

dertec[®]
Designed to Perform

Stainless Steel
Parallel Shaft GEARBOXES.

FFA



Dertec FFA series parallel shaft helical gearunits have been specifically developed with a view to hygiene and cleanability. The design and shape aims to minimize build-up of dirt and contributes to less accumulation, adhesion of contaminants, and simplifies cleaning. Stainless steel gearbox housings not only simplifies cleaning but also contributes to the reduced use of strong chemical cleaning agents that, as a side effect, also benefits the surface water quality. Dertec FFA series are robust versions of parallel shaft mounted gearboxes widely used in the food industry and interchangeable with cast iron drives with EURO dimensions. Available in 4 sizes with standard hollow shaft diameters of 30, 35, 40 and 50 mm, ready for IEC motor mounting or with an integrated Stainless steel Dertec motor. The maximum transmission ratio is 281.71: 1 and the maximum secondary torque is 1500 Nm.

Main features

Made of high quality carefully electro polished Stainless Steel AISI 316 (mirror Polished on request). The smooth design gives the gearbox a nice appearance, ready to suit all kinds of stainless steel machineries for the food industry.

Hardened shaft

All hollow shafts are produced in Duplex Stainless Steel 2205. The special PNS surface treatment ensures enough hardness to collaborate with our Special High Temperature Resistant Blue Shaft Seals. The PNS treatment increases the lifetime of shaft / seal cooperation and helps to reduce wear on the shaft surface. By this, the gearbox obtains a longer drip free operation compared to standard shaft / seal combinations made of SS304 with NBR or FKM. The use of above combination offers all the positive characteristics of stainless steel and the surface hardness of a hardened shaft.

Blue shaft seals

Our high performance engineered shaft seals have a Blue colour. It is a well overthought feature for food industry applications. It might be clear that the colour "Blue" is a not existing organic colour. In the context of food safety it is a common use to embed blue colours as these are very visible and easily to be recognised by Vision scanning systems.

Foodgrade lubrication

All gearboxes are standard equipped with NSH H1 certified Synthetic Foodgrade lubrication. On request it can be supplied with a Halal, Kosher or Nut Free certification.

Engraved tagplate

To avoid dirt traps under the commonly used motor identification tagplate, all our motors and gearboxes are being equipped with a laser engraved tagplate. Besides for the food safety this also prevents against possible lost of information because of taking away the tagplate or loosing the tagplate from the driveparts.

General specifications

- Standard ratio's 3,77 : 1 to 281.71 : 1
- IEC motor adaption versions (AM)
- Integrated motor versions (B5T..)
- Standard hollow shafts 30, 35, 40, 50 & 60 mm
- Extra hygienic optional shaft covers. (open and closed version)
- Easy clean torque arm with built in elastic element to reduce mis alignment.
- High efficiency of 94%
- Optional output flanges available
- Stainless Steel AISI316
- Duplex stainless steel 2205 output shaft
- Interchangeable with euro sizes
- Designed and produced in the Netherlands

As a part of our standard procedure every drive is tested in our production facility in the Netherlands to ensure correct functioning.



FFA 38		FFA 48	
Ratio's	From: 3.77 : 1 To: 128.51 : 1	Ratio's	From: 4.99 : 1 To: 190.76 : 1
Standard shaft	30 mm	Standard shaft	35 mm
Torque	Max. 200 Nm	Torque	Max. 400 Nm
Power	Max. 3.0 kW	Power	Max. 3.0 kW
FFA 68		FFA 78	
Ratio's	From: 3.97 : 1 To: 228.99 : 1	Ratio's	From: 4.28 : 1 To: 281.71 : 1
Standard shaft	40 mm	Standard shaft	50 mm
Torque	Max. 820 Nm	Torque	Max. 1500 Nm
Power	Max. 5.5 kW	Power	Max. 7.5 kW



Torque Arms	
FFA 38	SS 095 MS L110S
	SS 095 MS L130S
FFA 48	SS 115 MS L160S
	SS 115 MS L200
FFA 68	SS 130 MS L200
FFA 78	SS 140 MS

Easy Clean Closed Cover	
FFA 38	SS 095 CC
FFA 48	SS 115 CC
FFA 68	SS 130 CC
FFA 78	SS 140 CC

Easy Clean Open Cover	
FFA 38	SS 095 CO30
FFA 48	SS 115 CO35
FFA 68	SS 130 CO40
FFA 78	

Output Flanges	
FFA 38	SS 085 FL 125
FFA 48	SS 095 FL 160
	SS 095 FL 180
FFA 68	SS 115 FL 200
FFA 78	SS 130 FL 250

FFA Parallel Helical Gearbox



Possible Geometrical Combinations

FFA 38 (3 stage)

