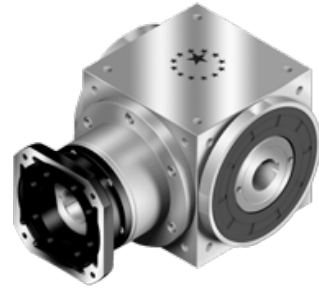


# AT-FH serie

## Overzicht



- Kegewiel reductor met uitgaande doorlopende holle as en motorflens aan de ingaande kant
- Roestvast stalen behuizing, aluminium zwart geanodiseerde motor adapterplaat
- Roestvast stalen uitgaande holle as met spiebaan
- Spiraal kegewiel 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: AT065FH / AT075FH / AT090FH / AT110FH / AT140FH / AT170FH / AT210FH / AT240FH / AT280FH

# Specificaties

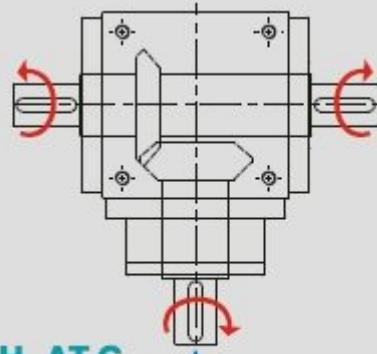
Bouwgrootte	Trap	Ratio <sup>1</sup>	AT065AT075AT090AT110AT140AT170AT210 AT240 AT280										
			FH	FH	FH	FH	FH	FH	FH	FH	FH	FH	
Nominaal uitgangskoppel $T_{2N}$	1	1	25	45	78	150	360	585	1,300	2,150	3,200		
		1.5	25	45	78	150	360	585	1,300	2,150	3,200		
		2	24	42	68	150	330	544	1,220	2,010	3,050		
		3	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		
		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 $T_{2B}$	Nm	1,2,3	1~500	1.5 keer Nominaal koppel $T_{2N}$									
Max. Versnelling Ingangssnelheid $n_{1B}$	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	
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 $F_{2rB}^2$ 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 $F_{2aB}^3$ 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	2.6	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	
Bedrijfstemperatuur	°C	1,2,3	1~500	-10°C~+90°C									
Smeermiddel		1,2,3	1~500	synthetisch smeermiddel, ISO VG 150									
Geluidsniveau ( $n_1=1500$ 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  $T_{2N}$

