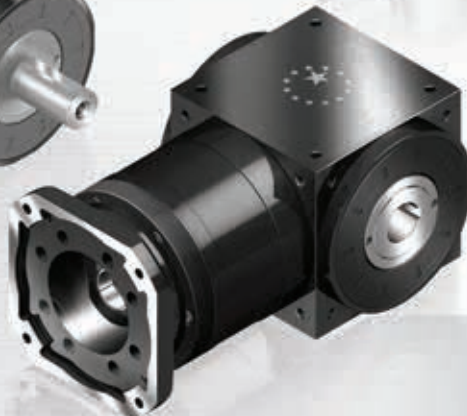
ATB-H



ATB-L



ATB-FH



ATB-4M



Cast Iron

PI/PIIR

AE/AER

AB/ABR

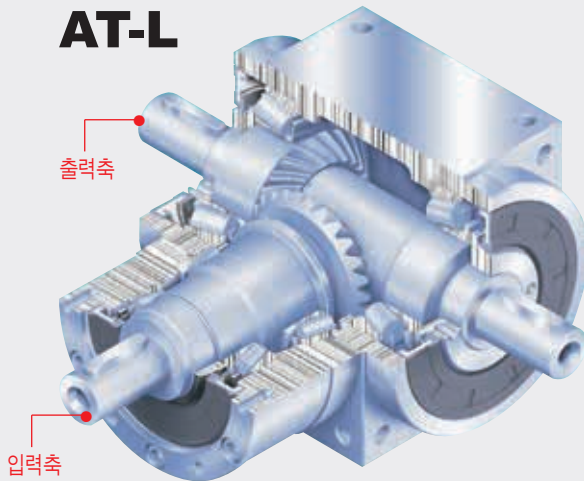
AF/AFR

AD/ADR/ADS

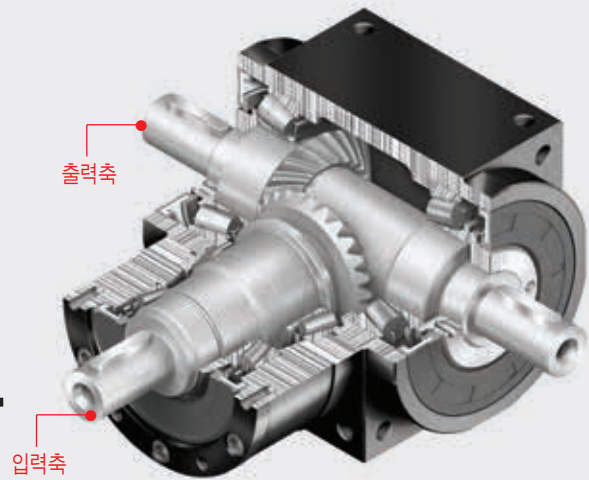
AT/ATB
series

Characteristic Highlights

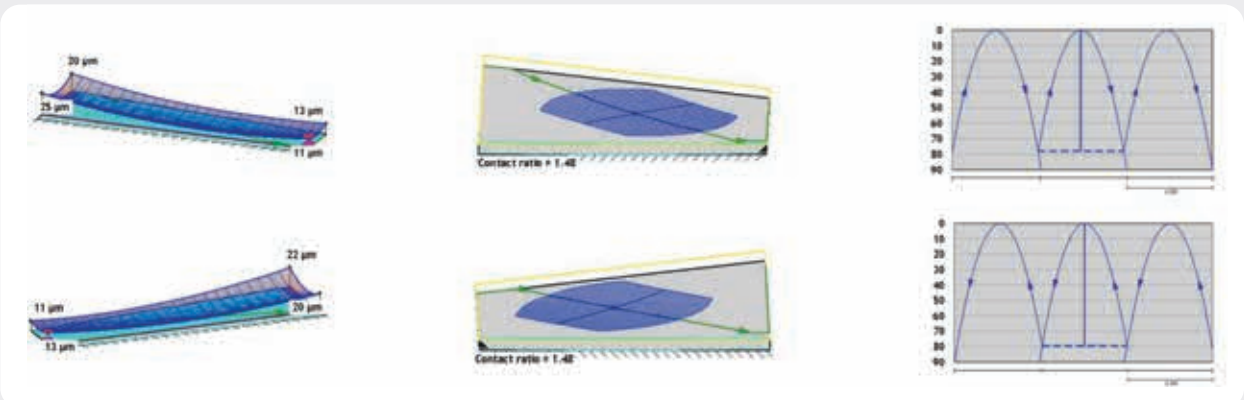
AT-L



ATB-L



- » 입출력축 위치 변경 시, 본사와 상담 요망
- » 최대강도와 내식성을 지닌 일체형 Stainless Steel(SUS) 하우징 (단,ATB는 흑염처리된 Cast Iron 하우징)
- » 설치용이를 위해 복합정밀 가공된 하우징 표면
- » 최적의 조건(고성능 아트 소프트웨어)에 의해 설계된 기어디자인
- » DIN5 규격이상으로 정밀 가공된 Carburized 고 신축성 합금강으로 구성된 기어
- » 전 사업분야에 적용 가능한 다양한 디자인과 Stainless Steel(SUS) 재질로 구성된 입력축과 출력축의 샤프트 (단,ATB는 Alloy Steel 재질)
- » 1/500의 감속비를 창출하기 위해 최적화된 유성기어와 결합되어 있는 고정밀 가공된 Spiral Bevel Gear세트
- » 높은 Torque 와 낮은 Backlash, 간결한 디자인은 모든 서보모터에 최적의 조건으로 적용가능
- » 유지보수가 불필요한 합성 윤활유



AT/ATB Shaft Type Series Specifications



Gearbox Performance

(ATB시리즈의 성능과 치수는 AT시리즈와 동일합니다.)

Model No.	Stage	Ratio	AT065 L	AT075 L	AT090 L	AT110 L	AT140 L	AT170 L	AT210 L	AT240 L	AT280 L	
			AT065 L1	AT075 L1	AT090 L1	AT110 L1	AT140 L1	AT170 L1	AT210 L1	AT240 L1	AT280 L1	
			AT065 H	AT075 H	AT090 H	AT110 H	AT140 H	AT170 H	AT210 H	AT240 H	AT280 H	
			AT065 C	AT075 C	AT090 C	AT110 C	AT140 C	AT170 C	AT210 C	AT240 C	AT280 C	
			AT065 R1	AT075 R1	AT090 R1	AT110 R1	AT140 R1	AT170 R1	AT210 R1	AT240 R1	AT280 R1	
			AT065 LM	AT075 LM	AT090 LM	AT110 LM	AT140 LM	AT170 LM	AT210 LM	AT240 LM	AT280 LM	
			AT065 RM	AT075 RM	AT090 RM	AT110 RM	AT140 RM	AT170 RM	AT210 RM	AT240 RM	AT280 RM	
			AT065 4M	AT075 4M	AT090 4M	AT110 4M	AT140 4M	AT170 4M	AT210 4M	AT240 4M	AT280 4M	
			Nominal Output Torque T_{2N} ⁶	Nm	1	1	25	45	78	150	360	585
1.5	25	45				78	150	360	585	1,300	2,150	3,200
2	24	42				68	150	330	544	1,220	2,010	3,050
3	18	33				54	120	270	450	1,020	1,650	2,850
4	13	28				48	100	224	376	860	1,410	2,300
		5	12	25	40	85	196	320	740	1,210	2,000	
Max Acceleration Torque T_{2B}	Nm	1	1~5	1.5 times Nominal Output Torque								
Max. Acceleration Input Speed n_{1B}	rpm	1	1~5	7,500	6,500	5,500	4,500	3,500	3,000	2,200	2,000	1,700
Standard Backlash ⁵	arcmin	1	1~5	≤ 6	≤ 6	≤ 6	≤ 6	≤ 6	≤ 6	≤ 6	≤ 6	≤ 6
Max. Radial Load F_{1RB} ² Input d1	N	1	1~5	700	950	1,450	2,100	2,700	3,800	7,800	9,600	10,500
Max. Radial Load F_{2RB} ² Output d2	N	1	1~5	900	1,100	1,700	2,700	4,800	6,600	11,500	16,000	18,000
Max. Axial Load F_{1aB} ² Input d1	N	1	1~5	350	425	725	1,050	1,350	1,900	3,900	4,800	5,250
Max. Axial Load F_{2aB} ² Output d2	N	1	1~5	450	550	850	1,350	2,400	3,300	5,750	8,500	9,000
Service Life	hr	1	1~5	20,000 ⁴								
Efficiency η	%	1	1~5	≥ 98%								
Operating Temp ³	°C	1	1~5	-10°C~+90°C								
Lubrication		1	1~5	Synthetic lubrication oils								
Noise Level($n_1=1500$ rpm, No Load)	dB(A)	1	1~5	≤68	≤70	≤74	≤76	≤77	≤78	≤80	≤82	≤83

1. Ratio ($i=N_{in}/N_{out}$).

3. 감속기 작동온도 : -10~90도, 감속기 주변온도 0~40도

5. 백래쉬 측정시 Nominal Output Torque 2%의 힘을 적용하여 측정

2. 기준 : 출력축 중간에 부하 걸리고 출력속도 100rpm 이하, 운전조건에 따라 수치는 변동될수 있으며 Page 111참조

4. S1 service life 10,000hrs (S1:연속운전조건)

6. AT-LM/RM/4M 모델은 1:1 감속비만 제공

Gearbox Inertia

(ATB시리즈의 성능과 치수는 AT시리즈와 동일합니다.)

Model No.	Stage	Ratio	AT065 L	AT075 L	AT090 L	AT110 L	AT140 L	AT170 L	AT210 L	AT240 L	AT280 L	
			AT065 L1	AT075 L1	AT090 L1	AT110 L1	AT140 L1	AT170 L1	AT210 L1	AT240 L1	AT280 L1	
			AT065 H	AT075 H	AT090 H	AT110 H	AT140 H	AT170 H	AT210 H	AT240 H	AT280 H	
			AT065 C	AT075 C	AT090 C	AT110 C	AT140 C	AT170 C	AT210 C	AT240 C	AT280 C	
			AT065 R1	AT075 R1	AT090 R1	AT110 R1	AT140 R1	AT170 R1	AT210 R1	AT240 R1	AT280 R1	
			AT065 LM	AT075 LM	AT090 LM	AT110 LM	AT140 LM	AT170 LM	AT210 LM	AT240 LM	AT280 LM	
			AT065 RM	AT075 RM	AT090 RM	AT110 RM	AT140 RM	AT170 RM	AT210 RM	AT240 RM	AT280 RM	
			AT065 4M	AT075 4M	AT090 4M	AT110 4M	AT140 4M	AT170 4M	AT210 4M	AT240 4M	AT280 4M	
			Mass Moments of inertia J_1	kg · cm ²	1	1	0.51	1.30	3.16	7.70	23.57	58.99
1.5	0.64	1.16				2.82	6.74	19.37	49.28	155.45	283.58	595.78
2	0.44	1.11				2.70	6.31	17.75	45.35	140.24	249.74	511.76
3	0.43	1.09				2.66	6.17	17.18	44.01	134.95	237.71	483.06
4	0.43	1.09				2.65	6.13	17.06	43.70	133.58	234.72	476.26
		5	0.43	1.09	2.65	6.12	17.02	43.60	133.14	233.67	473.58	

Weight

Model No.	Stage	Ratio	AT065	AT075	AT090	AT110	AT140	AT170	AT210	AT240	AT280	
L Series	kg	1	1~5	2.6	4.2	6.8	11.6	19.8	34.8	66.2	155.7	
L1 Series			1~5	2.6	4.1	6.7	11.5	19.5	34.2	65.1	153.4	
H Series			1~5	2.5	3.9	6.4	11.0	18.1	31.6	60.0	89.4	143.4
C Series			1~5	2.8	4.2	6.9	11.4	19.6	33.7	63.3	97.9	149.1
R1 Series			1~5	2.6	4.1	6.7	11.5	19.5	34.2	65.1	96.6	153.4
LM Series			1	3.5	5.6	9.0	15.2	24.1	42.4	81.4	122.0	190.9
RM Series			1	3.5	5.6	9.0	15.2	24.1	42.4	81.4	122.0	190.9
4M Series	1	3.5	5.6	9.1	15.4	24.8	42.6	82.5	123.5	193.3		

PI/PTR

AE/AER

AB/ABR

AF/AFR

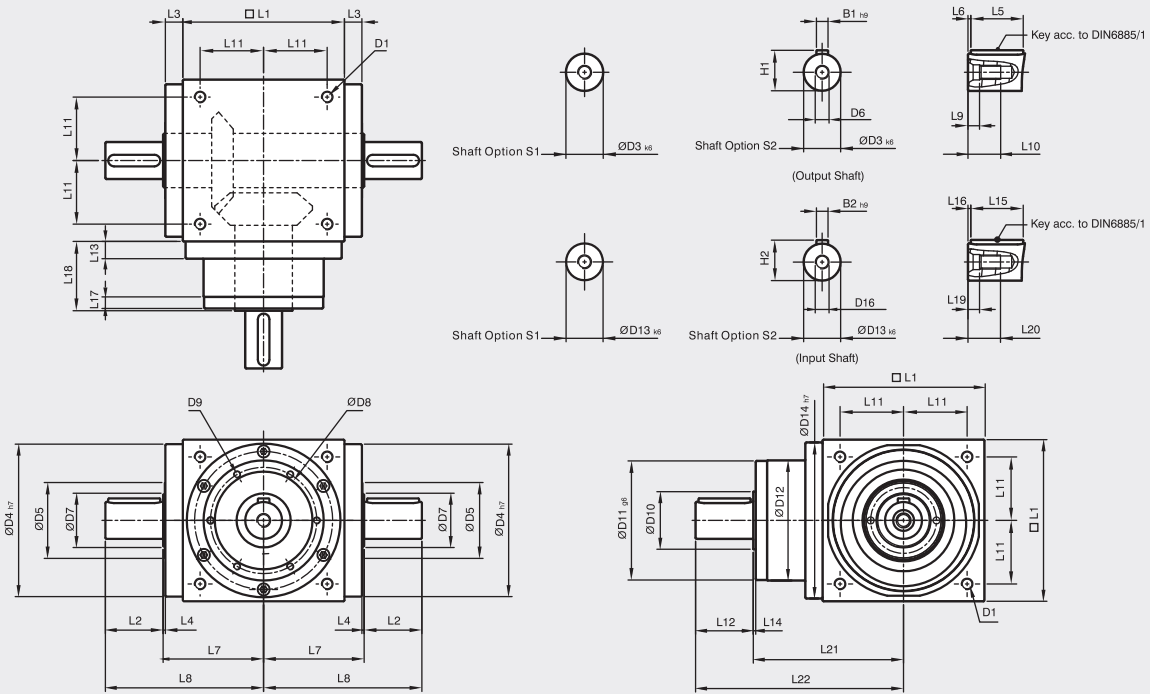
AD/ADR/ADS

AT/ATB series

AT-L/ATB-L Series Dimensions



1-stage(Ratio $i = 1 \sim 5$)



(ATB시리즈의 성능과 치수는 AT시리즈와 동일합니다.)