Maximum Torque = 200 Nm @ N1 = 1400r/min

n_2 [Min ⁻¹]	M_{2max} [Nm]	F_{r2} [N]	i	$\eta\%$	AM	B5T1	AM	B5T1	AM	B5T1	AM	B5T1	AM	B5T1
					63	71	80	90	100					
11	200	4290	128.51	94 %	✓	✓								
12	200	4290	117.88	94 %	✓	✓								
14	200	4290	100.36	94 %	✓	✓	✓							
16	200	4290	86.53	94 %	✓	✓	✓	✓						
17	200	4290	80.65	94 %	✓	✓	✓	✓	✓					
20	200	4290	70.50	94 %	✓	✓	✓	✓	✓	✓				✓
21	200	4290	66.09	94 %	✓	✓	✓	✓	✓	✓				
24	200	4290	58.32	94 %	✓	✓	✓	✓	✓	✓				✓
26	200	4290	54.54	94 %	✓	✓	✓	✓						
27	200	4290	51.70	94 %	✓	✓	✓	✓	✓	✓				✓
30	200	4290	47.02	94 %	✓	✓	✓	✓	✓	✓				
32	200	4290	43.83	94 %	✓	✓	✓	✓	✓	✓				
37	200	4290	38.31	94 %	✓	✓	✓	✓	✓	✓				✓
39	200	4290	35.91	94 %	✓	✓	✓	✓	✓	✓				
44	200	4290	31.69	94 %	✓	✓	✓	✓	✓	✓				✓
50	200	4060	28.09	94 %	✓	✓	✓	✓	✓	✓				✓
59	200	3760	23.88	94 %	✓	✓	✓	✓	✓	✓				✓

P_{1n} =
Rated Motor
Power [kW]

n_2 =
Output Speed
[Min⁻¹]

M_{2n} =
Rated Output torque
[Nm]

M_{2max} =
Maximum permissible
output torque [Nm]

F_{r2} =
Permitted Overhung
Load Output Side [N]

i = Gear unit Ratio
 $\eta\%$ = Transmission
Efficiency %

fs = Service Factor

FFA 38 (2 stage)

Maximum Torque = 200 Nm @ $N_1 = 1400\text{r/min}$

n_2 [Min ⁻¹]	$M_{2\text{max}}$ [Nm]	F_{r2} [N]	i	$\eta\%$	AM	B5T1	AM	B5T1	AM	B5T1	AM	B5T1	AM	B5T1
					63		71		80		90		100	
59	200	3740	23.63	96 %	✓		✓		✓					
68	200	3500	20.57	96 %	✓		✓		✓			✓		
73	200	3390	19.27	96 %	✓		✓		✓			✓		
82	200	3180	17.03	96 %	✓		✓		✓			✓		✓
89	200	3070	15.81	96 %	✓		✓		✓			✓		
98	200	2910	14.33	96 %	✓		✓		✓			✓		✓
109	200	2750	12.87	96 %	✓		✓		✓			✓		✓
126	190	2620	11.08	96 %	✓		✓		✓			✓		✓
134	185	2580	10.42	96 %	✓		✓		✓			✓		✓
156	175	2460	8.97	96 %	✓		✓		✓			✓		✓
175	170	2360	8.01	96 %					✓			✓		✓
188	145	2350	7.44	96 %	✓		✓		✓			✓		
208	140	2270	6.74	96 %	✓		✓		✓			✓		✓
231	135	2190	6.05	96 %	✓		✓		✓			✓		✓
269	125	2120	5.21	96 %	✓		✓		✓			✓		✓
286	120	2100	4.90	96 %	✓		✓		✓			✓		✓
332	110	2030	4.22	96 %	✓		✓		✓			✓		✓
371	105	1970	3.77	96 %					✓			✓		✓

FFA 48 (3 stage)

Maximum Torque = 400 Nm @ N1 = 1400r/min

n_2 [Min ⁻¹]	M_{2max} [Nm]	F_{r2} [N]	i	$\eta\%$	AM	B5T1	AM	B5T1	AM	B5T1	AM	B5T1	AM	B5T1
					63	71	80	90	100					
7.3	400	5920	190.76	94 %	✓	✓			✓					
8.0	400	5920	175.38	94 %	✓	✓			✓					
9.3	400	5920	150.06	94 %	✓	✓	✓		✓					
11	400	5920	130.07	94 %	✓	✓	✓		✓					
12	400	5920	121.57	94 %	✓	✓	✓		✓					
13	400	5920	105.09	94 %	✓	✓	✓		✓				✓	
16	400	5920	89.29	94 %	✓	✓	✓		✓				✓	
18	400	5920	79.72	94 %	✓	✓	✓		✓				✓	
21	400	5920	68.09	94 %	✓	✓	✓		✓				✓	
21	400	5920	65.36	94 %	✓	✓	✓		✓					
25	400	5920	56.49	94 %	✓	✓	✓		✓				✓	
29	400	5920	48.00	94 %	✓	✓	✓		✓				✓	
33	400	5920	42.86	94 %	✓	✓	✓		✓				✓	
38	400	5920	36.61	94 %	✓	✓	✓		✓				✓	
41	400	5920	34.29	94 %	✓	✓	✓		✓				✓	
48	400	5790	28.88	94 %	✓	✓	✓		✓				✓	

P_{1n} =
Rated Motor
Power [kW]

n_2 =
Output Speed
[Min⁻¹]

M_{2n} =
Rated Output torque
[Nm]

M_{2max} =
Maximum permissible
output torque [Nm]

F_{r2} =
Permitted Overhung
Load Output Side [N]

i = Gear unit Ratio
 $\eta\%$ = Transmission
Efficiency %

fs = Service Factor

FFA 48 (2 stage)