## Draairichting



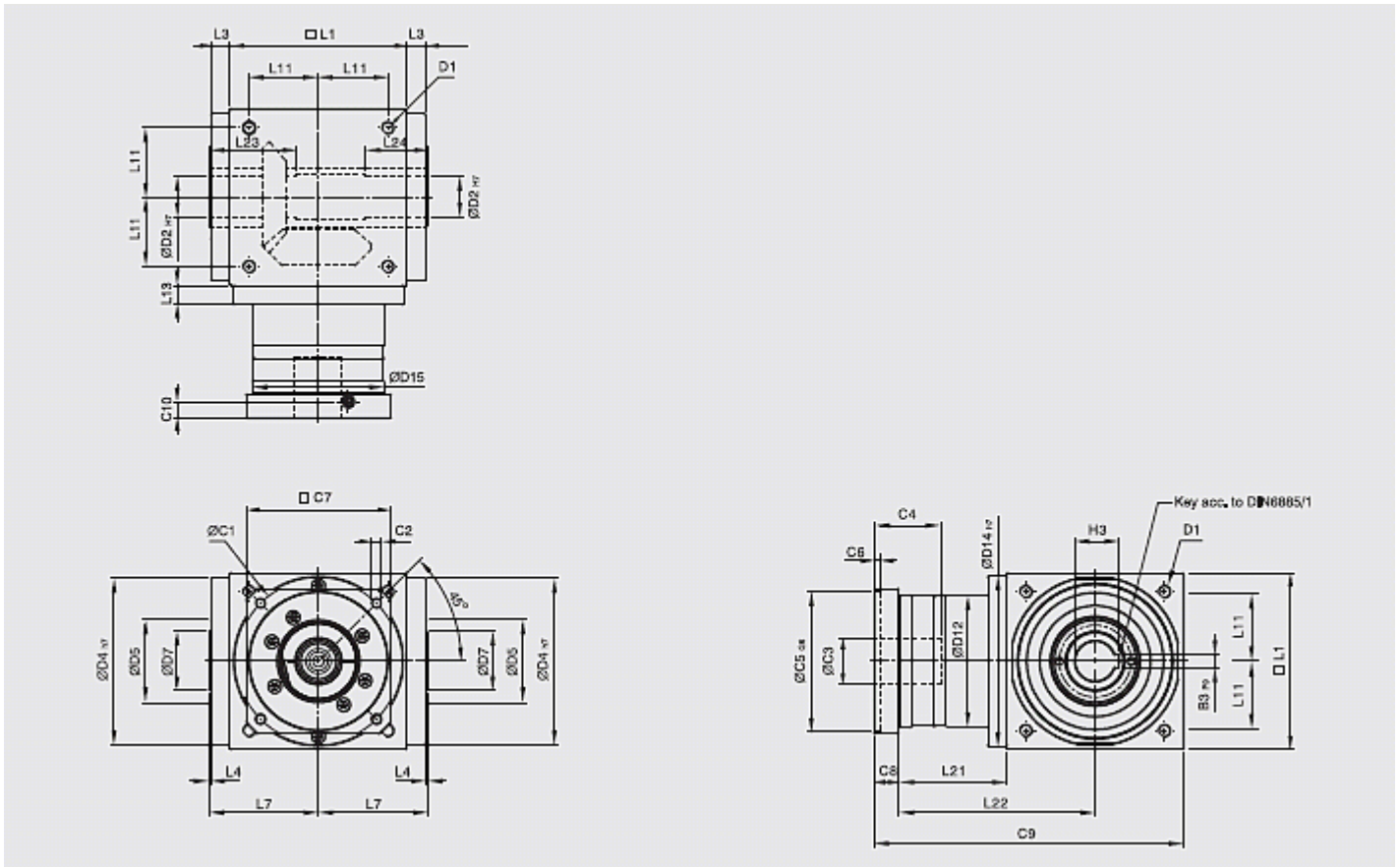
AT-L AT-H AT-C  
AT-FL AT-FH AT-FC

# Massatraagheid

Bouwgrootte	Trap	Ratio <sup>1</sup>	AT065 FH	AT075 FH	AT090 FH	AT110 FH	AT140 FH	AT170 FH	AT210 FH	AT240 FH	AT280 FH
Massatraagheid of inertia J <sub>1</sub>	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