[unit:mm]

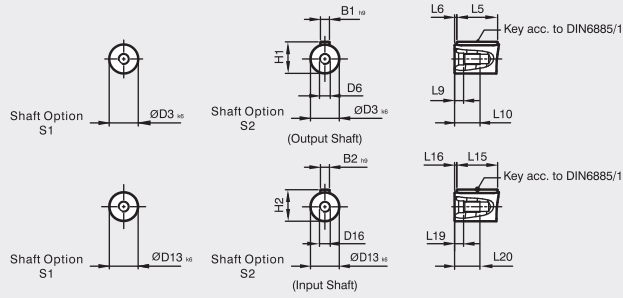
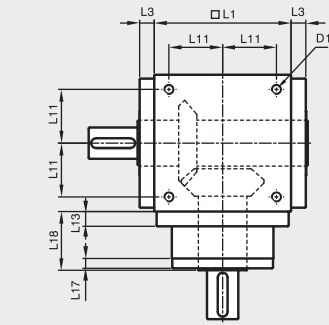
Dimension	AT065L	AT075L	AT090L	AT110L	AT140L	AT170L	AT210L	AT240L	AT280L
D1	M4	M6	M6	M8	M10	M12	M16	M16	M16
D3 _{k6}	13	16	18	22	32	40	50	55	60
D4 _{h7}	63	73	88	108	135	165	205	235	275
D5	31	35	43	53	68	83	104	124	144
D6	M4	M5	M5	M8	M12	M16	M16	M16	M20
D7	21	22	28	33	47	55	75	85	110
D8	53	62	76	95	92	114	142	160	176
D9	4 X M4 X L7	4 X M5 X L8	4 X M5 X L8	6 X M6 X L10	6 X M6 X L10	6 X M8 X L12.5	6 X M8 X L12.5	6 X M8 X L12.5	6 X M10 X L15
D10	15.4	20.4	25.8	35.8	49.8	59.3	79.3	92.3	102.3
D11 _{g6}	62.9	72.9	87	107	103	127	158	178	198
D12	62	72	86	106	104	128	160	180	200
D13 _{k6}	13	16	18	22	32	40	50	55	60
D14 _{h7}	63	73	88	108	135	165	205	235	275
D16	M4	M5	M5	M8	M12	M16	M16	M16	M20
L1	65	75	90	110	140	170	210	240	280
L2	19.5	30	35	40	50	60	75	85	110
L3	13	14.5	15	15	15	15	20	25	25
L4	2	2	2	2	2	2	2	2	2
L5	16	25	28	32	45	50	70	80	100
L6	2	2.5	3.5	4	2.5	5	2.5	2.5	5
L7	47.5	54	62	72	87	102	127	147	167
L8	67	84	97	112	137	162	202	232	277
L9	4.5	4.8	4.8	7.2	10	12	12	12	15
L10	10	12.5	12.5	19	28	36	36	36	42
L11	27	30	36	44	55	67	85	95	110
L12	19.5	30	35	40	50	60	75	85	110
L13	13	15	15	15	15	15	20	25	25
L14	2	2	2	2	2	2	2	2	2
L15	16	25	28	32	45	50	70	80	100
L16	2	2.5	3.5	4	2.5	5	2.5	2.5	5
L17	6	8	8	8	10	10	10	10	10
L18	43	52.5	55	60	60	70	90	105	120
L19	4.5	4.8	4.8	7.2	10	12	12	12	15
L20	10	12.5	12.5	19	28	36	36	36	42
L21	75.5	90	100	115	130	155	195	225	260
L22	95	120	135	155	180	215	270	310	370
B1 _{h9}	5	5	6	6	10	12	14	16	18
B2 _{h9}	5	5	6	6	10	12	14	16	18
H1	15	18	20.5	24.5	35	43	53.5	59	64
H2	15	18	20.5	24.5	35	43	53.5	59	64

AT-L1/R1/ATB-L1/R1 Series Dimensions

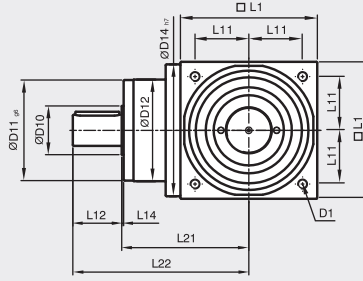
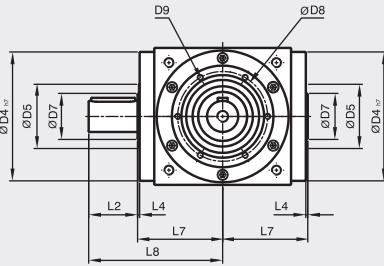
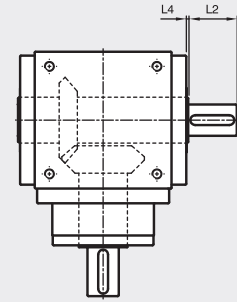


1-stage(Ratio $i = 1 \sim 5$)

AT-L1



AT-R1



(ATB시리즈의 성능과 치수는 AT시리즈와 동일합니다.)

[unit:mm]

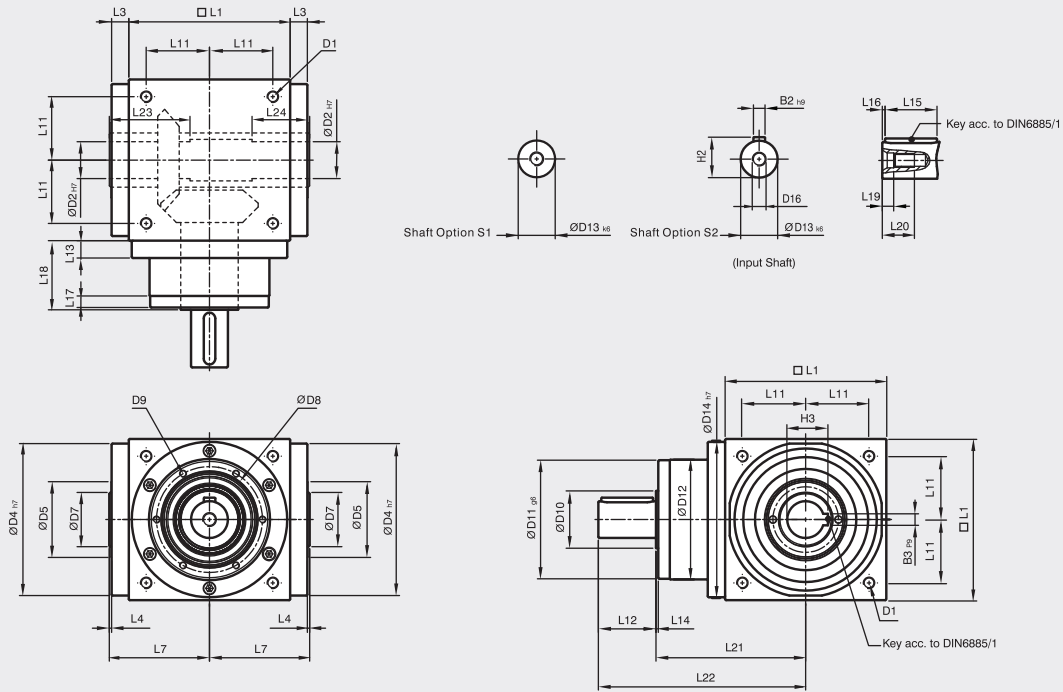
Dimension	AT065L1/R1	AT075L1/R1	AT090L1/R1	AT110L1/R1	AT140L1/R1	AT170L1/R1	AT210L1/R1	AT240L1/R1	AT280L1/R1
D1	M4	M6	M6	M8	M10	M12	M16	M16	M16
D3 k6	13	16	18	22	32	40	50	55	60
D4 h7	63	73	88	108	135	165	205	235	275
D5	31	35	43	53	68	83	104	124	144
D6	M4	M5	M5	M8	M12	M16	M16	M16	M20
D7	21	22	28	33	47	55	75	85	110
D8	53	62	76	95	92	114	142	160	176
D9	4xM4xL7	4xM5xL8	4xM5xL8	6xM6xL10	6xM6xL10	6xM8xL12.5	6xM8xL12.5	6xM8xL12.5	6xM10xL15
D10	15.4	20.4	25.8	35.8	49.8	59.3	79.3	92.3	102.3
D11 g6	62.9	72.9	87	107	103	127	158	178	198
D12	62	72	86	106	104	128	160	180	200
D13 k6	13	16	18	22	32	40	50	55	60
D14 h7	63	73	88	108	135	165	205	235	275
D16	M4	M5	M5	M8	M12	M16	M16	M16	M20
L1	65	75	90	110	140	170	210	240	280
L2	19.5	30	35	40	50	60	75	85	110
L3	13	14.5	15	15	15	15	20	25	25
L4	2	2	2	2	2	2	2	2	2
L5	16	25	28	32	45	50	70	80	100
L6	2	2.5	3.5	4	2.5	5	2.5	2.5	5
L7	47.5	54	62	72	87	102	127	147	167
L8	67	84	97	112	137	162	202	232	277
L9	4.5	4.8	4.8	7.2	10	12	12	12	15
L10	10	12.5	12.5	19	28	36	36	36	42
L11	27	30	36	44	55	67	85	95	110
L12	19.5	30	35	40	50	60	75	85	110
L13	13	15	15	15	15	15	20	25	25
L14	2	2	2	2	2	2	2	2	2
L15	16	25	28	32	45	50	70	80	100
L16	2	2.5	3.5	4	2.5	5	2.5	2.5	5
L17	6	8	8	8	10	10	10	10	10
L18	43	52.5	55	60	60	70	90	105	120
L19	4.5	4.8	4.8	7.2	10	12	12	12	15
L20	10	12.5	12.5	19	28	36	36	36	42
L21	75.5	90	100	115	130	155	195	225	260
L22	95	120	135	155	180	215	270	310	370
B1 h9	5	5	6	6	10	12	14	16	18
B2 h9	5	5	6	6	10	12	14	16	18
H1	15	18	20.5	24.5	35	43	53.5	59	64
H2	15	18	20.5	24.5	35	43	53.5	59	64

PI/PIR
 AE/AER
 AB/ABR
 AF/AFR
 AD/ADR/ADS
 AT/ATB series

AT-H/ATB-H Series Dimensions



1-stage(Ratio $i = 1 \sim 5$)



(ATB시리즈의 성능과 치수는 AT시리즈와 동일합니다.)

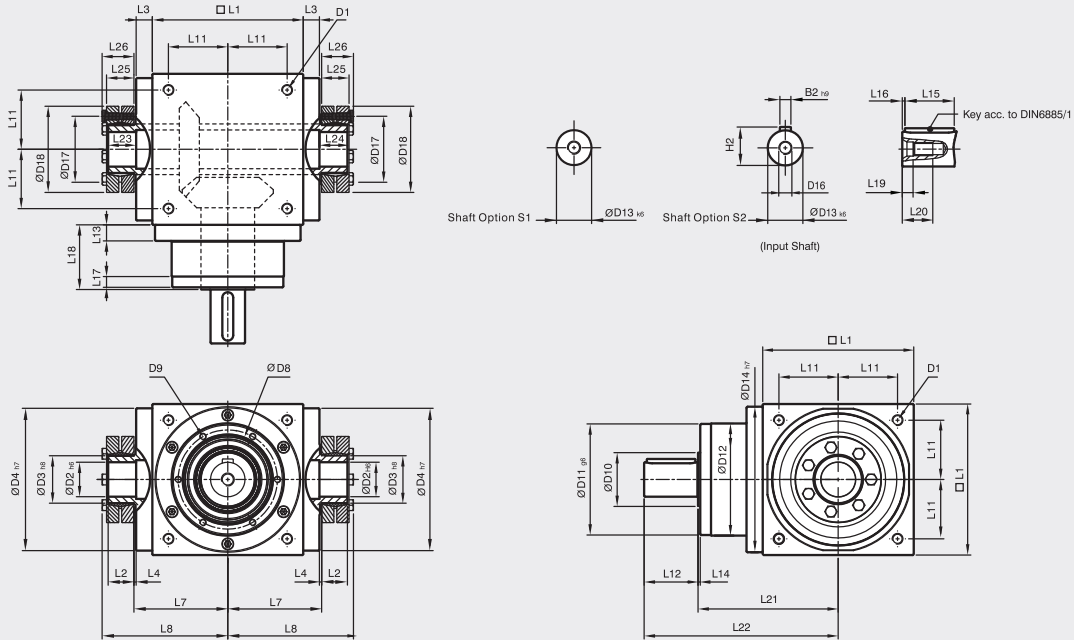
[unit:mm]

Dimension	AT065H	AT075H	AT090H	AT110H	AT140H	AT170H	AT210H	AT240H	AT280H
D1	M4	M6	M6	M8	M10	M12	M16	M16	M16
D2 _{H7}	13	14	18	22	32	40	50	55	60
D4 _{H7}	63	73	88	108	135	165	205	235	275
D5	31	35	43	53	68	83	104	124	144
D7	21	22	28	33	47	55	75	85	110
D8	53	62	76	95	92	114	142	160	176
D9	4xM4xL7	4xM5xL8	4xM5xL8	6xM6xL10	6xM6xL10	6xM8xL12.5	6xM8xL12.5	6xM8xL12.5	6xM10xL15
D10	15.4	20.4	25.8	35.8	49.8	59.3	79.3	92.3	102.3
D11 _{G6}	62.9	72.9	87	107	103	127	158	178	198
D12	62	72	86	106	104	128	160	180	200
D13 _{K6}	13	16	18	22	32	40	50	55	60
D14 _{H7}	63	73	88	108	135	165	205	235	275
D16	M4	M5	M5	M8	M12	M16	M16	M16	M20
L1	65	75	90	110	140	170	210	240	280
L3	13	14.5	15	15	15	15	20	25	25
L4	2	2	2	2	2	2	2	2	2
L7	47.5	54	62	72	87	102	127	147	167
L11	27	30	36	44	55	67	85	95	110
L12	19.5	30	35	40	50	60	75	85	110
L13	13	15	15	15	15	15	20	25	25
L14	2	2	2	2	2	2	2	2	2
L15	16	25	28	32	45	50	70	80	100
L16	2	2.5	3.5	4	2.5	5	2.5	2.5	5
L17	6	8	8	8	10	10	10	10	10
L18	43	52.5	55	60	60	70	90	105	120
L19	4.5	4.8	4.8	7.2	10	12	12	12	15
L20	10	12.5	12.5	19	28	36	36	36	42
L21	75.5	90	100	115	130	155	195	225	260
L22	95	120	135	155	180	215	270	310	370
L23	40	47	52	53	70	80	95	115	115
L24	30	32	35	35	50	55	65	80	80
B2 _{H9}	5	5	6	6	10	12	14	16	18
B3 _{P9}	5	5	6	6	10	12	14	16	18
H2	15	18	20.5	24.5	35	43	53.5	59	64
H3	15.3	16.3	20.8	24.8	35.3	43.3	53.8	59.3	64.4

AT-C/ATB-C Series Dimensions



1-stage(Ratio $i = 1 \sim 5$)



● 기본 약세사리 2 shrink disk power lock units 포함
(ATB시리즈의 성능과 치수는 AT시리즈와 동일합니다.)