Maximum Torque = 400 Nm @ $N_1 = 1400\text{r/min}$

n_2 [Min ⁻¹]	$M_{2\max}$ [Nm]	F_{r2} [N]	i	$\eta\%$	AM	B5T1	AM	B5T1	AM	B5T1	AM	B5T1	AM	B5T1
					63	71	80	90	100					
45	400	5920	30.86	96 %	✓	✓	✓	✓						
48	400	5830	29.32	96 %	✓	✓	✓	✓						
54	400	5470	25.72	96 %	✓	✓	✓	✓					✓	
64	400	5030	21.82	96 %	✓	✓	✓	✓					✓	✓
71	400	4770	19.70	96 %	✓	✓	✓	✓					✓	✓
81	400	4450	17.33	96 %	✓	✓	✓	✓					✓	✓
86	400	4320	16.36	96 %	✓	✓	✓	✓					✓	✓
101	400	3950	13.93	96 %	✓	✓	✓	✓					✓	✓
111	400	3740	12.66	96 %			✓	✓					✓	✓
128	400	3440	10.97	96 %			✓	✓					✓	✓
156	330	3250	8.96	96 %	✓	✓	✓	✓					✓	✓
178	380	2630	7.88	96 %	✓	✓	✓	✓					✓	✓
188	380	2530	7.44	96 %	✓	✓	✓	✓					✓	✓
221	350	2470	6.34	96 %	✓	✓	✓	✓					✓	✓
243	340	2390	5.76	96 %			✓	✓					✓	✓
281	320	2310	4.99	96 %			✓	✓					✓	✓

FFA 68 (3 stage)

Maximum Torque = 820 Nm @ N1 = 1400r/min

n_2 [Min ⁻¹]	M_{2max} [Nm]	F_{r2} [N]	i	$\eta\%$	AM	B5T2	AM	B5T2	AM	B5T2	AM	B5T2	AM	B5T2	AM	B5T2
					63	71	80	90	100	112	132					
6.1	820	10300	228.99	94 %	✓		✓									
7.2	820	10300	195.36	94 %	✓		✓	✓								
8.2	820	10300	170.85	94 %	✓		✓	✓	✓							
8.6	820	10300	162.31	94 %	✓		✓	✓	✓							
9.8	820	10300	142.40	94 %	✓		✓	✓	✓	✓						
12	820	10300	120.79	94 %	✓		✓	✓	✓	✓	✓					
13	820	10300	109.04	94 %	✓		✓	✓	✓	✓	✓	✓				
15	820	10300	95.94	94 %	✓		✓	✓	✓	✓	✓	✓	✓			✓
15	820	10300	90.59	94 %	✓		✓	✓	✓	✓	✓	✓	✓	✓		✓
18	820	10300	79.76	94 %	✓		✓	✓	✓	✓	✓	✓	✓	✓		
21	820	10300	67.65	94 %	✓		✓	✓	✓	✓	✓	✓	✓	✓		
23	820	10300	61.07	94 %	✓		✓	✓	✓	✓	✓	✓	✓	✓		
26	820	10300	53.73	94 %	✓		✓	✓	✓	✓	✓	✓	✓	✓		✓
28	820	10300	50.74	94 %	✓		✓	✓	✓	✓	✓	✓	✓	✓		✓
32	820	10300	43.20	94 %	✓		✓	✓	✓	✓	✓	✓	✓	✓		✓
36	780	10700	39.26	94 %				✓	✓	✓	✓	✓	✓	✓		✓
41	740	11000	34.01	94 %				✓	✓	✓	✓	✓	✓	✓		✓

P_{1n} =
Rated Motor
Power [kW]

n_2 =
Output Speed
[Min⁻¹]

M_{2n} =
Rated Output torque
[Nm]

M_{2max} =
Maximum permissible
output torque [Nm]

F_{r2} =
Permitted Overhung
Load Output Side [N]

i = Gear unit Ratio
 $\eta\%$ = Transmission
Efficiency %

fs = Service Factor

FFA 68 (2 stage)

Maximum Torque = 820 Nm @ N1 = 1400r/min

n_2 [Min ⁻¹]	M_{2max} [Nm]	F_{r2} [N]	i	$\eta\%$	AM	B5T2	AM	B5T2	AM	B5T2	AM	B5T2	AM	B5T2	AM	B5T2
					63	71	80	90	100	112	132					
39	820	10300	36.30	96 %	✓		✓		✓							
44	820	10300	32.08	96 %	✓		✓		✓		✓					
51	820	10300	27.41	96 %	✓		✓		✓		✓		✓			
56	820	10300	25.13	96 %	✓		✓		✓		✓		✓			
63	820	10300	22.05	96 %	✓		✓		✓		✓		✓		✓	
67	820	10300	20.90	96 %	✓		✓		✓		✓		✓		✓	
77	820	10300	18.29	96 %	✓		✓		✓		✓		✓		✓	
85	820	10300	16.48	96 %					✓		✓		✓		✓	
97	820	10300	14.46	96 %					✓		✓		✓		✓	
110	820	10300	12.76	96 %					✓		✓		✓		✓	
124	820	10300	11.31	96 %					✓		✓		✓		✓	
145	820	10300	9.66	96 %					✓		✓		✓		✓	
154	530	11400	9.08	96 %	✓		✓		✓		✓		✓		✓	
163	570	10900	8.60	96 %	✓		✓		✓		✓		✓		✓	
186	610	10100	7.53	96 %	✓		✓		✓		✓		✓		✓	
206	620	9660	6.78	96 %					✓		✓		✓		✓	
235	610	9200	5.95	96 %					✓		✓		✓		✓	
267	590	8850	5.25	96 %					✓		✓		✓		✓	
300	560	8590	4.66	96 %					✓		✓		✓		✓	
353	500	8390	3.97	96 %					✓		✓		✓		✓	

