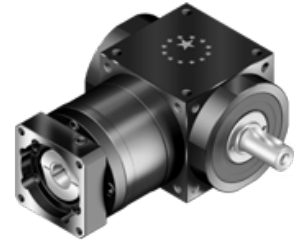


# ATB-FL1/FR1 serie



## Overzicht

- Kegelwiel reductor met één uitgaande as (links of rechts) en motorflens aan de ingaande kant
- Stalen stalen behuizing, aluminium zwart geanodiseerde motor adapterplaat
- Stalen stalen uitgaande as met of zonder spie
- Spiraal kegelwiel vertanding, planetaire deel met rechte vertanding
- Nominale koppels:
  - $T_{2N}$  : 12 Nm – 3.200 Nm
- Overbrengverhouding
  - 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
- Spelingarm
  - 1-traps :  $\leq 6$  arcmin
  - 2-traps :  $\leq 8$  arcmin
  - 3-traps :  $\leq 10$  arcmin
- Hoog rendement
  - 1-traps :  $\geq 98\%$
  - 2-traps :  $\geq 94\%$
  - 3-traps :  $\geq 94\%$
- Eenvoudige montage
- Compacte bouw
- Bouwgrootte:
  - ATB065FL1 / ATB075FL1 / ATB090FL1 / ATB110FL1 / ATB140FL1 / ATB170FL1 / ATB210FL1 / ATB240FL1 / ATB280FL1
  - ATB065FR1 / ATB075FR1 / ATB090FR1 / ATB110FR1 / ATB140FR1 / ATB170FR1 / ATB210FR1 / ATB240FR1 / ATB280FR1

# Specificaties

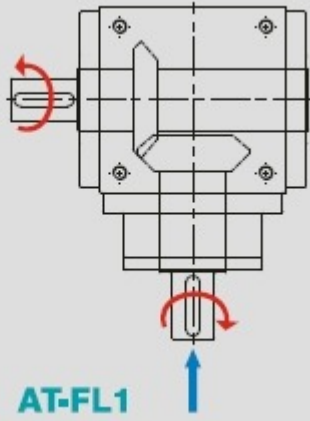
Bouwgrootte	Trap	Ratio <sup>1</sup>	ATB065 FL1/FR1	ATB075 FL1/FR1	ATB090 FL1/FR1	ATB110 FL1/FR1	ATB140 FL1/FR1	ATB170 FL1/FR1	ATB210 FL1/FR1	ATB240 FL1/FR1	ATB280 FL1/FR1	
Nominaal uitgangskoppel T <sub>2N</sub>	1	1	25	45	78	150	360	585	1,300	2,150	3,200	
		1.5	25	45	78	150	360	585	1,300	2,150	3,200	
		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	
		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	1,629	
	2	25	12	25	40	85	196	320	740	1,210	2,000	
		35	12	25	40	85	196	320	740	1,210	1,790	
		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 Versnellingskoppel T <sub>2B</sub>	Nm	1,2,3	1~500	1.5 keer Nominaal koppel T <sub>2N</sub>								
Max. Versnelling Ingangssnelheid n <sub>1B</sub>	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
Verdraaispeling*	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. Radiale Last F <sub>2rB</sub> <sup>2</sup> Uitgang d2	N	1,2,3	1~500	900	1,100	1,700	2,700	4,800	6,600	11,500	16,000	18,000
Max. Axiale Last F <sub>2aB</sub> <sup>3</sup> Uitgang d2	N	1,2,3	1~500	450	550	850	1,350	2,400	3,300	5,750	8,500	9,000
Service Life	hr	1	1~5	20,000*								
Rendement	%	1	1~5	≥ 98 %								
		2,3	7~500	≥ 94 %								
Gewicht	kg	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
Bedrijfstemperatuur	°C	1,2,3	1~500	-10°C~+90°C								
Smeermiddel		1,2,3	1~500	synthetisch smeermiddel, ISO VG 150								
Geluidsniveau (n <sub>i</sub> =1500 rpm, No Load)	dB(A)	1,2,3	1~500	≤71	≤72	≤76	≤77	≤78	≤79	≤81	≤83	≤84

1. Overbrengverhouding (ratio) ( i=N in / N out )
2. Uitge oefend op het midden van de ingaande as @ 100 rpm
3. Uitge oefend op het midden van de uitgaande as @ 100 rpm