[unit:mm]

Dimension	AT065C	AT075C	AT090C	AT110C	AT140C	AT170C	AT210C	AT240C	AT280C
D1	M4	M6	M6	M8	M10	M12	M16	M16	M16
D2 ^{H6}	13	14	18	22	32	40	50	55	60
D3 ^{H8}	16	16	22	25	44	50	62	68	75
D4 ^{H7}	63	73	88	108	135	165	205	235	275
D8	53	62	76	95	92	114	142	160	176
D9	4xM4xL7	4xM5xL8	4xM5xL8	6xM6xL10	6xM6xL10	6xM8xL12.5	6xM8xL12.5	6xM8xL12.5	6xM10xL15
D10	15.4	20.4	25.8	35.8	49.8	59.3	79.3	92.3	102.3
D11 ^{g6}	62.9	72.9	87	107	103	127	158	178	198
D12	62	72	86	106	104	128	160	180	200
D13 ^{k6}	13	16	18	22	32	40	50	55	60
D14 ^{H7}	63	73	88	108	135	165	205	235	275
D16	M4	M5	M5	M8	M12	M16	M16	M16	M20
D17	26	26	36	38	61	70	86	86	100
D18	41	41	50	50	80	90	110	115	138
L1	65	75	90	110	140	170	210	240	280
L2	14	14	18	18	24	26	29	29	30.5
L3	13	14.5	15	15	15	15	20	25	25
L4	2	2	2	2	2	2	2	2	2
L7	47.5	54	62	72	87	102	127	147	167
L8	66	72.5	85	95	116.5	133.5	161.5	181.5	205
L11	27	30	36	44	55	67	85	95	110
L12	19.5	30	35	40	50	60	75	85	110
L13	13	15	15	15	15	15	20	25	25
L14	2	2	2	2	2	2	2	2	2
L15	16	25	28	32	45	50	70	80	100
L16	2	2.5	3.5	4	2.5	5	2.5	2.5	5
L17	6	8	8	8	10	10	10	10	10
L18	43	52.5	55	60	60	70	90	105	120
L19	4.5	4.8	4.8	7.2	10	12	12	12	15
L20	10	12.5	12.5	19	28	36	36	36	42
L21	75.5	90	100	115	130	155	195	225	260
L22	95	120	135	155	180	215	270	310	370
L23	15	15	20	20	26	28	31	31	32.5
L24	15	15	20	20	26	28	31	31	32.5
L25	15	15	19.5	19.5	25.5	27.5	30.5	30.5	32.5
L26	18.5	18.5	23	23	29.5	31.5	34.5	34.5	38
B2 ^{H9}	5	5	6	6	10	12	14	16	18
H2	15	18	20.5	24.5	35	43	53.5	59	64

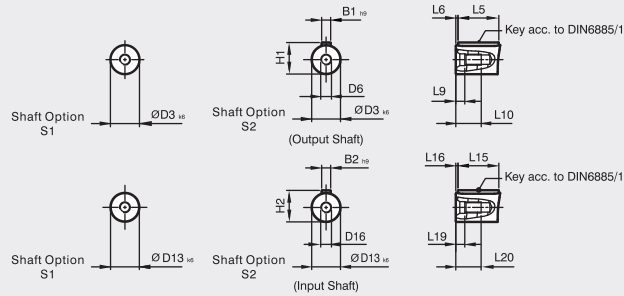
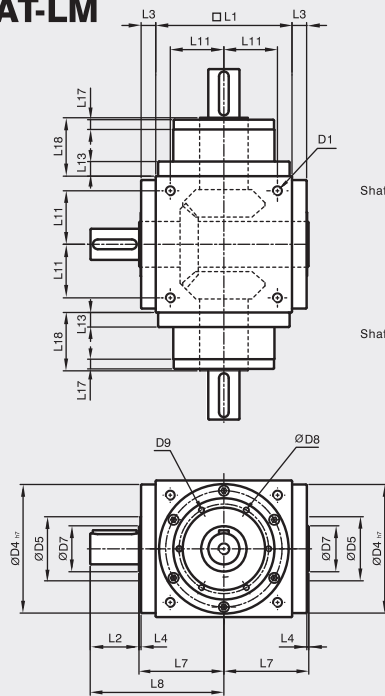
PI/PIR
AE/AER
AB/ABR
AF/AFR
AD/ADR/ADS
AT/ATB series

AT-LM/RM/ATB-LM/RM Series Dimensions

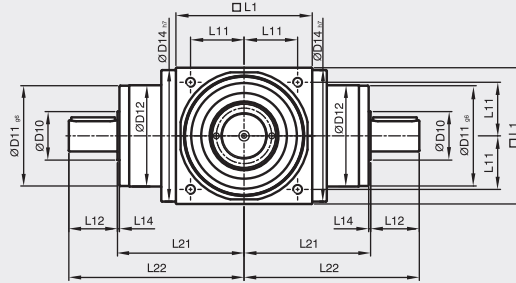
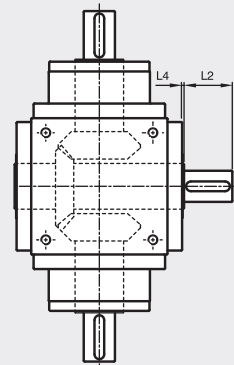


1-stage(Ratio $i = 1$)

AT-LM



AT-RM



(ATB시리즈의 성능과 치수는 AT시리즈와 동일합니다.)

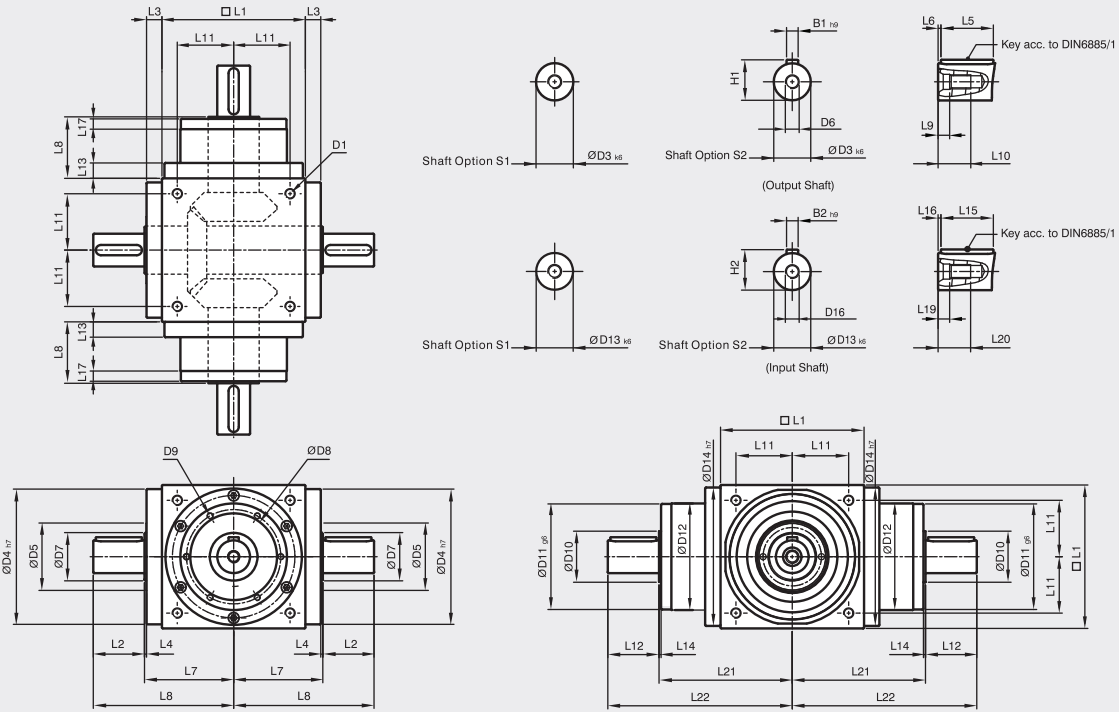
[unit:mm]

Dimension	AT065LM/RM	AT075LM/RM	AT090LM/RM	AT110LM/RM	AT140LM/RM	AT170LM/RM	AT210LM/RM	AT240LM/RM	AT280LM/RM
D1	M4	M6	M6	M8	M10	M12	M16	M16	M16
D3 _{k6}	13	16	18	22	32	40	50	55	60
D4 _{h7}	63	73	88	108	135	165	205	235	275
D5	31	35	43	53	68	83	104	124	144
D6	M4	M5	M5	M8	M12	M16	M16	M16	M20
D7	21	22	28	33	47	55	75	85	110
D8	53	62	76	95	92	114	142	160	176
D9	4xM4xL7	4xM5xL8	4xM5xL8	6xM6xL10	6xM6xL10	6xM8xL12.5	6xM8xL12.5	6xM8xL12.5	6xM10xL15
D10	15.4	20.4	25.8	35.8	49.8	59.3	79.3	92.3	102.3
D11 _{g6}	62.9	72.9	87	107	103	127	158	178	198
D12	62	72	86	106	104	128	160	180	200
D13 _{k6}	13	16	18	22	32	40	50	55	60
D14 _{h7}	63	73	88	108	135	165	205	235	275
D16	M4	M5	M5	M8	M12	M16	M16	M16	M20
L1	65	75	90	110	140	170	210	240	280
L2	19.5	30	35	40	50	60	75	85	110
L3	13	14.5	15	15	15	15	20	25	25
L4	2	2	2	2	2	2	2	2	2
L5	16	25	28	32	45	50	70	80	100
L6	2	2.5	3.5	4	2.5	5	2.5	2.5	5
L7	47.5	54	62	72	87	102	127	147	167
L8	67	84	97	112	137	162	202	232	277
L9	4.5	4.8	4.8	7.2	10	12	12	12	15
L10	10	12.5	12.5	19	28	36	36	36	42
L11	27	30	36	44	55	67	85	95	110
L12	19.5	30	35	40	50	60	75	85	110
L13	13	15	15	15	15	15	20	25	25
L14	2	2	2	2	2	2	2	2	2
L15	16	25	28	32	45	50	70	80	100
L16	2	2.5	3.5	4	2.5	5	2.5	2.5	5
L17	6	8	8	8	10	10	10	10	10
L18	43	52.5	55	60	60	70	90	105	120
L19	4.5	4.8	4.8	7.2	10	12	12	12	15
L20	10	12.5	12.5	19	28	36	36	36	42
L21	75.5	90	100	115	130	155	195	225	260
L22	95	120	135	155	180	215	270	310	370
B1 _{h9}	5	5	6	6	10	12	14	16	18
B2 _{h9}	5	5	6	6	10	12	14	16	18
H1	15	18	20.5	24.5	35	43	53.5	59	64
H2	15	18	20.5	24.5	35	43	53.5	59	64

AT-4M/ATB-4M Series Dimensions



1-stage(Ratio $i = 1$)



(ATB시리즈의 성능과 치수는 AT시리즈와 동일합니다.)

[unit:mm]

Dimension	AT065 4M	AT075 4M	AT090 4M	AT110 4M	AT140 4M	AT170 4M	AT210 4M	AT240 4M	AT280 4M
D1	M4	M6	M6	M8	M10	M12	M16	M16	M16
D3 _{k6}	13	16	18	22	32	40	50	55	60
D4 _{h7}	63	73	88	108	135	165	205	235	275
D5	31	35	43	53	68	83	104	124	144
D6	M4	M5	M5	M8	M12	M16	M16	M16	M20
D7	21	22	28	33	47	55	75	85	110
D8	53	62	76	95	92	114	142	160	176
D9	4xM4xL7	4xM5xL8	4xM5xL8	6xM6xL10	6xM6xL10	6xM8xL12.5	6xM8xL12.5	6xM8xL12.5	6xM10xL15
D10	15.4	20.4	25.8	35.8	49.8	59.3	79.3	92.3	102.3
D11 _{g6}	62.9	72.9	87	107	103	127	158	178	198
D12	62	72	86	106	104	128	160	180	200
D13 _{k6}	13	16	18	22	32	40	50	55	60
D14 _{h7}	63	73	88	108	135	165	205	235	275
D16	M4	M5	M5	M8	M12	M16	M16	M16	M20
L1	65	75	90	110	140	170	210	240	280
L2	19.5	30	35	40	50	60	75	85	110
L3	13	14.5	15	15	15	15	20	25	25
L4	2	2	2	2	2	2	2	2	2
L5	16	25	28	32	45	50	70	80	100
L6	2	2.5	3.5	4	2.5	5	2.5	2.5	5
L7	47.5	54	62	72	87	102	127	147	167
L8	67	84	97	112	137	162	202	232	277
L9	4.5	4.8	4.8	7.2	10	12	12	12	15
L10	10	12.5	12.5	19	28	36	36	36	42
L11	27	30	36	44	55	67	85	95	110
L12	19.5	30	35	40	50	60	75	85	110
L13	13	15	15	15	15	15	20	25	25
L14	2	2	2	2	2	2	2	2	2
L15	16	25	28	32	45	50	70	80	100
L16	2	2.5	3.5	4	2.5	5	2.5	2.5	5
L17	6	8	8	8	10	10	10	10	10
L18	43	52.5	55	60	60	70	90	105	120
L19	4.5	4.8	4.8	7.2	10	12	12	12	15
L20	10	12.5	12.5	19	28	36	36	36	42
L21	75.5	90	100	115	130	155	195	225	260
L22	95	120	135	155	180	215	270	310	370
B1 _{h9}	5	5	6	6	10	12	14	16	18
B2 _{h9}	5	5	6	6	10	12	14	16	18
H1	15	18	20.5	24.5	35	43	53.5	59	64
H2	15	18	20.5	24.5	35	43	53.5	59	64

PI/PIR

AE/AER

AB/ABR

AF/AFR

AD/ADR/ADS

AT/ATB series

AT/ATB-Flange Type Series Specifications



Gearbox Performance

(ATB시리즈의 성능과 치수는 AT시리즈와 동일합니다.)

Model No.	Stage	Ratio	AT065FL	AT075FL	AT090FL	AT110FL	AT140FL	AT170FL	AT210FL	AT240FL	AT280FL	
			AT065FL1	AT075FL1	AT090FL1	AT110FL1	AT140FL1	AT170FL1	AT210FL1	AT240FL1	AT280FL1	
			AT065FH	AT075FH	AT090FH	AT110FH	AT140FH	AT170FH	AT210FH	AT240FH	AT280FH	
			AT065FC	AT075FC	AT090FC	AT110FC	AT140FC	AT170FC	AT210FC	AT240FC	AT280FC	
			AT065 FR1	AT075 FR1	AT090 FR1	AT110 FR1	AT140 FR1	AT170 FR1	AT210 FR1	AT240 FR1	AT280 FR1	
Nominal Output Torque T_{2N}	1	1	25	45	78	150	360	585	1,300	2,150	3,200	
		1.5	25	45	78	150	360	585	1,300	2,150	3,200	
		2	24	42	68	150	330	544	1,220	2,010	3,050	
		3	18	33	54	120	270	450	1,020	1,650	2,850	
		4	13	28	48	100	224	376	860	1,410	2,300	
		5	12	25	40	85	196	320	740	1,210	2,000	
	2	7	12	12	33	91	91	91	195	358	358	
		10	24	28	68	150	208	208	430	846	846	
		15	18	33	54	120	270	312	645	1,269	1,269	
		20	13	28	48	100	224	376	860	1,410	1,692	
		25	12	25	40	85	196	320	740	1,210	2,000	
		35	12	25	40	85	196	320	740	1,210	1,790	
	3	50	12	25	40	85	196	320	740	1,210	1,465	
		75	-	-	-	120	210	312	585	1,269	1,269	
		100	-	-	-	100	224	376	780	1,410	1,692	
		125	-	-	-	85	196	320	740	1,210	2,000	
		150	-	-	-	120	135	312	390	975	975	
		200	-	-	-	100	180	376	520	1,300	1,300	
		250	-	-	-	85	196	320	650	1,210	1,625	
	350	-	-	-	85	196	320	740	1,210	1,790		
	500	-	-	-	85	196	320	740	1,210	1,465		
Max Acceleration Torque T_{2B}^4	Nm	1,2,3	1~500 1.5 times Nominal Output Torque									
Max. Acceleration Input Speed n_{1B}	rpm	1	1~5	7,500	6,500	5,500	4,500	3,500	3,000	2,200	2,000	1,700
		2	7~50	8,000	8,000	6,000	6,000	6,000	6,000	4,800	3,600	3,600
		3	75~500	-	-	-	8,000	8,000	6,000	6,000	6,000	6,000
Backlash ⁶	arcmin	1	1~5	≤ 6	≤ 6	≤ 6	≤ 6	≤ 6	≤ 6	≤ 6	≤ 6	≤ 6
		2	7~50	≤ 8	≤ 8	≤ 8	≤ 8	≤ 8	≤ 8	≤ 8	≤ 8	≤ 8
		3	75~500	-	-	-	≤ 10	≤ 10	≤ 10	≤ 10	≤ 10	≤ 10
Max. Radial Load F_{2B}^2	N	1,2,3	1~500	900	1,100	1,700	2,700	4,800	6,600	11,500	16,000	18,000
Output d2												
Max. Axial Load F_{2aB}^2	N	1,2,3	1~500	450	550	850	1,350	2,400	3,300	5,750	8,500	9,000
Output d2												
Service Life	hr	1~3	1~500	20,000 ⁵								
Efficiency η	%	1	1~500	≥ 98%								
		2,3	7~500	≥ 94%								
Operating Temp ³	°C	1,2,3	1~500	-10°C~+90°C								
Lubrication		1,2,3	1~500	Synthetic lubrication oils								
Noise Level($n_1=1500$ rpm, No Load)	dB(A)	1,2,3	1~500	≤71	≤72	≤76	≤77	≤78	≤79	≤81	≤83	≤84

1. Ratio ($i=N_{in}/N_{out}$).

3. 감속기 작동온도 : -10~90도, 감속기 주변온도 0~40도

5. S1 service life 10,000hrs (S1:연속운전조건)

2. 기준 : 출력축 중간에 부하 걸리고 출력속도 100rpm 이하. 운전조건에 따라 수치는 변동될수 있으며 Page 111참조

4. 최대가속토크 $T_{2B} = 60\%$ of T_{2N}

6. 백래쉬 측정시 Nominal Output Torque 2%의 힘을 적용하여 측정

AT/ATB-Flange Type Series Specifications



Gearbox Inertia

(ATB시리즈의 성능과 치수는 AT시리즈와 동일합니다.)