FFA 78 (3 stage)

Maximum Torque = 1500 Nm @ N1 = 1400r/min

n_2 [Min ⁻¹]	M_{2max} [Nm]	F_{r2} [N]	i	$\eta\%$	AM	B5T3	AM	B5T3	AM	B5T3	AM	B5T3	AM	B5T3	AM	B5T3
					63	71	80	90	100	112	132					
5.0	1500	15700	281.71	94 %	✓		✓									
5.3	1500	15700	262.93	94 %	✓		✓									
6.2	1500	15700	225.79	94 %	✓		✓	✓								
7.1	1500	15700	198.31	94 %	✓		✓	✓	✓							
7.4	1500	15700	188.40	94 %	✓		✓	✓	✓							
8.4	1500	15700	166.47	94 %	✓		✓	✓	✓	✓						
9.8	1500	15700	142.27	94 %	✓		✓	✓	✓	✓	✓					
11	1500	15700	130.42	94 %	✓		✓	✓	✓	✓	✓	✓				
12	1500	15700	114.45	94 %	✓		✓	✓	✓	✓	✓	✓	✓			✓
13	1500	15700	108.46	94 %	✓		✓	✓	✓	✓	✓	✓	✓	✓		✓
15	1500	15700	94.93	94 %	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
16	1500	15700	85.52	94 %				✓	✓	✓	✓	✓	✓	✓	✓	✓
19	1500	15700	75.02	94 %				✓	✓	✓	✓	✓	✓	✓	✓	✓
19	1500	15700	72.50	94 %	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
21	1500	15700	66.46	94 %	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
24	1500	15700	58.32	94 %	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
25	1500	15700	55.27	94 %	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
29	1500	15700	48.37	94 %	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
32	1500	15700	43.58	94 %				✓	✓	✓	✓	✓	✓	✓	✓	✓
37	1500	15700	38.23	94 %				✓	✓	✓	✓	✓	✓	✓	✓	✓
41	1500	15700	33.74	94 %					✓	✓	✓	✓	✓	✓	✓	✓
47	1500	15700	29.91	94 %						✓	✓	✓	✓	✓	✓	✓
55	1450	16100	25.54	94 %							✓	✓	✓	✓	✓	✓

P_{1n} =
Rated Motor
Power [kW]

n_2 =
Output Speed
[Min⁻¹]

M_{2n} =
Rated Output torque
[Nm]

M_{2max} =
Maximum permissible
output torque [Nm]

F_{r2} =
Permitted Overhung
Load Output Side [N]

i = Gear unit Ratio
 $\eta\%$ = Transmission
Efficiency %



fs = Service Factor

FFA 78 (2 stage)

Maximum Torque = 1500 Nm @ N1 = 1400r/min

n_2 [Min ⁻¹]	M_{2max} [Nm]	F_{r2} [N]	i	$\eta\%$	AM	B5T3	AM	B5T3	AM	B5T3	AM	B5T3	AM	B5T3	AM	B5T3
					63	71	80	90	100	112	132					
38	1110	17900	36.58	96 %	✓		✓		✓		✓					
44	1380	16500	31.51	96 %	✓		✓		✓		✓		✓			
49	1430	16200	28.75	96 %	✓		✓		✓		✓		✓			
55	1500	15700	25.50	96 %	✓		✓		✓		✓		✓		✓	
65	1500	15700	21.43	96 %	✓		✓		✓		✓		✓		✓	
71	1500	15700	19.70	96 %					✓		✓		✓		✓	
80	1500	15700	17.49	96 %					✓		✓		✓		✓	
90	1500	15700	15.64	96 %							✓		✓		✓	
100	1500	15700	14.06	96 %							✓		✓		✓	
115	1500	14900	12.20	96 %							✓		✓		✓	
128	1500	14200	10.93	96 %									✓		✓	
151	1080	13800	9.30	96 %					✓		✓		✓		✓	
169	1080	13100	8.26	96 %					✓		✓		✓		✓	
189	1080	12500	7.39	96 %							✓		✓		✓	
211	1080	12000	6.64	96 %							✓		✓		✓	
243	1080	11300	5.76	96 %							✓		✓		✓	
271	1080	10700	5.16	96 %									✓		✓	
327	1010	10200	4.28	96 %									✓		✓	