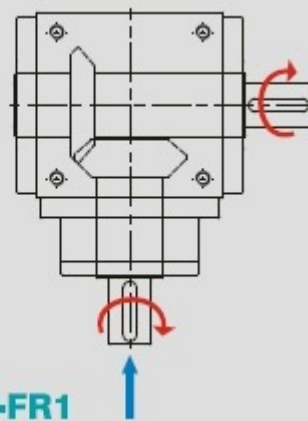
\* S1 service life 10,000 uren

\* Verdraaispeling is gemeten met 2% van het Nominaal koppel T<sub>2N</sub>

## Draairichting



AT-L1 AT-FL1



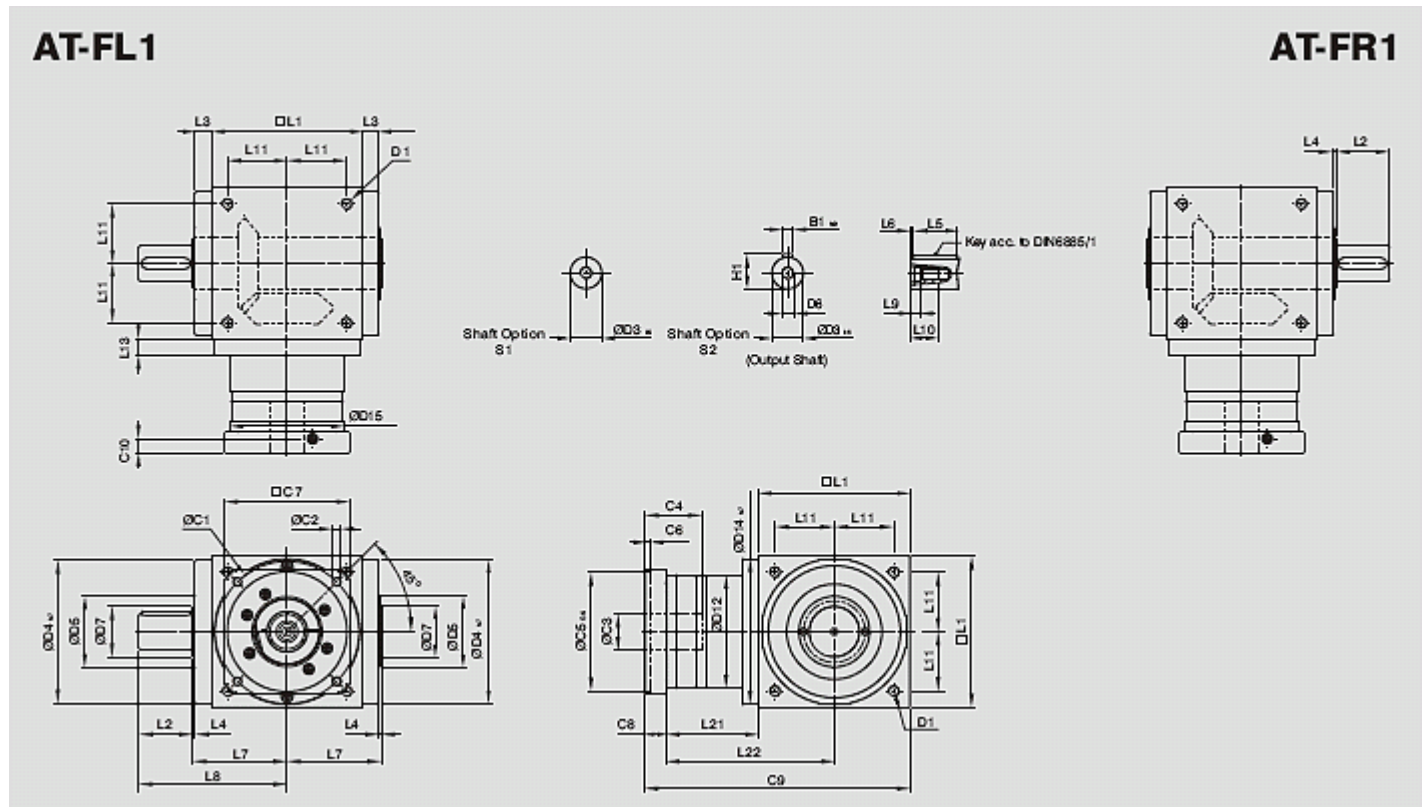
AT-R1 AT-FR1

# Massatraagheid

Bouwgrootte	Trap	Ratio <sup>1</sup>	ATB065 FL1/FR1	ATB075 FL1/FR1	ATB090 FL1/FR1	ATB110 FL1/FR1	ATB140 FL1/FR1	ATB170 FL1/FR1	ATB210 FL1/FR1	ATB240 FL1/FR1	ATB280 FL1/FR1
Massatraagheid 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
		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
	3	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