AT-FH serie 1-traps, ratio  $i = 1 \sim 5$

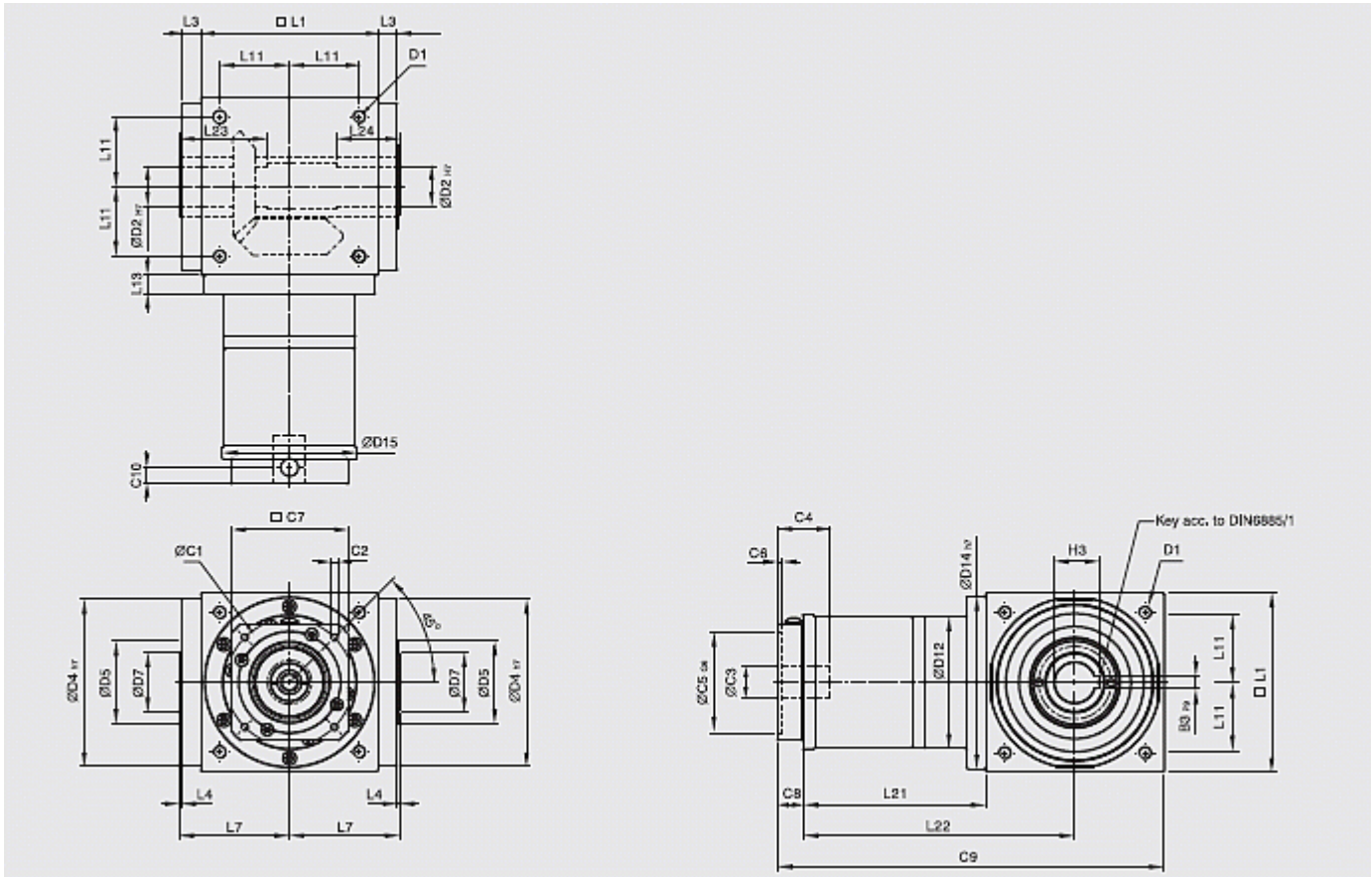


	AT065FH	AT075FH	AT090FH	AT110FH	AT140FH	AT170FH	AT210FH	AT240FH	AT280FH
D1	M4	M6	M6	M8	M10	M12	M16	M16	M16
D2 <sub>h7</sub>	13	14	18	22	32	40	50	55	60
D4 <sub>h7</sub>	63	73	88	108	135	165	205	235	275
D5	31	35	43	53	68	83	104	124	144
D7	21	22	28	33	47	55	75	85	110
D12	62	72	86	106	104	128	160	180	200
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
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	55	60	70	80	95	115	130
L24	30	32	35	40	50	55	65	80	80
C1 <sup>9</sup>	46	70	100	100	130	165	215	215	235
C2 <sup>9</sup>	M4	M5	M6	M6	M8	M10	M12	M12	M12
C3 <sup>9</sup>	≤11 ≤12	≤14 ≤15,875 ≤16	≤19	≤24	≤32	≤38	≤42	≤48	≤55
C4 <sup>9</sup>	30	34	40	40	50	60	85	85	116
C5 <sup>9</sup> <sub>G6</sub>	30	50	80	80	110	130	180	180	200
C6 <sup>9</sup>	3.5	8	4	4	5	6	6	6	6