Gearbox Selection Tables

P_{1n} [kW]	n_2 min-1	M_{2n} [Nm]	i	F_{r2} [N]	f_s		
0.12	11	107	128.51	5220	1.85	FFA 38 AM63 FFA 38 B5T1	631-4 B5 631-4 B5T1
	12	98	117.88	5270	2.00		
	14	83	100.36	5340	2.40		
	16	72	86.53	5400	2.80		
	17	67	80.65	5410	3.00	FFA 48 AM63 FFA 48 B5T1	631-4 B5 631-4 B5T1
	7.2	158	190.76	7970	2.50		
	7.9	146	175.38	8020	2.80		
	9.2	125	150.06	8100	3.20		
11	108	130.07	8150	3.70			
0.18	10	167	128.51	4700	1.20	FFA 38 AM63 FFA 38 B5T1	632-4 B5 632-4 B5T1
	11	154	117.88	4850	1.30		
	13	131	100.36	5050	1.55		
	15	113	86.53	5180	1.75		
	16	105	80.65	5230	1.90		
	19	92	70.50	5300	2.20		
	20	86	66.09	5330	2.30		
	23	76	58.32	5380	2.60		
	8.7	198	100.36	4320	1.00	FFA 38 AM71 FFA 38 B5T1	711-6 B5 711-6 B5T1
	10	171	86.53	4660	1.15		
	11	159	80.65	4790	1.25		
	12	139	70.50	4970	1.45		
	6.9	250	190.76	7470	1.60	FFA 48 AM63 FFA 48 B5T1	632-4 B5 632-4 B5T1
	7.5	230	175.38	7610	1.75		
	8.8	195	150.06	7800	2.10		
	10	169	130.07	7920	2.40		
	11	158	121.57	7970	2.50		
	4.6	375	190.76	6240	1.05		
	5.0	345	175.38	6600	1.15		
	5.8	295	150.06	7090	1.35		
	6.7	255	130.07	7410	1.55		
	7.2	240	121.57	7530	1.65		
	5.8	300	228.99	13000	2.80	FFA 68 AM63 FFA 68 B5T2	632-4 B5 632-4 B5T2
	6.8	255	195.39	13000	3.20		
	7.7	225	170.85	13000	3.70		
	3.8	450	228.99	12600	1.80	FFA 68 AM71 FFA 68 B5T2	711-6 B5 711-6 B5T2
	4.5	385	195.39	12900	2.10		
	5.1	340	170.85	13000	2.40		
3.1	555	281.71	19600	2.70	FFA 78 AM71 FFA 78 B5T3	711-6 B5 711-6 B5T3	
3.3	520	262.93	19700	2.90			
3.9	445	225.79	19800	3.40			

P_{1n} =
Rated Motor
Power [kW]

n_2 =
Output Speed
[Min⁻¹]



M_{2n} =
Rated Output torque
[Nm]


M_{2max} =
Maximum permissible
output torque [Nm]

F_{r2} =
Permitted Overhung
Load Output Side [N]

i = Gear unit Ratio
 $\eta\%$ = Transmission
Efficiency %

f_s = Service Factor

P_{1n} [kW]	n_2 min-1	M_{2n} [Nm]	i	F_{t2} [N]	f_s		
0.25	13	184	100.36	4500	1.10	FFA 38 AM71 FFA 38 B5T1	711-4 B5 711-4 B5T1
	15	159	86.53	4790	1.25		
	16	148	80.65	4900	1.35		
	18	130	70.50	5060	1.55		
	20	121	66.09	5120	1.65		
	22	107	58.32	5210	1.85		
	24	100	54.54	5260	2.00		
	25	95	51.70	5280	2.10		
	28	86	47.02	5330	2.30		
	30	81	43.83	5360	2.50		
	34	70	38.31	5400	2.80		
	36	66	35.91	5420	3.00		
	41	58	31.69	5450	3.40		
	6.8	350	190.76	6550	1.15	FFA 48 AM71 FFA 48 B5T1	711-4 B5 711-4 B5T1
	7.4	320	175.38	6850	1.25		
	8.7	275	150.06	7270	1.45		
	10	240	130.07	7540	1.65		
	11	225	121.57	7640	1.80		
	12	193	105.09	7810	2.10		
	15	164	89.29	7950	2.40		
	5.9	405	150.06	5750	1.00	FFA 48 AM71 FFA 48 B5T1	712-6 B5 712-6 B5T1
	6.8	355	130.07	6530	1.15		
	7.2	330	121.57	6770	1.20		
	8.4	285	105.09	7190	1.40	FFA 68 AM71 FFA 68 B5T2	711-4 B5 711-4 B5T2
	5.7	420	228.99	12700	1.95		
	6.7	360	195.39	13000	2.30		
	7.6	315	170.85	13000	2.60		
	8.0	300	162.31	13000	2.80		
	9.1	260	142.40	13000	3.10		
	3.8	620	228.99	11800	1.30	FFA 68 AM71 FFA 68 B5T2	712-6 B5 712-6 B5T2
	4.5	530	195.39	12300	1.55		
	5.2	465	170.85	12600	1.75		
	5.4	440	162.31	12700	1.85		
6.2	385	142.40	12900	2.10			
3.1	765	281.71	19100	1.95	FFA 78 AM71 FFA 78 B5T3	712-6 B5 712-6 B5T3	
3.4	715	262.93	19200	2.10			
3.9	615	225.79	19500	2.50			
4.4	540	198.31	19600	2.80			
4.7	510	188.40	19700	2.90			