Model No.	Stage	Ratio*	AT065FL	AT075FL	AT090FL	AT110FL	AT140FL	AT170FL	AT210FL	AT240FL	AT280FL
			AT065FL1	AT075FL1	AT090FL1	AT110FL1	AT140FL1	AT170FL1	AT210FL1	AT240FL1	AT280FL1
			AT065FH	AT075FH	AT090FH	AT110FH	AT140FH	AT170FH	AT210FH	AT240FH	AT280FH
			AT065FC	AT075FC	AT090FC	AT110FC	AT140FC	AT170FC	AT210FC	AT240FC	AT280FC
			AT065FR1	AT075FR1	AT090FR1	AT110FR1	AT140FR1	AT170FR1	AT210FR1	AT240FR1	AT280FR1
Mass Moments of inertia J ₁	1	1	0.51	1.30	3.14	7.62	23.54	59.09	195.96	365.38	787.63
		1.5	0.46	1.15	2.80	6.65	19.34	49.38	156.02	279.62	584.28
		2	0.44	1.10	2.68	6.23	17.72	45.44	140.80	245.78	500.26
		3	0.43	1.09	2.64	6.08	17.16	44.11	135.51	233.75	471.56
		4	0.43	1.08	2.63	6.05	17.03	43.79	134.14	230.77	464.76
		5	0.43	1.08	2.63	6.04	16.99	43.69	133.71	229.71	462.08
	2	7	0.15	0.15	0.50	2.79	2.79	2.79	9.91	29.26	29.26
		10	0.15	0.15	0.50	2.80	2.80	2.80	9.96	29.43	29.43
		15	0.15	0.15	0.50	2.80	2.80	2.80	9.96	29.43	29.43
		20	0.15	0.15	0.50	2.80	2.80	2.80	9.96	29.43	29.43
		25	0.15	0.15	0.50	2.80	2.80	2.80	9.96	29.43	29.43
		35	0.15	0.15	0.50	2.79	2.79	2.79	9.91	29.26	29.26
	3	50	0.15	0.15	0.50	2.79	2.79	2.79	9.89	29.20	29.20
		75	-	-	-	2.80	2.80	2.80	9.96	29.43	29.43
		100	-	-	-	2.80	2.80	2.80	9.96	29.43	29.43
		125	-	-	-	2.80	2.80	2.80	9.96	29.43	29.43
		150	-	-	-	2.79	2.79	2.79	9.89	29.20	29.20
		200	-	-	-	2.79	2.79	2.79	9.89	29.20	29.20
		250	-	-	-	2.79	2.79	2.79	9.89	29.20	29.20
	350	-	-	-	2.79	2.79	2.79	9.89	29.20	29.20	
	500	-	-	-	2.79	2.79	2.79	9.89	29.20	29.20	

Weight

(ATB시리즈의 성능과 치수는 AT시리즈와 동일합니다.)

Model No.	Stage	Ratio*	AT065H	AT075H	AT090H	AT110H	AT140H	AT170H	AT210H	AT240H	AT280H
FL Series	1	1~5	2.8	4.4	7.1	12.1	20.9	36.1	69.4	101.2	158.3
	2	7~50	3.2	4.8	8.1	14.3	24.2	38.5	74.1	112.4	171.0
	3	75~500	-	-	-	13.9	23.7	38.8	73.4	110.2	168.7
FL1 Series	1	1~5	2.7	4.3	7.1	11.9	20.3	35.5	68.3	99.6	156.0
	2	7~50	3.2	4.8	8.0	14.2	23.9	37.9	73.0	110.8	168.6
	3	75~500	-	-	-	13.8	23.4	38.2	72.3	108.6	166.4
FH Series	1	1~5	2.6	4.1	6.7	11.4	18.9	32.9	63.2	92.5	146.0
	2	7~50	3.1	4.6	7.7	13.6	22.4	35.3	67.9	103.7	158.7
	3	75~500	-	-	-	13.3	21.9	35.6	67.2	101.5	156.5
FC Series	1	1~5	2.9	4.4	7.2	11.8	20.4	35.0	66.5	96.0	151.7
	2	7~50	3.3	4.9	8.2	14.1	24.1	37.4	71.2	107.2	164.4
	3	75~500	-	-	-	13.7	23.5	37.5	70.5	105.0	162.2
FR1 Series	1	1~5	2.7	4.3	7.1	11.9	20.3	35.5	68.3	99.6	156.0
	2	7~50	3.2	4.8	8.0	14.2	23.9	37.9	73.0	110.8	168.6
	3	75~500	-	-	-	13.8	23.4	38.2	72.3	108.6	166.4

PI/PIIR

AE/AER

AB/ABR

AF/AFR

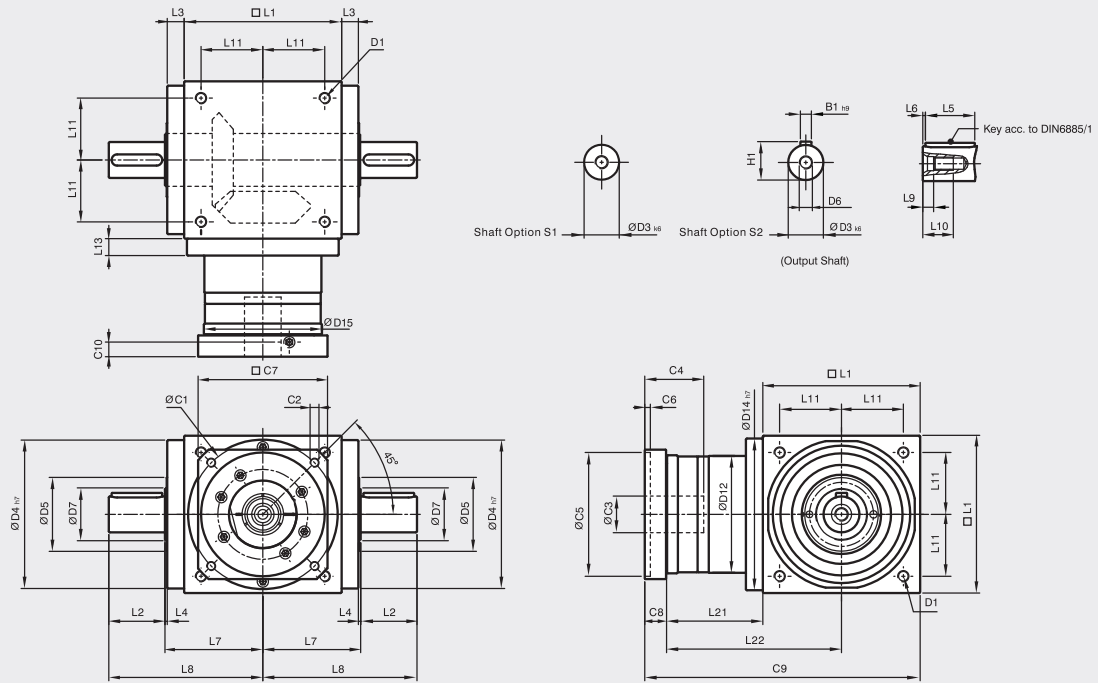
AD/ADR/ADS

AT/ATB series

AT-FL/ATB-FL Series Dimensions



1-stage(Ratio $i = 1 \sim 5$)



(ATB시리즈의 성능과 치수는 AT시리즈와 동일합니다.)

[unit:mm]

Dimension	AT065FL	AT075FL	AT090FL	AT110FL	AT140FL	AT170FL	AT210FL	AT240FL	AT280FL
D1	M4	M6	M6	M8	M10	M12	M16	M16	M16
D3 _{k6}	13	16	18	22	32	40	50	55	60
D4 _{h7}	63	73	88	108	135	165	205	235	275
D5	31	35	43	53	68	83	104	124	144
D6	M4	M5	M5	M8	M12	M16	M16	M16	M20
D7	21	22	28	33	47	55	75	85	110
D12	62	72	86	106	104	128	160	180	200
D14 _{h7}	63	73	88	108	135	165	205	235	275
D15	62.9	72.9	87	107	105	127	158	178	198
L1	65	75	90	110	140	170	210	240	280
L2	19.5	30	35	40	50	60	75	85	110
L3	13	14.5	15	15	15	15	20	25	25
L4	2	2	2	2	2	2	2	2	2
L5	16	25	28	32	45	50	70	80	100
L6	2	2.5	3.5	4	2.5	5	2.5	2.5	5
L7	47.5	54	62	72	87	102	127	147	167
L8	67	84	97	112	137	162	202	232	277
L9	4.5	4.8	4.8	7.2	10	12	12	12	15
L10	10	12.5	12.5	19	28	36	36	36	42
L11	27	30	36	44	55	67	85	95	110
L13	13	15	15	15	15	15	20	25	25
L21	49	60.5	63	69.5	85.5	95	130	144.5	135
L22	81.5	98	108	124.5	155.5	180	235	264.5	275
C1 ³	46	70	100	100	130	165	215	215	235
C2 ³	M4	M5	M6	M6	M8	M10	M12	M12	M12
C3 ³	≤11 / ≤12 ¹	≤14 / ≤15.875 / ≤16 ²	≤19	≤24	≤32	≤38	≤42	≤48	≤55
C4 ³	30	34	40	40	50	60	85	85	116
C5 ³	30	50	80	80	110	130	180	180	200
C6 ³	3.5	8	4	4	5	6	6	6	6
C7 ³	42	60	90	90	115	142	190	190	220
C8 ³	19.5	19	17	17	19.5	22.5	29	29	63
C9 ³	133.5	154.5	170	196.5	245	287.5	369	413.5	478
C10 ³	13.25	13.5	10.75	10.75	13	15	20.75	20.75	53.5
B1 _{h9}	5	5	6	6	10	12	14	16	18
H1	15	18	20.5	24.5	35	43	53.5	59	64

1. AT065 FLM1은 C3≤12mm를 옵션으로 제공

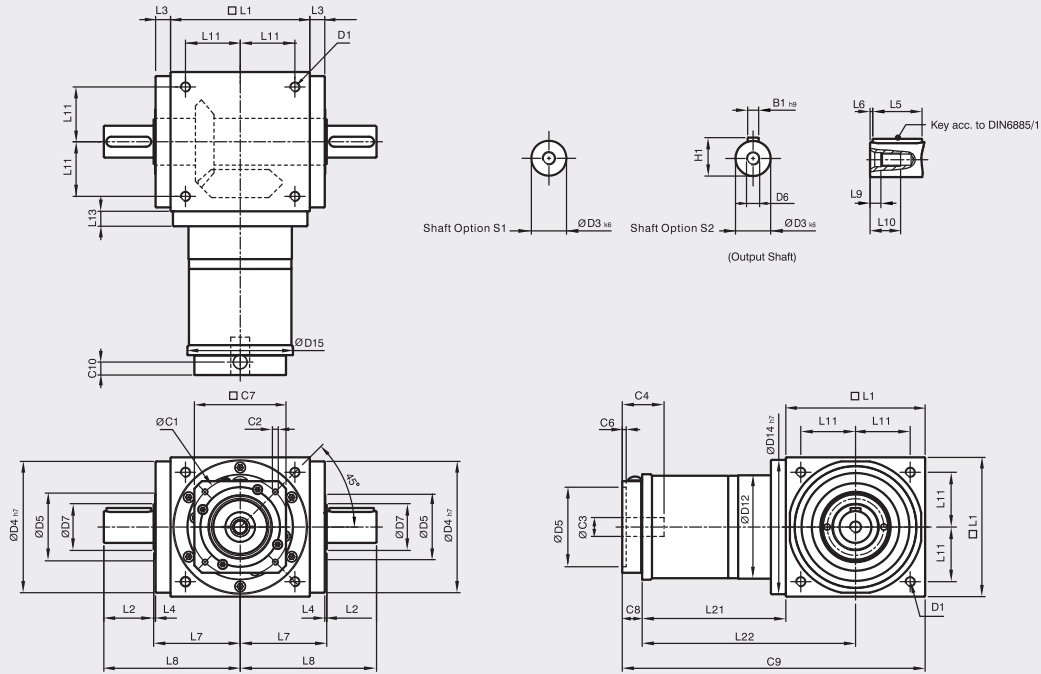
2. AT075 FLM1은 C3≤12mm를, AT075 FLM2는 C3≤15.875mm를 옵션으로 제공

3. C1~C10은 적용모터에 따라 치수가 상이하니 당사 홈페이지 www.apexdynakorea.co.kr에 접속 후 디자인 Tool을 이용하여 치수를 확인할 수 있습니다.

AT-FL/ATB-FL Series Dimensions



2-stage(Ratio $i = 7 \sim 50$)



(ATB시리즈의 성능과 치수는 AT시리즈와 동일합니다.)