C7 <sup>9</sup>	42	60	90	90	115	142	190	190	220
C8 <sup>9</sup>	19.5	19	17	17	19.5	22.5	29	29	63
C9 <sup>9</sup>	133.5	154.5	170	196.5	245	287.5	369	413.5	478
C10 <sup>9</sup>	13.25	13.5	10.75	10.75	13	15	20.75	20.75	53.5
B3 <sub>h9</sub>	5	5	6	6	10	12	14	16	18
H3	15.3	16.3	20.8	24.8	35.5	43.3	53.8	59.3	64.4

9. C1~C10 zijn motor specifieke afmetingen.

### AT-FH serie 2-traps, ratio i = 7 ~ 50

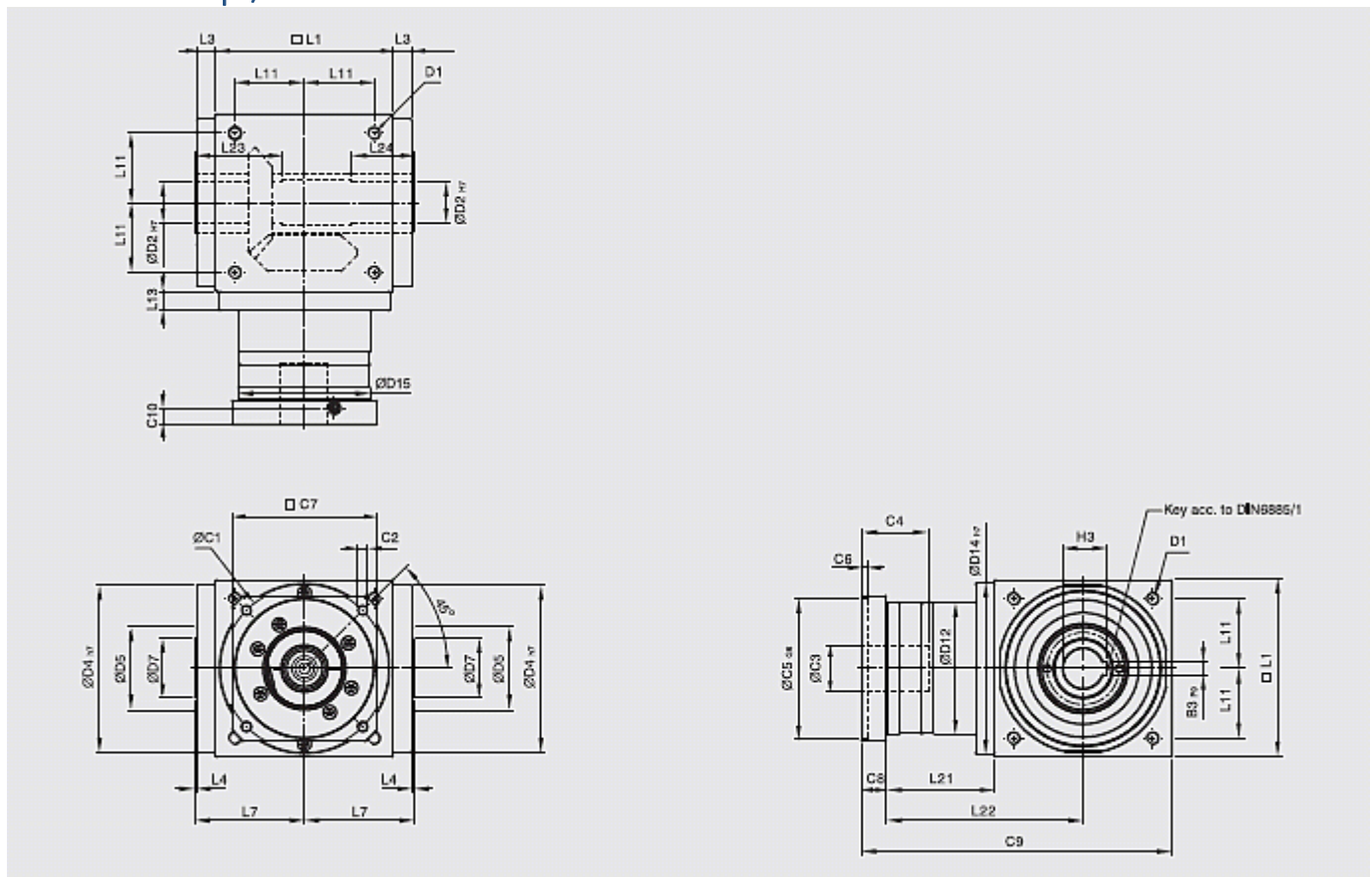


	AT065FH	AT075FH	AT090FH	AT110FH	AT140FH	AT170FH	AT210FH	AT240FH	AT280FH
D1	M4	M6	M6	M8	M10	M12	M16	M16	M16
D2 <sub>H7</sub>	13	14	18	22	32	40	50	55	60
D4 <sub>h7</sub>	63	73	88	108	135	165	205	235	275
D5	31	35	43	53	68	83	104	124	144
D7	21	22	28	33	47	55	75	85	110
D12	62	72	86	106	104	128	160	180	200
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
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	55	60	70	80	95	115	130
L24	30	32	35	40	50	55	65	80	80
C1 <sup>10</sup>	46	46	70	100	100	100	130	165	165
C2 <sup>10</sup>	M4	M4	M5	M6	M6	M6	M8	M10	M10
C3 <sup>10</sup>	≤12	≤12	≤16	≤24	≤24	≤24	≤32	≤38	≤38
C4 <sup>10</sup>	30	30	34	40	40	40	50	60	60
C5 <sup>10</sup> <sub>G6</sub>	30	30	50	80	80	80	110	130	130
C6 <sup>10</sup>	3.5	3.5	8	4	4	4	5	6	6