P_{1n} [kW]	n_2 min-1	M_{2n} [Nm]	i	F_{r2} [N]	f_s		
0.37	20	181	70.50	4550	1.10	FFA 38 AM71 FFA 38 B5T1	712-4 B5 712-4 B5T1
	21	169	66.09	4680	1.20		
	24	149	58.32	4890	1.35		
	25	140	54.54	4970	1.45		
	27	132	51.70	5030	1.50		
	29	120	47.02	5120	1.65		
	31	112	43.83	5180	1.80		
	36	98	38.31	5270	2.00		
	38	92	35.91	5300	2.20		
	44	81	31.69	5300	2.50		
	49	72	28.09	5140	2.80		
	58	61	23.88	4930	3.30		
	9.2	385	150.06	6140	1.05	FFA 48 AM71 FFA 48 B5T1	712-4 B5 712-4 B5T1
	11	335	130.07	6740	1.20		
	13	270	105.09	7320	1.50		
	15	230	89.29	7600	1.75		
	17	205	79.72	7750	1.95		
	20	174	68.09	7900	2.30		
	21	167	65.36	7930	2.40		
	6.0	585	228.99	12000	1.40	FFA 68 AM71 FFA 68 B5T2	712-4 B5 712-4 B5T2
	7.1	500	195.39	12400	1.65		
	8.1	435	170.85	12700	1.85		
	8.5	415	162.31	12800	1.95		
	9.7	365	142.40	12900	2.30		
	11	310	120.79	13000	2.70		
	4.6	765	195.39	10800	1.05	FFA 68 AM80 FFA 68 B5T2	801-6 B14a 801-6 B5T2
	5.3	670	170.85	11500	1.20		
	5.5	635	162.31	11700	1.30		
	6.3	560	142.40	12100	1.45		
	7.5	475	120.79	12500	1.75		
4.9	720	281.71	19200	2.10	FFA 78 AM71 FFA 78 B5T3	712-4 B5 712-4 B5T3	
5.2	675	262.93	19300	2.20			
6.1	580	225.79	19500	2.60			
7.0	510	198.31	19700	3.00			
4.0	890	225.79	18700	1.70	FFA 78 AM80 FFA 78 B5T3	801-6 B14a 801-6 B5T3	
4.5	780	198.31	19100	1.95			
4.8	740	188.40	19200	2.00			
5.4	655	166.47	19400	2.30			
6.3	560	142.27	19600	2.70			

P_{1n} =
Rated Motor
Power [kW]

n_2 =
Output Speed
[Min⁻¹]



M_{2n} =
Rated Output torque
[Nm]


M_{2max} =
Maximum permissible
output torque [Nm]

F_{r2} =
Permitted Overhung
Load Output Side [N]

i = Gear unit Ratio
 η % = Transmission
Efficiency %

f_s = Service Factor

P_{1n} [kW]	n_2 min-1	M_{2n} [Nm]	i	F_{r2} [N]	f_s		
0.55	26	200	51.70	4300	1.00	FFA 38 AM80 FFA 38 B5T1	801-4 B14a 801-4 B5T1
	29	182	47.02	4540	1.10		
	31	169	43.83	4680	1.20		
	36	148	38.31	4900	1.35		
	38	139	35.91	4980	1.45		
	43	122	31.69	4990	1.65		
	48	109	28.09	4870	1.85		
	57	92	23.88	4700	2.20		
	58	91	23.63	4690	2.20		
	66	79	20.57	4540	2.50		
	71	74	19.27	4470	2.70		
	80	66	17.03	4340	3.00		
	95	55	14.33	4150	3.60		
	13	405	105.09	5840	1.00		
	15	345	89.29	6620	1.15		
	17	310	79.72	6990	1.30		
	20	265	68.09	7370	1.50		
	21	250	65.36	7440	1.60		
	24	220	56.49	7670	1.85		
	28	185	48.00	7850	2.20		
	32	166	42.86	7940	2.40		
	7.0	755	195.39	10900	1.10	FFA 68 AM80 FFA 68 B5T2	801-4 B14a 801-4 B5T2
	8.0	660	170.85	11500	1.25		
	8.4	625	162.31	11700	1.30		
	9.6	550	142.40	12200	1.50		
	11	465	120.79	12600	1.75		
	12	420	109.04	12700	1.95		
	14	370	95.94	12900	2.20		
	15	350	90.59	13000	2.30		
	17	310	79.76	13000	2.70		
	6.0	870	225.79	18800	1.70	FFA 78 AM80 FFA 78 B5T3	801-4 B14a 801-4 B5T3
	6.9	765	198.31	19100	1.95		
	7.2	730	188.40	19200	2.10		
	8.2	645	166.47	19400	2.30		
	9.6	550	142.27	19600	2.70		
	10	505	130.42	19700	3.00		
	12	440	114.45	19800	3.40		
	13	420	108.46	19800	3.60		
	14	365	94.93	19900	4.10		
	4.0	1320	225.79	16800	1.15	FFA 78 AM80 FFA 78 B5T3	802-6 B14a 802-6 B5T3
	4.5	1160	198.31	17600	1.30		
	4.8	1100	188.40	17900	1.35		
5.4	970	166.47	18400	1.55			
6.3	830	142.27	18900	1.80			
6.9	760	130.42	19100	1.95			