[unit:mm]

Dimension	AT065FL	AT075FL	AT090FL	AT110FL	AT140FL	AT170FL	AT210FL	AT240FL	AT280FL
D1	M4	M6	M6	M8	M10	M12	M16	M16	M16
D3 _{k6}	13	16	18	22	32	40	50	55	60
D4 _{h7}	63	73	88	108	135	165	205	235	275
D5	31	35	43	53	68	83	104	124	144
D6	M4	M5	M5	M8	M12	M16	M16	M16	M20
D7	21	22	28	33	47	55	75	85	110
D12	62	72	86	106	104	128	160	180	200
D14 _{h7}	63	73	88	108	135	165	205	235	275
D15	62.9	72.9	87	107	106	127	158	178	198
L1	65	75	90	110	140	170	210	240	280
L2	19.5	30	35	40	50	60	75	85	110
L3	13	14.5	15	15	15	15	20	25	25
L4	2	2	2	2	2	2	2	2	2
L5	16	25	28	32	45	50	70	80	100
L6	2	2.5	3.5	4	2.5	5	2.5	2.5	5
L7	47.5	54	62	72	87	102	127	147	167
L8	67	84	97	112	137	162	202	232	277
L9	4.5	4.8	4.8	7.2	10	12	12	12	15
L10	10	12.5	12.5	19	28	36	36	36	42
L11	27	30	36	44	55	67	85	95	110
L13	13	15	15	15	15	15	20	25	25
L21	75	84.5	99	122	144.5	157.5	206.5	239	248
L22	107.5	122	144	177	214.5	242.5	311.5	359	388
C1 ¹	46	46	70	100	100	100	130	165	165
C2 ¹	M4	M4	M5	M6	M6	M6	M8	M10	M10
C3 ¹	≤12	≤12	≤16	≤24	≤24	≤24	≤32	≤38	≤38
C4 ¹	30	30	34	40	40	40	50	60	60
C5 ¹	30	30	50	80	80	80	110	130	130
C6 ¹	3.5	3.5	8	4	4	4	5	6	6
C7 ¹	42	42	60	92	92	92	115	142	142
C8 ¹	21.5	21.5	21.5	20	20	20	24	31	31
C9 ¹	161.5	181	210.5	252	304.5	347.5	440.5	510	559
C10 ¹	14.5	14.5	15.5	13	13	13	16	21	21
B1 _{h9}	5	5	6	6	10	12	14	16	18
H1	15	18	20.5	24.5	35	43	53.5	59	64

1. C1-C10은 적용모터에 따라 치수가 상이하니 당사 홈페이지 www.apexdynakorea.co.kr에 접속 후 디자인 Tool을 이용하여 치수를 확인할 수 있습니다.

PI/PIR

AE/AER

AB/ABR

AF/AFR

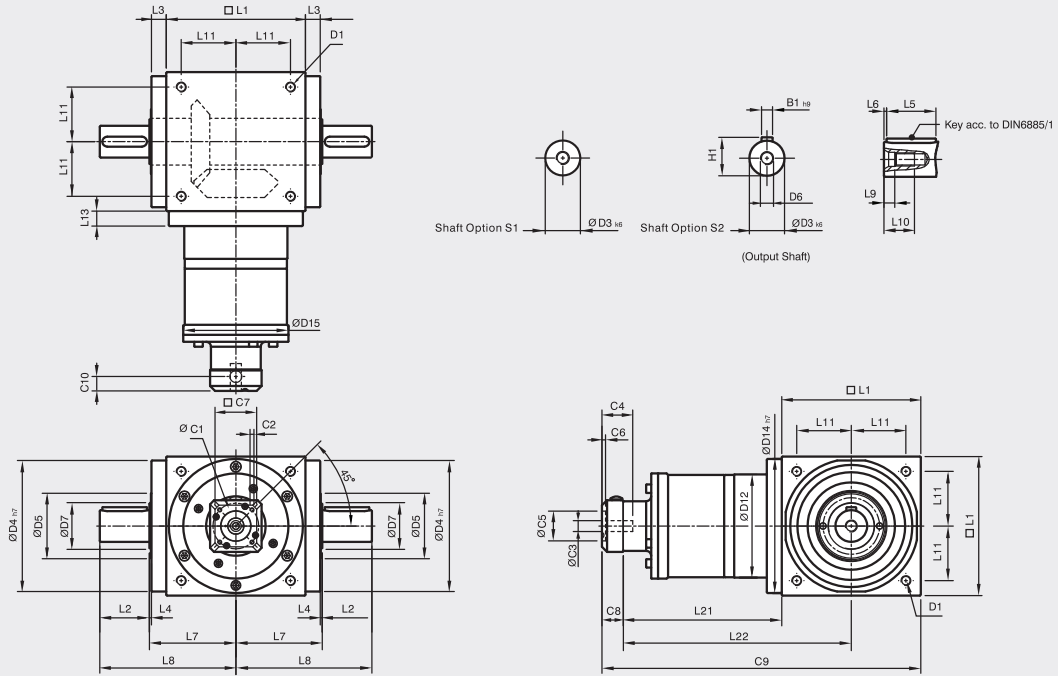
AD/ADR/ADS

AT/ATB series

AT-FL/ATB-FL Series Dimensions



3-stage(Ratio $i = 75 \sim 500$)



(ATB시리즈의 성능과 치수는 AT시리즈와 동일합니다.)

[unit:mm]

Dimension	AT110FL	AT140FL	AT170FL	AT210FL	AT240FL	AT280FL
D1	M8	M10	M12	M16	M16	M16
D3 _{k6}	22	32	40	50	55	60
D4 _{h7}	108	135	165	205	235	275
D5	53	68	83	104	124	144
D6	M8	M12	M16	M16	M16	M20
D7	33	47	55	75	85	110
D12	106	104	128	160	180	200
D14 _{h7}	108	135	165	205	235	275
D15	107	106	127	158	178	198
L1	110	140	170	210	240	280
L2	40	50	60	75	85	110
L3	15	15	15	20	25	25
L4	2	2	2	2	2	2
L5	32	45	50	70	80	100
L6	4	2.5	5	2.5	2.5	5
L7	72	87	102	127	147	167
L8	112	137	162	202	232	277
L9	7.2	10	12	12	12	15
L10	19	28	36	36	36	42
L11	44	55	67	85	95	110
L13	15	15	15	20	25	25
L21	136.5	159.5	183.5	226	269	278
L22	191.5	229.5	268.5	331	389	418
C1 ¹	46	46	70	70	100	100
C2 ¹	M4	M4	M5	M5	M6	M6
C3 ¹	≤12	≤12	≤16	≤16	≤24	≤24
C4 ¹	30	30	34	34	40	40
C5 ¹	30	30	50	50	80	80
C6 ¹	3.5	3.5	8	8	4	4
C7 ¹	42	42	60	60	92	92
C8 ¹	21.5	21.5	21.5	21.5	20	20
C9 ¹	268	321	375	457.5	529	578
C10 ¹	14.5	14.5	15.5	15.5	13	13
B2 _{h9}	6	10	12	14	16	18
H1	24.5	35	43	53.5	59	64

1. C1-C10은 적용모터에 따라 치수가 상이하니 당사 홈페이지 www.apexdynakorea.co.kr에 접속 후 디자인 Tool을 이용하여 치수를 확인할 수 있습니다.

AT-FL1/FR1 ATB-FL1/FR1 Series Dimensions



PI/PIIR

AE/AER

AB/ABR

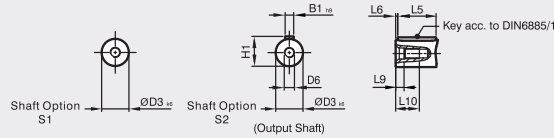
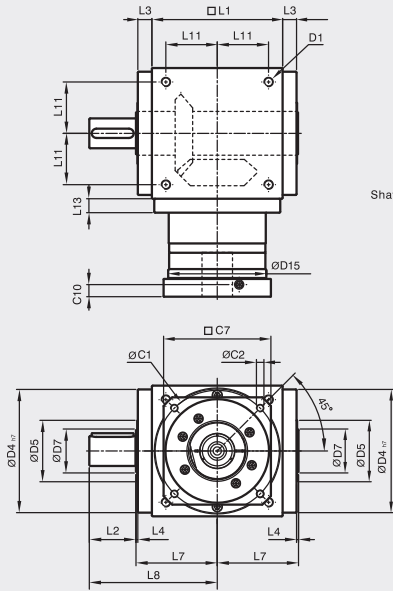
AF/AFR

AD/ADR/ADS

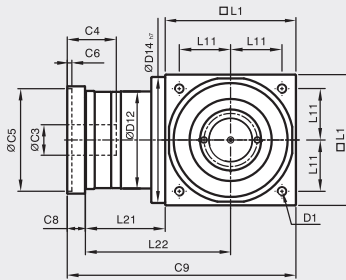
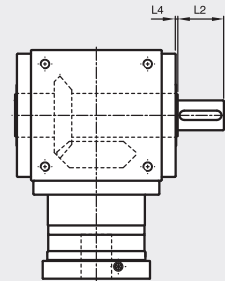
AT/ATB
series

1-stage(Ratio $i = 1 \sim 5$)

AT-FL1



AT-FR1



(ATB시리즈의 성능과 치수는 AT시리즈와 동일합니다.)

[unit:mm]

Dimension	AT065FL1/FR1	AT075FL1/FR1	AT090FL1/FR1	AT110FL1/FR1	AT140FL1/FR1	AT170FL1/FR1	AT210FL1/FR1	AT240FL1/FR1	AT280FL1/FR1
D1	M4	M6	M6	M8	M10	M12	M16	M16	M16
D3 k6	13	16	18	22	32	40	50	55	60
D4 h7	63	73	88	108	135	165	205	235	275
D5	31	35	43	53	68	83	104	124	144
D6	M4	M5	M5	M8	M12	M16	M16	M16	M20
D7	21	22	28	33	47	55	75	85	110
D12	62	72	86	106	104	128	160	180	200
D14 h7	63	73	88	108	135	165	205	235	275
D15	62.9	72.9	87	107	105	127	158	178	198
L1	65	75	90	110	140	170	210	240	280
L2	19.5	30	35	40	50	60	75	85	110
L3	13	14.5	15	15	15	15	20	25	25
L4	2	2	2	2	2	2	2	2	2
L5	16	25	28	32	45	50	70	80	100
L6	2	2.5	3.5	4	2.5	5	2.5	2.5	5
L7	47.5	54	62	72	87	102	127	147	167
L8	67	84	97	112	137	162	202	232	277
L9	4.5	4.8	4.8	7.2	10	12	12	12	15
L10	10	12.5	12.5	19	28	36	36	36	42
L11	27	30	36	44	55	67	85	95	110
L13	13	15	15	15	15	15	20	25	25
L21	49	60.5	63	69.5	85.5	95	130	144.5	135
L22	81.5	98	108	124.5	155.5	180	235	264.5	275
C1 ³	46	70	100	100	130	165	215	215	235
C2 ³	M4	M5	M6	M6	M8	M10	M12	M12	M12
C3 ³	$\leq 11 / \leq 12^1$	$\leq 14 / \leq 15.875 / \leq 16^2$	≤ 19	≤ 24	≤ 32	≤ 38	≤ 42	≤ 48	≤ 55
C4 ³	30	34	40	40	50	60	85	85	116
C5 ³	30	50	80	80	110	130	180	180	200
C6 ³	3.5	8	4	4	5	6	6	6	6
C7 ³	42	60	90	90	115	142	190	190	220
C8 ³	19.5	19	17	17	19.5	22.5	29	29	63
C9 ³	133.5	154.5	170	196.5	245	287.5	369	413.5	478
C10 ³	13.25	13.5	10.75	10.75	13	15	20.75	20.75	53.5
B1 h9	5	5	6	6	10	12	14	16	18
H1	15	18	20.5	24.5	35	43	53.5	59	64

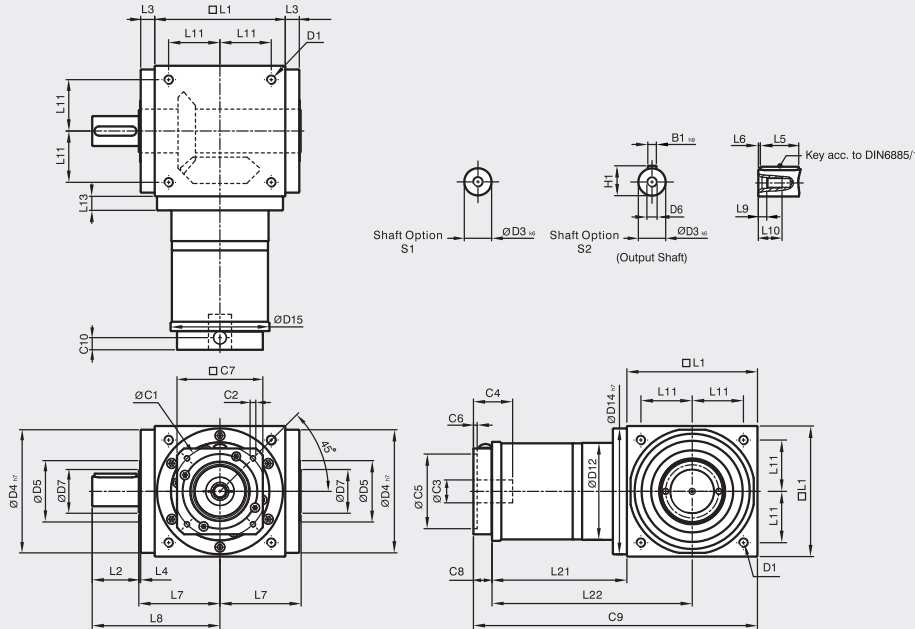
1. AT065 FL1/FR1M1은 C3≤12mm를 옵션으로 제공 2. AT075 FL1/FR1M1은 C3≤12mm를, AT075 FL1/FR1M2는 C3≤15.875mm를 옵션으로 제공
3. C1-C10은 적용모터에 따라 치수가 상이하니 당사 홈페이지 www.apexdynekorea.co.kr에 접속 후 디자인 Tool을 이용하여 치수를 확인할 수 있습니다.

AT-FL1/FR1 ATB-FL1/FR1 Series Dimensions

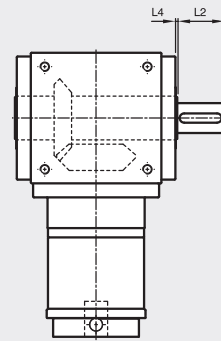


2-stage(Ratio $i = 7 \sim 50$)

AT-FL1



AT-FR1



(ATB시리즈의 성능과 치수는 AT시리즈와 동일합니다.)