C7 <sup>10</sup>	42	42	60	92	92	92	115	142	142
C8 <sup>10</sup>	21.5	21.5	21.5	20	20	20	24	31	31
C9 <sup>10</sup>	161.5	181	210.5	252	304.5	347.5	440.5	510	559
C10 <sup>10</sup>	14.5	14.5	15.5	13	13	13	16	21	21
B3 <sub>p9</sub>	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

10. C1~C10 zijn motor specifieke afmetingen.

### AT-FH serie 3-traps, ratio i = 75 ~ 500



	AT110FH	AT140FH	AT170FH	AT210FH	AT240FH	AT280FH
D1	M8	M10	M12	M16	M16	M16
D2 <sub>H7</sub>	22	32	40	50	55	60
D4 <sub>H7</sub>	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 <sub>H7</sub>	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	60	70	80	95	115	130
L24	40	50	55	65	80	80
C1 <sup>11</sup>	46	46	70	70	100	100
C2 <sup>11</sup>	M4	M4	M5	M5	M6	M6
C3 <sup>11</sup>	≤12	≤12	≤16	≤16	≤24	≤24
C4 <sup>11</sup>	30	30	34	34	40	40
C5 <sup>11</sup> <sub>G6</sub>	30	30	50	50	80	80
C6 <sup>11</sup>	3.5	3.5	8	8	4	4
C7 <sup>11</sup>	42	42	60	60	92	92
C8 <sup>11</sup>	21.5	21.5	21.5	21.5	20	20
C9 <sup>11</sup>	268	321	375	457.5	529	578
C10 <sup>11</sup>	14.5	14.5	15.5	15.5	13	13
B3 <sub>p9</sub>	6	10	12	14	16	18
H3	24.8	35.3	43.3	53.8	59.3	64.4

11. C1~C10 are motor specific dimensions (metric std shown)