P_{1n} [kW]	n_2 min-1	M_{2n} [Nm]	i	F_{r2} [N]	f_s		
0.75	36	199	38.31	4310	1.00	FFA 38 AM80 FFA 38 B5T1	802-4 B14a 802-4 B5T1
	38	186	35.91	4480	1.05		
	44	165	31.69	4620	1.20		
	49	146	28.09	4540	1.35		
	58	123	23.63	4400	1.65		
	67	107	20.57	4290	1.85		
	72	100	19.27	4240	2.00		
	81	88	17.03	4130	2.30		
	96	74	14.33	3970	2.70		
	107	67	12.87	3870	3.00		
	20	355	68.09	6520	1.15	FFA 48 AM80 FFA 48 B5T1	802-4 B14a 802-4 B5T1
	21	340	65.36	6680	1.20		
	24	295	56.49	7120	1.35		
	29	250	48.00	7470	1.60		
	32	220	42.86	7640	1.80		
	38	190	36.61	7820	2.10		
	40	178	34.29	7850	2.30		
	48	150	28.88	7540	2.70		
	9.7	740	142.40	11000	1.10	FFA 68 AM80 FFA 68 B5T2	802-4 B14a 802-4 B5T2
	11	625	120.79	11700	1.30		
	13	565	109.04	12100	1.45		
	14	500	95.94	12400	1.65		
	15	470	90.59	12500	1.75		
	17	415	79.76	12800	2.00		
	20	350	67.65	13000	2.30		
	23	315	61.07	13000	2.60		
	6.1	1170	225.79	17600	1.30	FFA 78 AM80 FFA 78 B5T3	802-4 B14a 802-4 B5T3
	7.0	1030	198.31	18200	1.45		
	7.3	980	188.40	18400	1.55		
	8.3	860	166.47	18800	1.75		
	9.7	740	142.27	19200	2.00		
	11	675	130.42	19300	2.20		
	12	595	114.45	19500	2.50		
13	565	108.46	19600	2.70			
4.8	1500	188.40	15700	1.00	FFA 78 AM90 FFA 78 B5T3	90S-6 B14a 90S-6 B5T3	
5.4	1320	166.47	16800	1.15			
6.3	1130	142.27	17800	1.30			
6.9	1040	130.42	18200	1.45			

P_{1n} =
Rated Motor
Power [kW]

n_2 =
Output Speed
[min⁻¹]



M_{2n} =
Rated Output torque
[Nm]

M_{2max} =
Maximum permissible
output torque [Nm]

F_{r2} =
Permitted Overhung
Load Output Side [N]

i = Gear unit Ratio
 η = Transmission
Efficiency %

f_s = Service Factor

P_{1n} [kW]	n_2 min-1	M_{2n} [Nm]	i	F_{t2} [N]	f_s		
1.1	59	179	23.88	3930	1.10	FFA 38 AM90 FFA 38 B5T1	90S-4 B14a 90S-4 B5T1
	68	154	20.57	3870	1.30		
	73	145	19.27	3840	1.40		
	82	128	17.03	3780	1.55		
	98	108	14.33	3680	1.85		
	109	97	12.87	3610	2.10		
	126	83	11.08	3500	2.30		
	134	78	10.42	3460	2.40		
	156	67	8.97	3350	2.60		
	29	360	48.00	6440	1.10	FFA 48 AM90 FFA 48 B5T1	90S-4 B14a 90S-4 B5T1
	33	320	42.86	6860	1.25		
	38	275	36.61	7280	1.45		
	41	255	34.29	7260	1.55		
	48	215	28.88	7040	1.85		
	45	230	30.86	7130	1.75		
	48	220	29.32	7060	1.80		
	54	193	25.72	6880	2.10		
	64	164	21.82	6640	2.40		
	71	148	19.70	6490	2.70		
	13	820	109.04	10300	1.00	FFA 68 AM90 FFA 68 B5T2	90S-4 B14a 90S-4 B5T2
	15	720	95.94	11100	1.15		
	15	680	90.59	11400	1.20		
	18	600	79.76	11900	1.35		
	21	510	67.65	12400	1.60		
	23	460	61.07	12600	1.80		
	26	405	53.73	12800	2.00		
	28	380	50.74	12900	2.20		
	32	325	43.20	13000	2.50		
	36	295	39.26	13000	2.70		
	41	255	34.01	13000	2.90		
	7.1	1490	198.31	15800	1.00	FFA 78 AM90 FFA 78 B5T3	FFA 78 AM90 FFA 78 B5T3
	7.4	1410	188.40	16300	1.05		
	8.4	1250	166.47	17200	1.20		
	9.8	1070	142.27	18000	1.40		
	11	980	130.42	18400	1.55		
	12	860	114.45	18800	1.75		
13	810	108.46	18900	1.85			
15	710	94.93	19200	2.10			
16	640	85.52	19400	2.30			
19	565	75.02	19600	2.70			

P_{1n} [kW]	n_2 min-1	M_{2n} [Nm]	i	F_{r2} [N]	f_s		
1.5	73	196	19.27	3410	1.00	FFA 38 AM90 FFA 38 B5T1	90L-4 B14a 90L-4 B5T1
	83	173	17.03	3400	1.15		
	98	146	14.33	3350	1.35		
	110	131	12.87	3310	1.55		
	127	113	11.08	3250	1.70		
	135	106	10.42	3220	1.75		
	157	91	8.97	3140	1.90		
	176	81	8.01	3080	2.10		
	39	370	36.61	6300	1.10		
	41	350	34.29	6580	1.15		
	49	295	28.88	6500	1.35		
	46	315	30.86	6550	1.30		
	48	300	29.32	6510	1.35		
	55	260	25.72	6390	1.55		
	65	220	21.82	6230	1.80		
	72	200	19.70	6110	2.00		
	81	176	17.33	5970	2.30		
	86	166	16.36	5900	2.40		
	101	142	13.93	5700	2.80		
	18	810	79.76	10400	1.00	FFA 68 AM90 FFA 68 B5T2	90L-4 B14a 90L-4 B5T2
	21	685	67.65	11400	1.20		
	23	620	61.07	11800	1.30		
	26	545	53.73	12200	1.50		
	28	515	50.74	12300	1.60		
	33	440	43.20	12700	1.85		
	36	400	39.26	12800	1.95		
	39	370	36.30	12900	2.20		
	44	325	32.08	13000	2.50		
	51	280	27.41	13000	2.90		
	56	255	25.13	13000	3.20		
	9.9	1450	142.27	16100	1.05	FFA 78 AM90 FFA 78 B5T3	90L-4 B14a 90L-4 B5T3
	11	1320	130.42	16800	1.15		
	12	1160	114.45	17600	1.30		
	13	1100	108.46	17900	1.35		
	15	960	94.93	18400	1.55		
	16	870	85.52	18800	1.75		
	19	760	75.02	19100	1.95		
	19	735	72.50	19200	2.00		
	21	675	66.46	19300	2.20		
	24	595	58.32	19500	2.50		
	26	560	55.27	19600	2.70		
	29	490	48.37	19700	3.10		
	32	445	43.58	19800	3.40		
	37	390	38.23	19900	3.90		
	39	370	36.58	19900	3.00		
45	320	31.51	20000	4.30			