[unit:mm]

Dimension	AT065FL1/R1	AT075FL1/R1	AT090FL1/R1	AT110FL1/R1	AT140FL1/R1	AT170FL1/R1	AT210FL1/R1	AT240FL1/R1	AT280FL1/R1
D1	M4	M6	M6	M8	M10	M12	M16	M16	M16
D3 _{k6}	13	16	18	22	32	40	50	55	60
D4 _{h7}	63	73	88	108	135	165	205	235	275
D5	31	35	43	53	68	83	104	124	144
D6	M4	M5	M5	M8	M12	M16	M16	M16	M20
D7	21	22	28	33	47	55	75	85	110
D12	62	72	86	106	104	128	160	180	200
D14 _{h7}	63	73	88	108	135	165	205	235	275
D15	62.9	72.9	87	107	106	127	158	178	198
L1	65	75	90	110	140	170	210	240	280
L2	19.5	30	35	40	50	60	75	85	110
L3	13	14.5	15	15	15	15	20	25	25
L4	2	2	2	2	2	2	2	2	2
L5	16	25	28	32	45	50	70	80	100
L6	2	2.5	3.5	4	2.5	5	2.5	2.5	5
L7	47.5	54	62	72	87	102	127	147	167
L8	67	84	97	112	137	162	202	232	277
L9	4.5	4.8	4.8	7.2	10	12	12	12	15
L10	10	12.5	12.5	19	28	36	36	36	42
L11	27	30	36	44	55	67	85	95	110
L13	13	15	15	15	15	15	20	25	25
L21	75	84.5	99	122	144.5	157.5	206.5	239	248
L22	107.5	122	144	177	214.5	242.5	311.5	359	388
C1 ¹	46	46	70	100	100	100	130	165	165
C2 ¹	M4	M4	M5	M6	M6	M6	M8	M10	M10
C3 ¹	≤12	≤12	≤16	≤24	≤24	≤24	≤32	≤38	≤38
C4 ¹	30	30	34	40	40	40	50	60	60
C5 ¹	30	30	50	80	80	80	110	130	130
C6 ¹	3.5	3.5	8	4	4	4	5	6	6
C7 ¹	42	42	60	92	92	92	115	142	142
C8 ¹	21.5	21.5	21.5	20	20	20	24	31	31
C9 ¹	161.5	181	210.5	252	304.5	347.5	440.5	510	559
C10 ¹	14.5	14.5	15.5	13	13	13	16	21	21
B1 _{h9}	5	5	6	6	10	12	14	16	18
H1	15	18	20.5	24.5	35	43	53.5	59	64

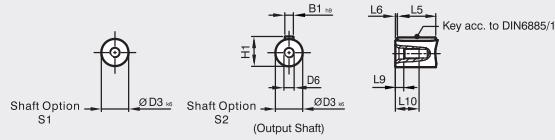
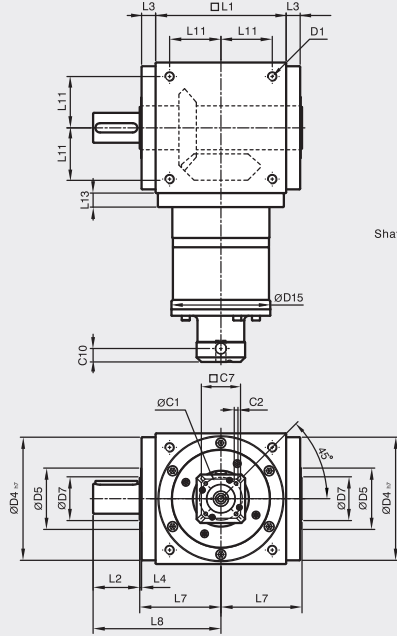
1. C1~C10은 적용모터에 따라 치수가 상이하니 당사 홈페이지 www.apexdynakorea.co.kr에 접속 후 디자인 Tool을 이용하여 치수를 확인할 수 있습니다.

AT-FL1/FR1 ATB-FL1/FR1 Series Dimensions

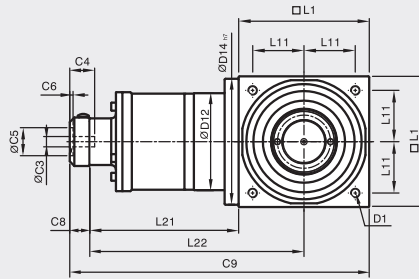
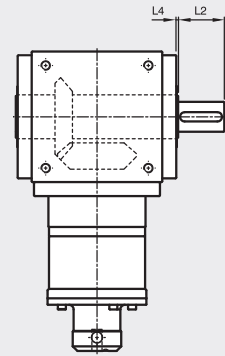


3-stage(Ratio $i = 75 \sim 500$)

AT-FL1



AT-FR1



(ATB시리즈의 성능과 치수는 AT시리즈와 동일합니다.)

[unit:mm]

Dimension	AT110FL1/FR1	AT140FL1/FR1	AT170FL1/FR1	AT210FL1/FR1	AT240FL1/FR1	AT280FL1/R1
D1	M8	M10	M12	M16	M16	M16
D3 _{k6}	22	32	40	50	55	60
D4 _{h7}	108	135	165	205	235	275
D5	53	68	83	104	124	144
D6	M8	M12	M16	M16	M16	M20
D7	33	47	55	75	85	110
D12	106	104	128	160	180	200
D14 _{h7}	108	135	165	205	235	275
D15	107	106	127	158	178	198
L1	110	140	170	210	240	280
L2	40	50	60	75	85	110
L3	15	15	15	20	25	25
L4	2	2	2	2	2	2
L5	32	45	50	70	80	100
L6	4	2.5	5	2.5	2.5	5
L7	72	87	102	127	147	167
L8	112	137	162	202	232	277
L9	7.2	10	12	12	12	15
L10	19	28	36	36	36	42
L11	44	55	67	85	95	110
L13	15	15	15	20	25	25
L21	136.5	159.5	183.5	226	269	278
L22	191.5	229.5	268.5	331	389	418
C1 ¹	46	46	70	70	100	100
C2 ¹	M4	M4	M5	M5	M6	M6
C3 ¹	≤12	≤12	≤16	≤16	≤24	≤24
C4 ¹	30	30	34	34	40	40
C5 ¹	30	30	50	50	80	80
C6 ¹	3.5	3.5	8	8	4	4
C7 ¹	42	42	60	60	92	92
C8 ¹	21.5	21.5	21.5	21.5	20	20
C9 ¹	268	321	375	457.5	529	578
C10 ¹	14.5	14.5	15.5	15.5	13	13
B1 _{h9}	6	10	12	14	16	18
H1	24.5	35	43	53.5	59	64

1. C1-C10은 적용모터에 따라 치수가 상이하니 당사 홈페이지 www.apexdynakorea.co.kr에 접속 후 디자인 Tool을 이용하여 치수를 확인할 수 있습니다.

PI/PIR

AE/AER

AB/ABR

AF/AFR

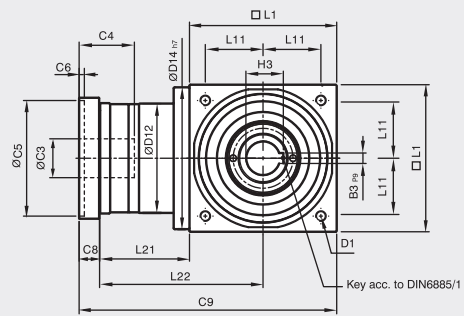
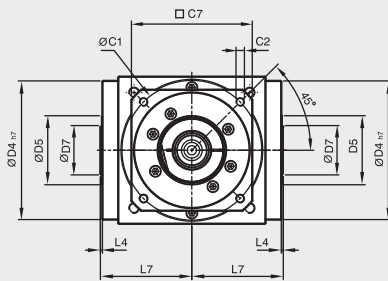
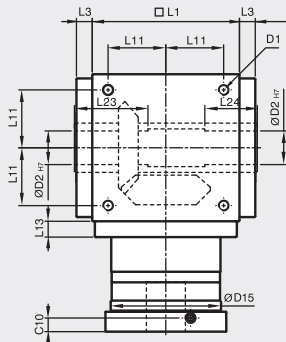
AD/ADR/ADS

AT/ATB
series

AT-FH/ATB-FH Series Dimensions



1-stage(Ratio $i = 1 \sim 5$)



(ATB시리즈의 성능과 치수는 AT시리즈와 동일합니다.)

[unit:mm]

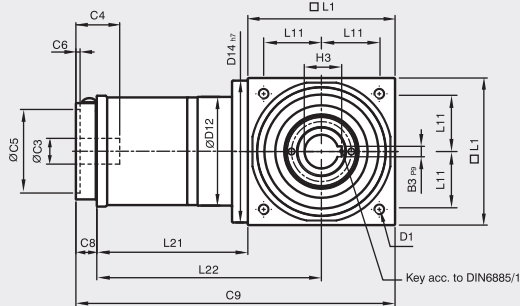
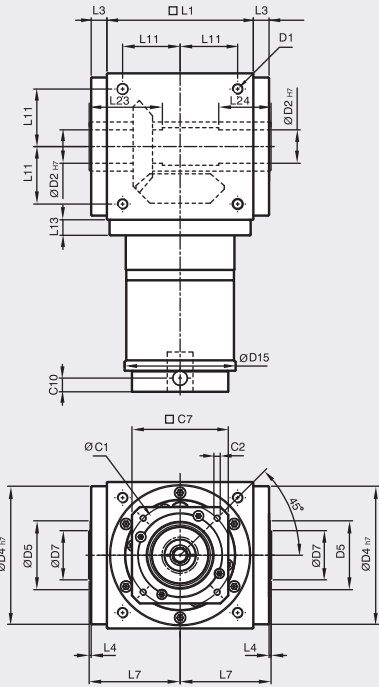
Dimension	AT065FH	AT075FH	AT090FH	AT110FH	AT140FH	AT170FH	AT210FH	AT240FH	AT280FH
D1	M4	M6	M6	M8	M10	M12	M16	M16	M16
D2 _{h7}	13	14	18	22	32	40	50	55	60
D4 _{h7}	63	73	88	108	135	165	205	235	275
D5	31	35	43	53	68	83	104	124	144
D7	21	22	28	33	47	55	75	85	110
D12	62	72	86	106	104	128	160	180	200
D14 _{h7}	63	73	88	108	135	165	205	235	275
D15	62.9	72.9	87	107	105	127	158	178	198
L1	65	75	90	110	140	170	210	240	280
L3	13	14.5	15	15	15	15	20	25	25
L4	2	2	2	2	2	2	2	2	2
L7	47.5	54	62	72	87	102	127	147	167
L11	27	30	36	44	55	67	85	95	110
L13	13	15	15	15	15	15	20	25	25
L21	49	60.5	63	69.5	85.5	95	130	144.5	135
L22	81.5	98	108	124.5	155.5	180	235	264.5	275
L23	40	47	52	53	70	80	95	115	115
L24	30	32	35	40	50	55	65	80	80
C1 ³	46	70	100	100	130	165	215	215	235
C2 ³	M4	M5	M6	M6	M8	M10	M12	M12	M12
C3 ³	≤11 / ≤12 ¹	≤14 / ≤15.875 / ≤16 ²	≤19	≤24	≤32	≤38	≤42	≤48	≤55
C4 ³	30	34	40	40	50	60	85	85	116
C5 ³	30	50	80	80	110	130	180	180	200
C6 ³	3.5	8	4	4	5	6	6	6	6
C7 ³	42	60	90	90	115	142	190	190	220
C8 ³	19.5	19	17	17	19.5	22.5	29	29	63
C9 ³	133.5	154.5	170	196.5	245	287.5	369	413.5	478
C10 ³	13.25	13.5	10.75	10.75	13	15	20.75	20.75	53.5
B3 _{h9}	5	5	6	6	10	12	14	16	18
H3	15.3	16.3	20.8	24.8	35.3	43.3	53.8	59.3	64.4

1. AT065 FHM1은 C3≤12mm를 옵션으로 제공 2. AT075 FHM1은 C3≤12mm를, AT075 FHM2는 C3≤15.875mm를 옵션으로 제공
 3. C1~C10은 적용모터에 따라 치수가 상이하니 당사 홈페이지 www.apexdynakorea.co.kr에 접속 후 디자인 Tool을 이용하여 치수를 확인할 수 있습니다.

AT-FH/ATB-FH Series Dimensions



2-stage(Ratio $i = 7 \sim 50$)



(ATB시리즈의 성능과 치수는 AT시리즈와 동일합니다.)

[unit:mm]

Dimension	AT065FH	AT075FH	AT090FH	AT110FH	AT140FH	AT170FH	AT210FH	AT240FH	AT280FH
D1	M4	M6	M6	M8	M10	M12	M16	M16	M16
D2 _{H7}	13	14	18	22	32	40	50	55	60
D4 _{H7}	63	73	88	108	135	165	205	235	275
D5	31	35	43	53	68	83	104	124	144
D7	21	22	28	33	47	55	75	85	110
D12	62	72	86	106	104	128	160	180	200
D14 _{H7}	63	73	88	108	135	165	205	235	275
D15	62.9	72.9	87	107	106	127	158	178	198
L1	65	75	90	110	140	170	210	240	280
L3	13	14.5	15	15	15	15	20	25	25
L4	2	2	2	2	2	2	2	2	2
L7	47.5	54	62	72	87	102	127	147	167
L11	27	30	36	44	55	67	85	95	110
L13	13	15	15	15	15	15	20	25	25
L21	75	84.5	99	122	144.5	157.5	206.5	239	248
L22	107.5	122	144	177	214.5	242.5	311.5	359	388
L23	40	47	52	53	70	80	95	115	115
L24	30	32	35	35	50	55	65	80	80
C1 ¹	46	46	70	100	100	100	130	165	165
C2 ¹	M4	M4	M5	M6	M6	M6	M8	M10	M10
C3 ¹	≤12	≤12	≤16	≤24	≤24	≤24	≤32	≤38	≤38
C4 ¹	30	30	34	40	40	40	50	60	60
C5 ¹	30	30	50	80	80	80	110	130	130
C6 ¹	3.5	3.5	8	4	4	4	5	6	6
C7 ¹	42	42	60	92	92	92	115	142	142
C8 ¹	21.5	21.5	21.5	20	20	20	24	31	31
C9 ¹	161.5	181	210.5	252	304.5	347.5	440.5	510	559
C10 ¹	14.5	14.5	15.5	13	13	13	16	21	21
B3 _{P9}	5	5	6	6	10	12	14	16	18
H3	15.3	16.3	20.8	24.8	35.3	43.3	53.8	59.3	64.4

1. C1-C10은 적용모터에 따라 치수가 상이하니 당사 홈페이지 www.apexdynakorea.co.kr에 접속 후 디자인 Tool을 이용하여 치수를 확인할 수 있습니다.

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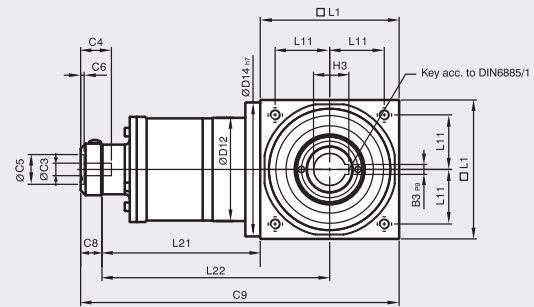
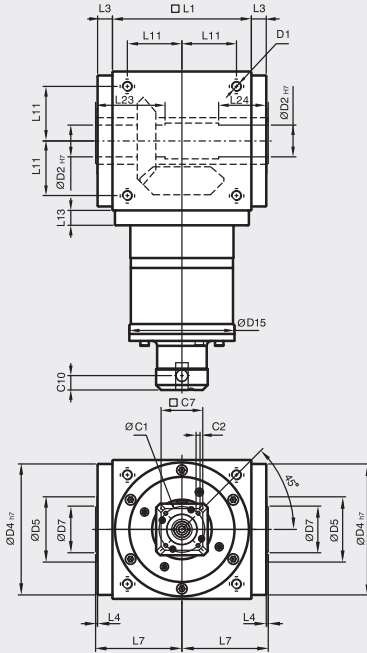
AD/ADR/ADS

AT/ATB series

AT-FH / ATB-FH Series Dimensions



3-stage(Ratio $i = 75 \sim 500$)



(ATB시리즈의 성능과 치수는 AT시리즈와 동일합니다.)