# Afmetingen

ATB-FL1/FR1 serie 1-traps, ratio  $i = 1 \sim 5$

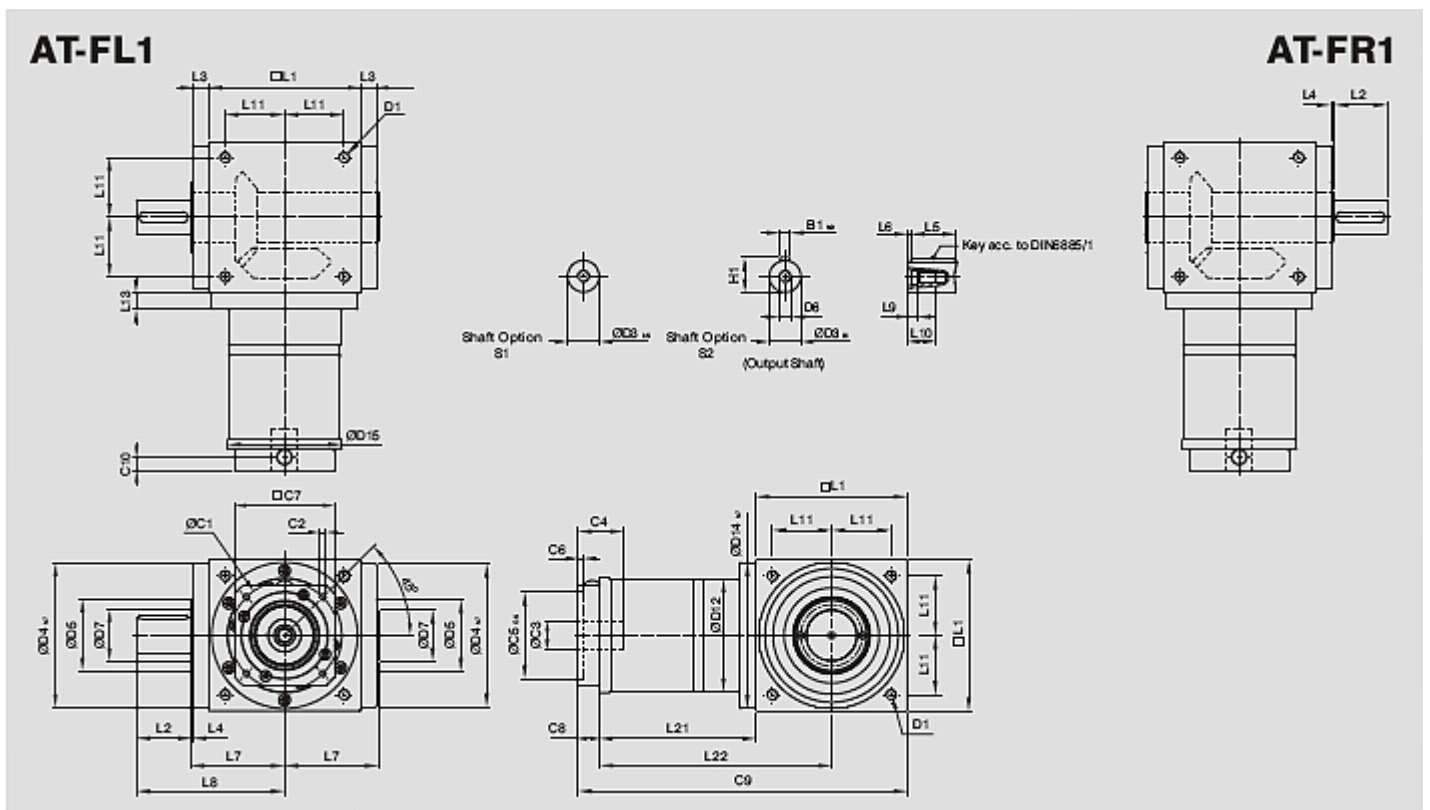


	ATB065FL1 ATB065FR1	ATB075FL1 ATB075FR1	ATB090FL1 ATB090FR1	ATB110FL1 ATB110FR1	ATB140FL1 ATB140FR1	ATB170FL1 ATB170FR1	ATB210FL1 ATB210FR1	ATB240FL1 ATB240FR1	ATB280FL1 ATB280FR1
D1	M4	M6	M6	M8	M10	M12	M16	M16	M16
D3 <sub>h6</sub>	13	16	18	22	32	40	50	55	60
D4 <sub>h7</sub>	63	73	88	108	135	165	205	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 <sub>h7</sub>	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 <sup>6</sup>	46	70	100	100	130	165	215	215	235
C2 <sup>6</sup>	M4	M5	M6	M6	M8	M10	M12	M12	M12
C3 <sup>6</sup>	≤11 ≤12	≤14 ≤15.875 ≤16	≤19	≤24	≤32	≤38	≤42	≤48	≤55

C4 <sup>6</sup>	30	34	40	40	50	60	85	85	116
C5 <sup>6</sup> <sub>G6</sub>	30	50	80	80	110	130	180	180	200
C6 <sup>6</sup>	3.5	8	4	4	5	6	6	6	6
C7 <sup>6</sup>	42	60	90	90	115	142	190	190	220
C8 <sup>6</sup>	19.5	19	17	17	19.5	22.5	29	29	63
C9 <sup>6</sup>	133.5	154.5	170	196.5	245	287.5	369	413.5	478
C10 <sup>6</sup>	13.25	13.5	10.75	10.75	13	15	20.75	20.75	53.5
B1 <sub>h9</sub>	5	5	6	6	10	12	14	16	18
H1	15	18	20.5	24.5	35	43	53.5	59	64