[unit:mm]

Dimension	AT110FH	AT140FH	AT170FH	AT210FH	AT240FH	AT280FH
D1	M8	M10	M12	M16	M16	M16
D2 _{h7}	22	32	40	50	55	60
D4 _{h7}	108	135	165	205	235	275
D5	53	68	83	104	124	144
D7	33	47	55	75	85	110
D12	106	104	128	160	180	200
D14 _{h7}	108	135	165	205	235	275
D15	107	106	127	158	178	198
L1	110	140	170	210	240	280
L3	15	15	15	20	25	25
L4	2	2	2	2	2	2
L7	72	87	102	127	147	167
L11	44	55	67	85	95	110
L13	15	15	15	20	25	25
L21	136.5	159.5	183.5	226	269	278
L22	191.5	229.5	268.5	331	389	418
L23	53	70	80	95	115	115
L24	35	50	55	65	80	80
C1 ¹	46	46	70	70	100	100
C2 ¹	M4	M4	M5	M5	M6	M6
C3 ¹	≤12	≤12	≤16	≤16	≤24	≤24
C4 ¹	30	30	34	34	40	40
C5 ¹	30	30	50	50	80	80
C6 ¹	3.5	3.5	8	8	4	4
C7 ¹	42	42	60	60	92	92
C8 ¹	21.5	21.5	21.5	21.5	20	20
C9 ¹	268	321	375	457.5	529	578
C10 ¹	14.5	14.5	15.5	15.5	13	13
B3 _{p9}	6	10	12	14	16	18
H3	24.8	35.3	43.3	53.8	59.3	64.4

1. C1-C10은 적용모터에 따라 치수가 상이하니 당사 홈페이지 www.apexdynkorea.co.kr에 접속 후 디자인 Tool을 이용하여 치수를 확인할 수 있습니다.

AT-FC/ATB-FC Series Dimensions



PI/PIR

AE/AER

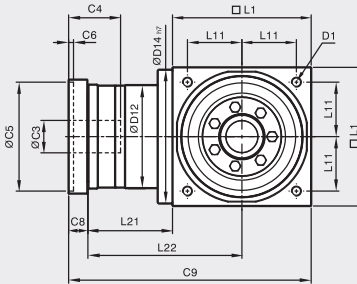
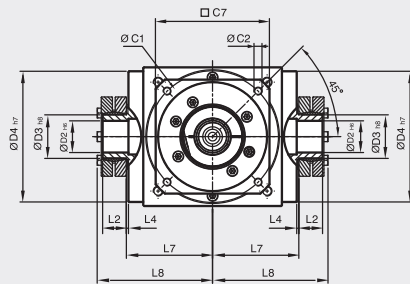
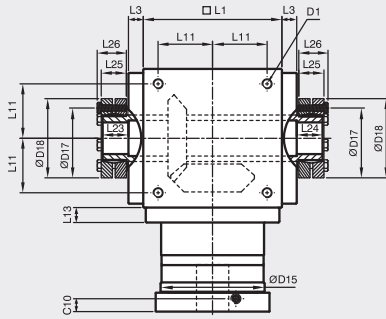
AB/ABR

AF/AFR

AD/ADR/ADS

AT/ATB series

1-stage(Ratio $i = 1 \sim 5$)



● 기본 약세사리 2 shrink disk power lock units 포함
(ATB시리즈의 성능과 치수는 AT시리즈와 동일합니다.)

[unit:mm]

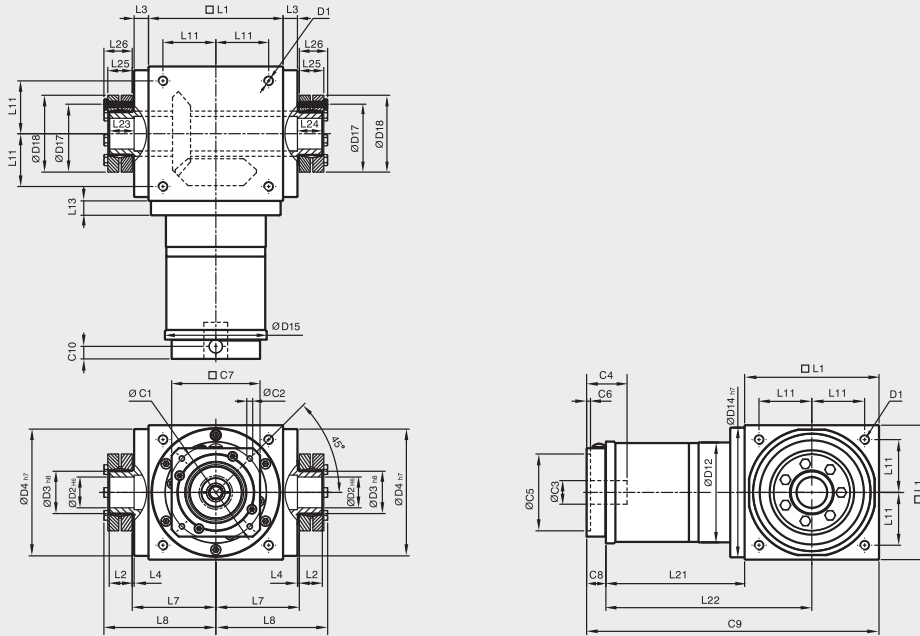
Dimension	AT065FC	AT075FC	AT090FC	AT110FC	AT140FC	AT170FC	AT210FC	AT240FC	AT280FC
D1	M4	M6	M6	M8	M10	M12	M16	M16	M16
D2 ^{H6}	13	14	18	22	32	40	50	55	60
D3 ^{h8}	16	16	22	25	44	50	62	68	75
D4 ^{h7}	63	73	88	108	135	165	205	235	275
D12	62	72	86	106	104	128	160	180	200
D14 ^{h7}	63	73	88	108	135	165	205	235	275
D15	62.9	72.9	87	107	105	130	158	178	198
D17	26	26	36	38	61	70	86	86	100
D18	41	41	50	50	80	90	110	115	138
L1	65	75	90	110	140	170	210	240	280
L2	14	14	18	18	24	26	29	29	30.5
L3	13	14.5	15	15	15	15	20	25	25
L4	2	2	2	2	2	2	2	2	2
L7	47.5	54	62	72	87	102	127	147	167
L8	66	72.5	85	95	116.5	133.5	161.5	181.5	205
L11	27	30	36	44	55	67	85	95	110
L13	13	15	15	15	15	15	20	25	25
L21	49	60.5	63	69.5	85.5	95	130	144.5	135
L22	81.5	98	108	124.5	155.5	180	235	264.5	275
L23	15	15	20	20	26	28	31	31	32.5
L24	15	15	20	20	26	28	31	31	32.5
L25	15	15	19.5	19.5	25.5	27.5	30.5	30.5	32.5
L26	18.5	18.5	23	23	29.5	31.5	34.5	34.5	38
C1 ³	46	70	100	100	130	165	215	215	235
C2 ³	M4	M5	M6	M6	M8	M10	M12	M12	M12
C3 ³	≤11 / ≤12 ¹	≤14 / ≤15.875 / ≤16 ²	≤19	≤24	≤32	≤38	≤42	≤48	≤55
C4 ³	30	34	40	40	50	60	85	85	116
C5 ³	30	50	80	80	110	130	180	180	200
C6 ³	3.5	8	4	4	5	6	6	6	6
C7 ³	42	60	90	90	115	142	190	190	220
C8 ³	19.5	19	17	17	19.5	22.5	29	29	63
C9 ³	133.5	154.5	170	196.5	245	287.5	369	413.5	478
C10 ³	13.25	13.5	10.75	10.75	13	15	20.75	20.75	53.5

1. AT065 FCM1은 C3≤12mm를 옵션으로 제공 2. AT075 FCM1은 C3≤12mm를, AT075 FCM2는 C3≤15.875mm를 옵션으로 제공
3. C1~C10은 적용모터에 따라 치수가 상이하니 당사 홈페이지 www.apexdynakorea.co.kr에 접속 후 디자인 Tool을 이용하여 치수를 확인할 수 있습니다.

AT-FC / ATB-FC Series Dimensions



2-stage(Ratio $i = 7 \sim 50$)



● 기본 약세사리 2 shrink disk power lock units 포함
(ATB시리즈의 성능과 치수는 AT시리즈와 동일합니다.)

[unit:mm]

Dimension	AT065FC	AT075FC	AT090FC	AT110FC	AT140FC	AT170FC	AT210FC	AT240FC	AT280FC
D1	M4	M6	M6	M8	M10	M12	M16	M16	M16
D2 _{H6}	13	14	18	22	32	40	50	55	60
D3 _{H8}	16	16	22	25	44	50	62	68	75
D4 _{H7}	63	73	88	108	135	165	205	235	275
D12	62	72	86	106	104	128	160	180	200
D14 _{H7}	63	73	88	108	135	165	205	235	275
D15	62.9	72.9	87	107	106	127	158	178	198
D17	26	26	36	38	61	70	86	86	100
D18	41	41	50	50	80	90	110	115	138
L1	65	75	90	110	140	170	210	240	280
L2	14	14	18	18	24	26	29	29	30.5
L3	13	14.5	15	15	15	15	20	25	25
L4	2	2	2	2	2	2	2	2	2
L7	47.5	54	62	72	87	102	127	147	167
L8	66	72.5	85	95	116.5	133.5	161.5	181.5	205
L11	27	30	36	44	55	67	85	95	110
L13	13	15	15	15	15	15	20	25	25
L21	75	84.5	99	122	144.5	157.5	206.5	239	248
L22	107.5	122	144	177	214.5	242.5	311.5	359	388
L23	15	15	20	20	26	28	31	31	32.5
L24	15	15	20	20	26	28	31	31	32.5
L25	15	15	19.5	19.5	25.5	27.5	30.5	30.5	32.5
L26	18.5	18.5	23	23	29.5	31.5	34.5	34.5	38
C1 ¹	46	46	70	100	100	100	130	165	165
C2 ¹	M4	M4	M5	M6	M6	M6	M8	M10	M10
C3 ¹	≤12	≤12	≤16	≤24	≤24	≤24	≤32	≤38	≤38
C4 ¹	30	30	34	40	40	40	50	60	60
C5 ¹	30	30	50	80	80	80	110	130	130
C6 ¹	3.5	3.5	8	4	4	4	5	6	6
C7 ¹	42	42	60	92	92	92	115	142	142
C8 ¹	21.5	21.5	21.5	20	20	20	24	31	31
C9 ¹	161.5	181	210.5	252	304.5	347.5	440.5	510	559
C10 ¹	14.5	14.5	15.5	13	13	13	16	21	21

1. C1-C10은 적용모터에 따라 치수가 상이하니 당사 홈페이지 www.apexdynkorea.co.kr에 접속 후 디자인 Tool을 이용하여 치수를 확인할 수 있습니다.

AT-FC/ATB-FC Series Dimensions



PI/PIR

AE/AER

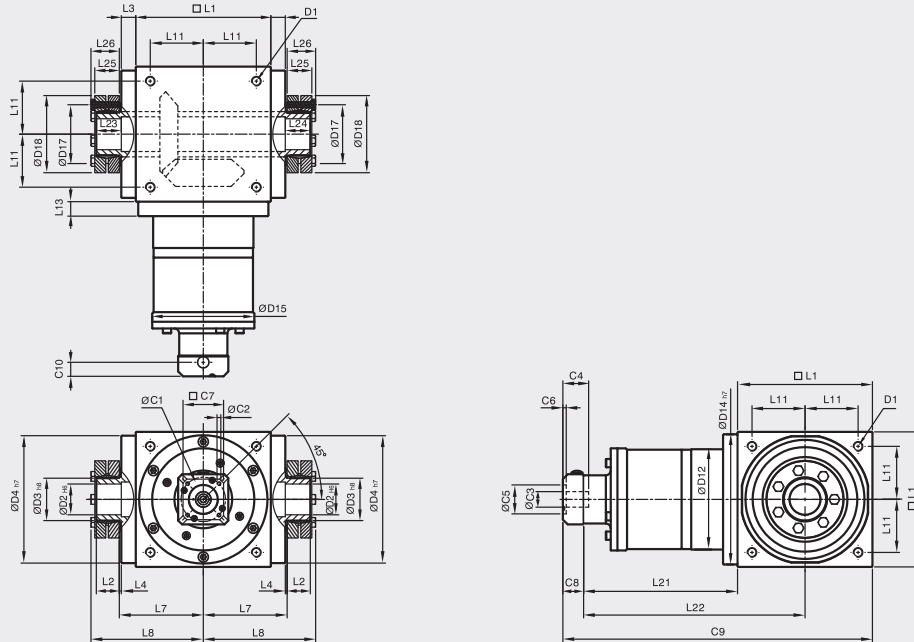
AB/ABR

AF/AFR

AD/ADR/ADS

AT/ATB series

3-stage(Ratio $i = 75 \sim 500$)



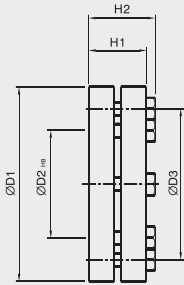
● 기본 약세서리 2 shrink disk power lock units 포함
(ATB시리즈의 성능과 치수는 AT시리즈와 동일합니다.)

[unit:mm]

Dimension	AT110FC	AT140FC	AT170FC	AT210FC	AT240FC	AT280FC
D1	M8	M10	M12	M16	M16	M16
D2 H6	22	32	40	50	55	60
D3 h8	25	44	50	62	68	75
D4 h7	108	135	165	205	235	275
D12	106	104	128	160	180	200
D14 h7	108	135	165	205	235	275
D15	107	106	127	158	178	198
D17	38	61	70	86	86	100
D18	50	80	90	110	115	138
L1	110	140	170	210	240	280
L2	18	24	26	29	29	30.5
L3	15	15	15	20	25	25
L4	2	2	2	2	2	2
L7	72	87	102	127	147	167
L8	95	116.5	133.5	161.5	181.5	205
L11	44	55	67	85	95	110
L13	15	15	15	20	25	25
L21	136.5	159.5	183.5	226	269	278
L22	191.5	229.5	268.5	331	389	418
L23	20	26	28	31	31	32.5
L24	20	26	28	31	31	32.5
L25	19.5	25.5	27.5	30.5	30.5	32.5
L26	23	29.5	31.5	34.5	34.5	38
C1 ¹	46	46	70	70	100	100
C2 ¹	M4	M4	M5	M5	M6	M6
C3 ¹	≤12	≤12	≤16	≤16	≤24	≤24
C4 ¹	30	30	34	34	40	40
C5 ¹	30	30	50	50	80	80
C6 ¹	3.5	3.5	8	8	4	4
C7 ¹	42	42	60	60	92	92
C8 ¹	21.5	21.5	21.5	21.5	20	20
C9 ¹	268	321	375	457.5	529	578
C10 ¹	14.5	14.5	15.5	15.5	13	13