6. C1~C10 zijn motor specifieke afmetingen.

### ATB-FL1/FR1 serie 2-traps, ratio i = 7 ~ 50

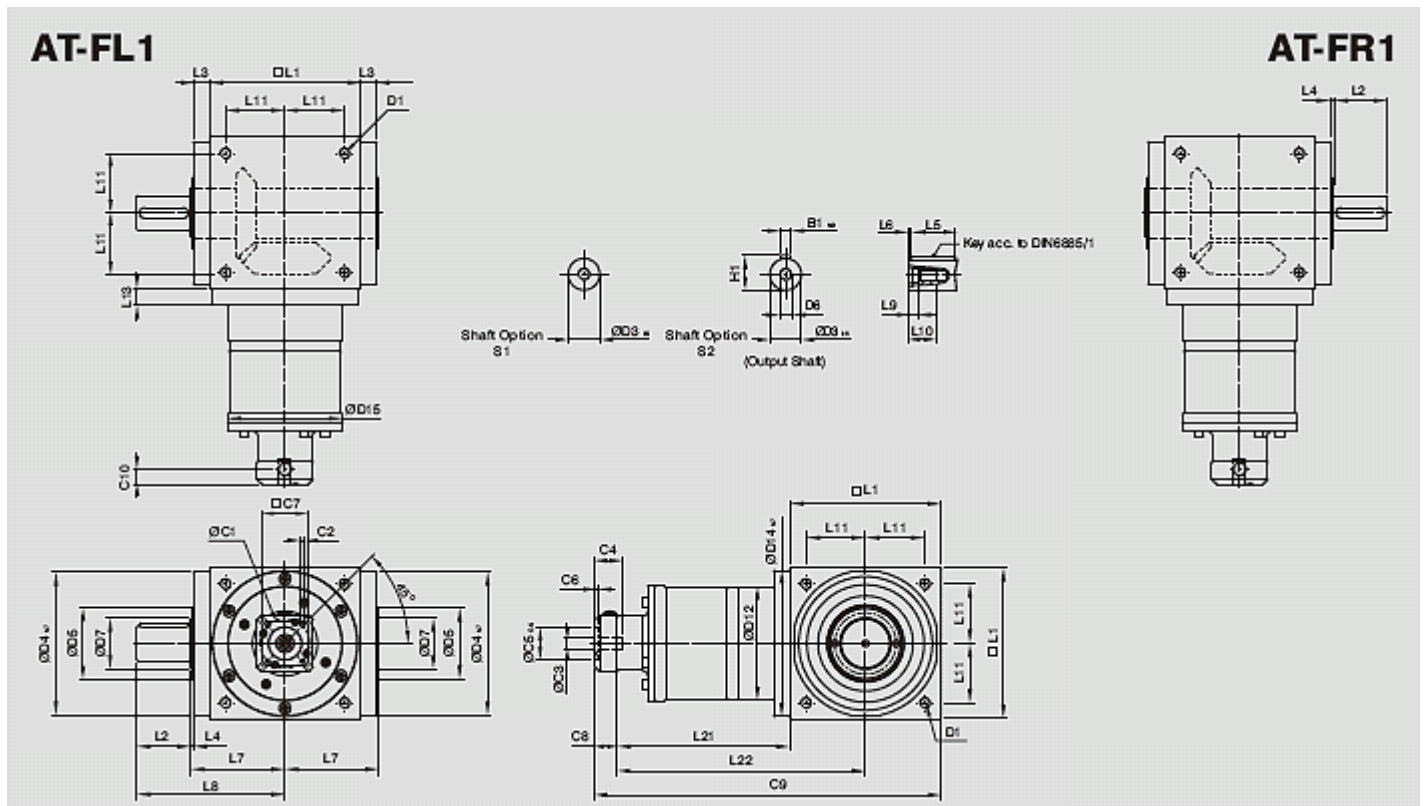


	ATB065FL1 ATB065FR1	ATB075FL1 ATB075FR1	ATB090FL1 ATB090FR1	ATB110FL1 ATB110FR1	ATB140FL1 ATB140FR1	ATB170FL1 ATB170FR1	ATB210FL1 ATB210FR1	ATB240FL1 ATB240FR1	ATB280FL1 ATB280FR1
D1	M4	M6	M6	M8	M10	M12	M16	M16	M16
D3 <sub>k6</sub>	13	16	18	22	32	40	50	55	60
D4 <sub>h7</sub>	63	73	88	108	135	165	205	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 <sub>h7</sub>	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 <sup>7</sup>	46	46	70	100	100	100	130	165	165
C2 <sup>7</sup>	M4	M4	M5	M6	M6	M6	M8	M10	M10
C3 <sup>7</sup>	≤12	≤12	≤16	≤24	≤24	≤24	≤32	≤38	≤38
C4 <sup>7</sup>	30	30	34	40	40	40	50	60	60
C5 <sup>7</sup> <sub>GG</sub>	30	30	50	80	80	80	110	130	130
C6 <sup>7</sup>	3.5	3.5	8	4	4	4	5	6	6
C7 <sup>7</sup>	42	42	60	92	92	92	115	142	142
C8 <sup>7</sup>	21.5	21.5	21.5	20	20	20	24	31	31
C9 <sup>7</sup>	161.5	181	210.5	252	304.5	347.5	440.5	510	559
C10 <sup>7</sup>	14.5	14.5	15.5	13	13	13	16	21	21
B1 <sub>h9</sub>	5	5	6	6	10	12	14	16	18