1. C1~C10은 적용모터에 따라 치수가 상이하니 당사 홈페이지 www.apexdynakorea.co.kr에 접속 후 디자인 Tool을 이용하여 치수를 확인할 수 있습니다.

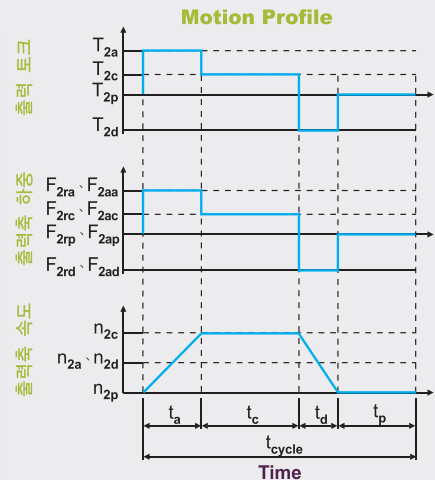
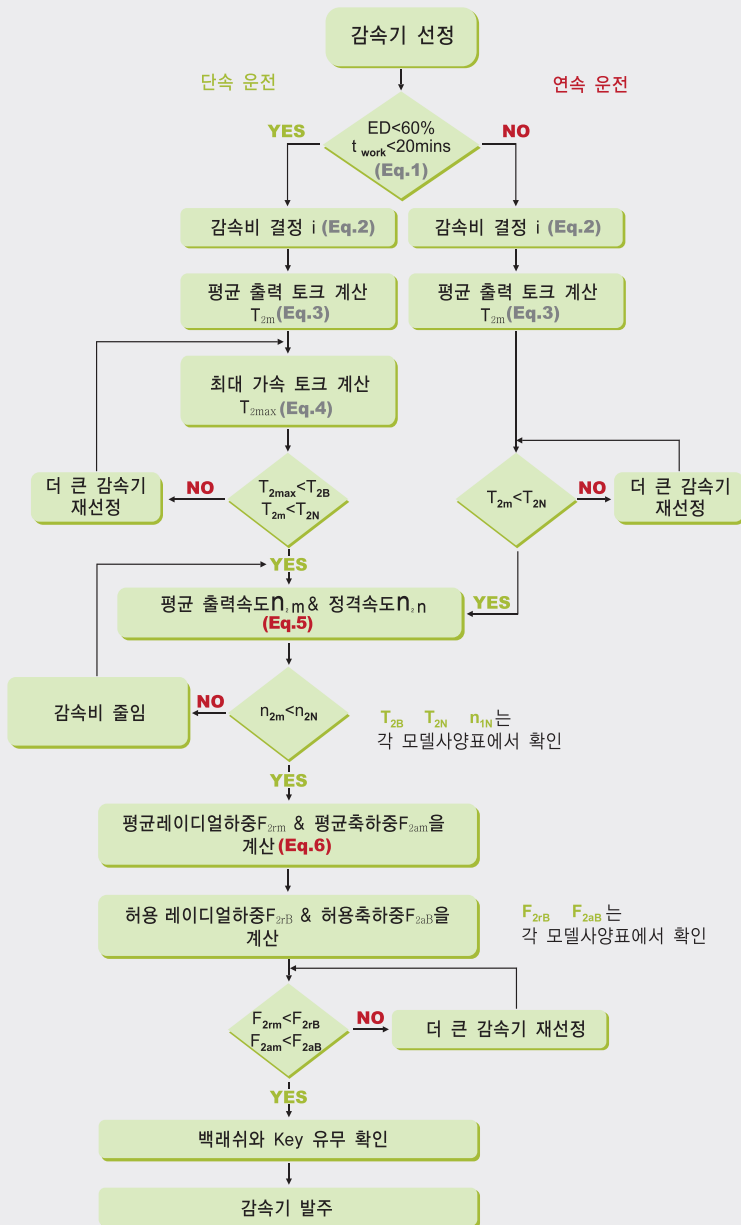
Shrink Disc Power Lock



[unit: mm]

C / FC Series	D1	D2	D3	H1	H2
SSD-d16xdw14	41	16	26	15	18.5
SSD-d22xdw18	50	22	36	19.5	23
SSD-d25xdw22	50	25	38	19.5	23
SSD-d44xdw32	80	44	61	25.5	29.5
SSD-d50xdw40	90	50	70	27.5	31.5
SSD-d62xdw50	110	62	86	30.5	34.5
SSD-d68xdw55	115	68	86	30.5	34.5
SSD-d75xdw60	138	75	100	32.5	38

Selection of the Optimum Gearbox



S1 : 연속운전의 기준

- 전체 Cycle중 작동시간이 60%이상일때
- 작동시간이 20분을 초과할때
- 하루 작동시간이 20시간을 초과할때

$$1. ED = \frac{t_a + t_c + t_d}{t_{cycle}} \times 100\%, t_{work} = t_a + t_c + t_d$$

Index : a. Acceleration, c. Constant, d. Deceleration, p. Pause (Eq. 1)

$$2. i \approx \frac{n_m}{n_{work}}$$

n_m Output Speed of the Motor (Eq. 2)
 n_{work} Working Speed

$$3. T_{2m} = \sqrt[3]{\frac{n_{2a} \times t_a \times T_{2a}^3 + n_{2c} \times t_c \times T_{2c}^3 + n_{2d} \times t_d \times T_{2d}^3}{n_{2a} \times t_a + n_{2c} \times t_c + n_{2d} \times t_d}}$$

(Eq. 3)

$$4. T_{2max} = T_{mB} \times i \times K_s \times \eta$$

where K_s is

K_s	No. of Cycles / hr
1.0	0~1,000
1.1	1,000 ~ 1,500
1.3	1,500 ~ 2,000
1.6	2,000 ~ 3,000
1.8	3,000 ~ 5,000
2.0	5,000 ~ 9,000
2.05	9,000 ~ 10,000
not recommended	above 10,000



Recommended (for S5 Cycle Operation)

The general design is given for

$$\frac{J_L}{i^2} \leq 4 \times J_m$$

The optimal design is given for

$$\frac{J_L}{i^2} \cong J_m$$

J_L Load Inertia

J_m Motor Inertia

T_{mB} Max. Output Torque of the Motor
 η Efficiency of the Gearbox (Eq.4)

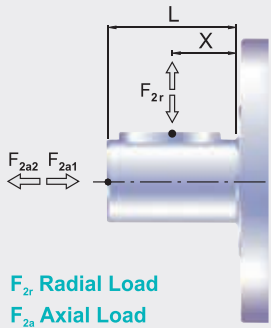
$$5. n_{2a} = n_{2d} = \frac{1}{2} \times n_{2c}$$

$$n_{2m} = \frac{n_{2a} \times t_a + n_{2c} \times t_c + n_{2d} \times t_d}{t_a + t_c + t_d} \quad \text{(Eq.5)}$$

$$n_{2N} = \frac{n_{1N}}{i}$$

$$6. F_{2m} = 3 \sqrt{\frac{n_{2a}^3 \times t_a^3 \times F_{2ra}^3 + n_{2c}^3 \times t_c^3 \times F_{2rc}^3 + n_{2d}^3 \times t_d^3 \times F_{2rd}^3}{n_{2a} \times t_a + n_{2c} \times t_c + n_{2d} \times t_d}}$$

$$F_{2am} = 3 \sqrt{\frac{n_{2a}^3 \times t_a^3 \times F_{2aa}^3 + n_{2c}^3 \times t_c^3 \times F_{2ac}^3 + n_{2d}^3 \times t_d^3 \times F_{2ad}^3}{n_{2a} \times t_a + n_{2c} \times t_c + n_{2d} \times t_d}} \quad \text{(Eq.6)}$$

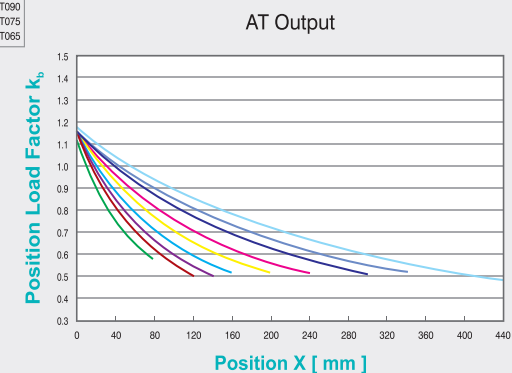
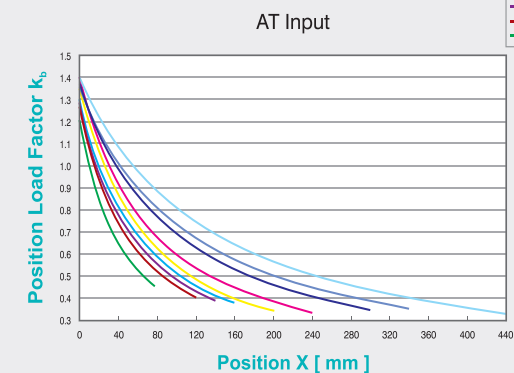
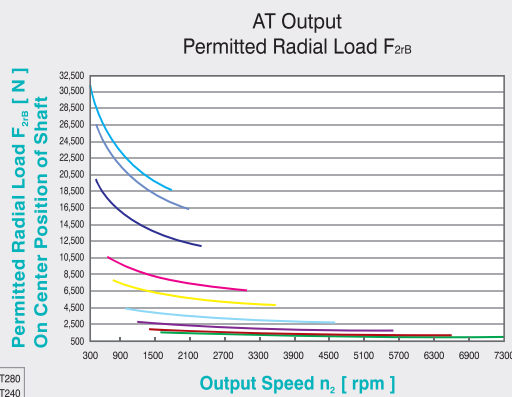
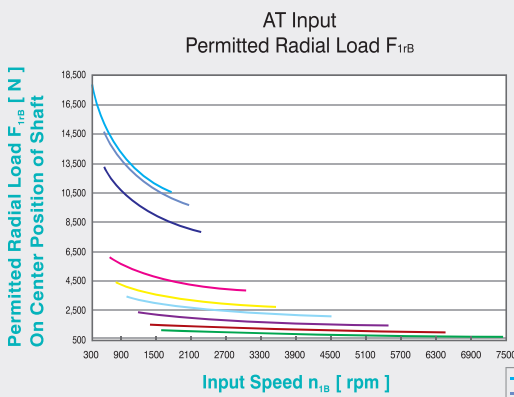


감속기 입력축과 출력축의 허용 레이디얼 및 액시얼 하중

감속기 입·출력축 허용 레이디얼 및 액시얼 하중은 베어링을 지지하는 감속기 디자인에 의해 결정됩니다.

아팩스 제품은 일반크기보다 치수가 큰 테이퍼 롤러 베어링을 적용하여 각 방향으로부터 보다 큰 부하를 지지할 수 있습니다.

F_{2r} Radial Load
 F_{2a} Axial Load



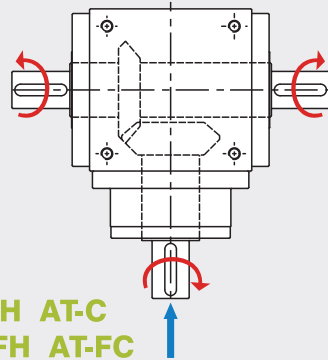
레이디얼 하중(F_{2r})이 입·출력축 중심에 가해진다면 $X=1/2 \times L$ 이 됩니다.

입·출력축 속도변화에 따른 감속기 출력축 허용레이디얼 하중은 왼쪽도표에서 확인할 수 있습니다.

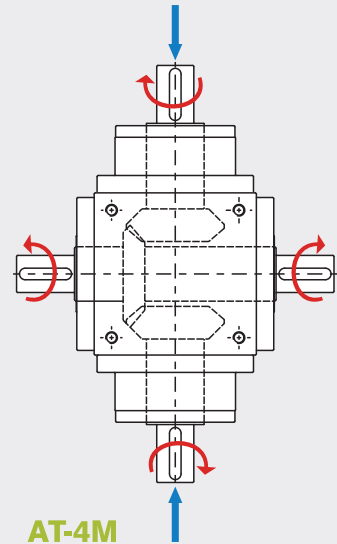
레이디얼 하중(F_{2r})이 입·출력축 중심에서 벗어난다면 감속기 허용 레이디얼 하중은 거리에 비례하여 감소됩니다. 허용레이디얼 하중과 액시얼 하중은 위치계수(k_b)에 의해 계산될 수 있습니다.

단 부하의 위치가 입·출력축을 벗어날 경우 추가적인 지지가 필요합니다.

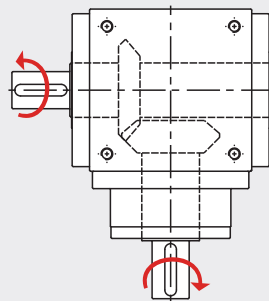
Rotation Direction



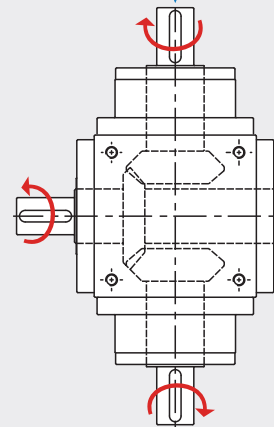
AT-L AT-H AT-C
AT-FL AT-FH AT-FC
ATB-L ATB-H ATB-C
ATB-FL ATB-FH ATB-FC



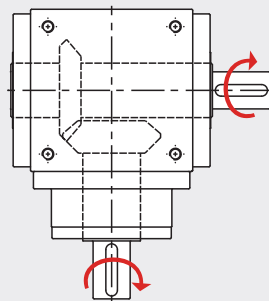
AT-4M
ATB-4M



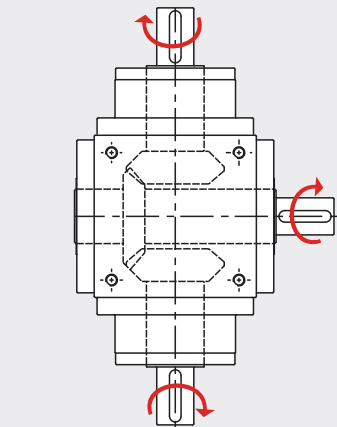
AT-L1 AT-FL1
ATB-L1 ATB-FL1



AT-LM
ATB-LM



AT-R1 AT-FR1
ATB-R1 ATB-FR1



AT-RM
ATB-RM

Ordering Code



PI/PIIR

AE/AER

AB/ABR

AF/AFR

AD/ADR/ADS

AT/ATB
series

AT / ATB Series

AT/ATB065

L

001.5

S1

Gearbox Size :

AT065, AT075, AT090, AT110, AT140,
AT170, AT210, AT240, AT280
ATB065, ATB075, ATB090, ATB110, ATB140,
ATB170, ATB210, ATB240, ATB280

Ratio :

1 Stage: 1, 1.5, 2, 3, 4, 5

Gearbox :

L/L1/H/C/R1/LM/RM/4M

Shaft Option :

S1: Smooth Output Shaft
S2: Output Shaft with Key

★당사 홈페이지의 디자인툴을 확인하신 후 Low Friction Type을 선택하여 주십시오.

Ordering Example: AT065-L-001.5-S1, ATB065-L-001.5-S1

AT210/ATB210

FL1

200

S1

/ MOTOR

Gearbox Size :

AT065, AT075, AT090, AT110, AT140,
AT170, AT210, AT240, AT280
ATB065, ATB075, ATB090, ATB110, ATB140,
ATB170, ATB210, ATB240, ATB280

Ratio :

1 Stage: 1, 1.5, 2, 3, 4, 5
2 Stage: 7, 10, 15, 20, 25, 35, 50
3 Stage: 75, 100, 125, 150, 200,
250, 350, 500

Motor Designation :

Manufacturer Type
And Model

Gearbox :

FL/FLM1/FLM2/FL1/FL1M1/FL1M2/FR1/FR1M1/
FR1M2/FH/FHM1/FHM2/FC/FCM1/FCM2

Shaft Option :

S1: Smooth Output Shaft
S2: Output Shaft with Key

Ordering Example: AT210-FL1-200-S1 / SIEMENS 1FK6 032-6AK71 ATB210-FL1-200-S1 / SIEMENS 1FK6 032-6AK71

★아펙스 프로그램(디자인툴)을 통해 선정되어진 감속기는 귀사에서 선택하신 모터에 맞는 최적의 감속기 용량이오니 안심하고 적용하실 수 있습니다.
★예외로 과도한 레이디얼 하중이나 24시간 연속운전 및 빈번한 Run/Stop 등의 열악한 시스템 조건인 경우에는 필히 당사에 문의한 후 안전한 모델을 선정, 적용하시기 바라며, 당사 승인 외의 사용 용도일 경우에는 보증받을 수 없습니다.