H1	15	18	20.5	24.5	35	43	53.5	59	64

7. C1~C10 zijn motor specifieke afmetingen.

### ATB-FL serie 3-traps, ratio i = 75 ~ 500



ATB110FL1  
ATB110FR1

ATB140FL1  
ATB140FR1

ATB170FL1  
ATB170FR1

ATB210FL1  
ATB210FR1

ATB240FL1  
ATB240FR1

ATB280FL1  
ATB280FR1

D1                      M8                      M10                      M12                      M16                      M16                      M16

D3 <sub>k6</sub>	22	32	40	50	55	60
D4 <sub>h7</sub>	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 <sub>h7</sub>	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 <sup>8</sup>	46	46	70	70	100	100
C2 <sup>8</sup>	M4	M4	M5	M5	M6	M6
C3 <sup>8</sup>	≤12	≤12	≤16	≤16	≤24	≤24
C4 <sup>8</sup>	30	30	34	34	40	40
C5 <sup>8</sup> <sub>G6</sub>	30	30	50	50	80	80
C6 <sup>8</sup>	3.5	3.5	8	8	4	4
C7 <sup>8</sup>	42	42	60	60	92	92
C8 <sup>8</sup>	21.5	21.5	21.5	21.5	20	20
C9 <sup>8</sup>	268	321	375	457.5	529	578
C10 <sup>8</sup>	14.5	14.5	15.5	15.5	13	13
B1 <sub>h9</sub>	6	10	12	14	16	18
H1	24.5	35	43	53.5	59	64

8. C1~C10 zijn motor specifieke afmetingen.