P_{1n} =
Rated Motor
Power [kW]

n_2 =
Output Speed
[Min⁻¹]



M_{2n} =
Rated Output torque
[Nm]



M_{2max} =
Maximum permissible
output torque [Nm]

F_{r2} =
Permitted Overhung
Load Output Side [N]

i = Gear unit Ratio
 η % = Transmission
Efficiency %

f_s = Service Factor

P_{1n} [kW]	n_2 min-1	M_{2n} [Nm]	i	F_{r2} [N]	f_s				
2.2	110	192	12.87	2810	1.05	FFA 38 AM100 FFA 38 B5T1	100L1-4 B14a 100L1-4 B5T1		
	127	165	11.08	2820	1.15				
	135	155	10.42	2810	1.20				
	157	134	8.97	2790	1.30				
	176	119	8.01	2770	1.40				
	209	100	6.74	2630	1.40				
	233	90	6.05	2590	1.50				
	271	78	5.21	2540	1.60				
	288	73	4.90	2520	1.65				
	334	63	4.22	2460	1.75				
	374	56	3.77	2400	1.85				
	55	385	25.72	5560	1.05			FFA 48 AM100 FFA 48 B5T1	100L1-4 B14a 100L1-4 B5T1
	65	325	21.82	5520	1.25				
	72	295	19.70	5480	1.35				
	81	260	17.33	5410	1.55				
	86	245	16.36	5370	1.65				
	101	210	13.93	5250	1.95				
	111	189	12.66	5170	2.10				
	129	163	10.97	5040	2.50				
	157	133	8.96	4740	2.50				
	26	800	53.73	10500	1.00	FFA 68 AM100 FFA 68 B5T2	100L1-4 B14a 100L1-4 B5T2		
	28	755	50.74	10800	1.10				
	33	645	43.20	11600	1.25				
	36	585	39.26	12000	1.35				
	41	505	34.01	12400	1.45				
	44	480	32.08	12500	1.70				
	51	410	27.41	12800	2.00				
	56	375	25.13	12900	2.20				
	64	330	22.05	13000	2.50				
	67	310	20.90	13000	2.60				
	77	275	18.29	13000	3.00				
	15	1410	94.93	16300	1.05	FFA 78 AM100 FFA 78 B5T3	100L1-4 B14a 100L1-4 B5T3		
	16	1270	85.52	17100	1.20				
	19	1120	75.02	17800	1.35				
	21	990	66.46	18300	1.50				
	24	870	58.32	18800	1.75				
	26	820	55.27	18900	1.80				
	29	720	48.37	19200	2.10				
	32	650	43.58	19400	2.30				
	39	545	36.58	19600	2.00				
	45	470	31.51	19700	2.90				
	49	430	28.75	19800	3.30				
	55	380	25.50	19900	4.00				

P_{1n} [kW]	n_2 min-1	M_{2n} [Nm]	i	F_{r2} [N]	f_s		
3.0	175	164	8.01	2410	1.05	FFA 38 AM100 FFA 38 B5T1	100L2-4 B14a 100L2-4 B5T1
	208	138	6.74	2290	1.00		
	231	124	6.05	2300	1.10		
	269	107	5.21	2290	1.15		
	286	100	4.90	2280	1.20		
	332	86	4.22	2250	1.25		
	372	77	3.77	2220	1.35	FFA 48 AM100 FFA 48 B5T1	100L2-4 B14a 100L2-4 B5T1
	71	405	19.70	4750	1.00		
	81	355	17.33	4760	1.15		
	86	335	16.36	4760	1.20		
	100	285	13.93	4740	1.40		
	111	260	12.66	4700	1.55		
	128	225	10.97	4640	1.80	FFA 68 AM100 FFA 68 B5T2	100L2-4 B14a 100L2-4 B5T2
	156	183	8.96	4370	1.80		
	41	695	34.01	11300	1.05		
	44	655	32.08	11600	1.25		
	51	560	27.41	12100	1.45		
	56	515	25.13	12300	1.60		
	63	450	22.05	12600	1.80	FFA 78 AM100 FFA 78 B5T3	100L2-4 B14a 100L2-4 B5T3
	67	430	20.90	12700	1.90		
	77	375	18.29	12900	2.20		
	85	335	16.48	13000	2.40		
	97	295	14.46	13000	2.80		
	19	1540	75.02	15500	1.00		
	21	1360	66.46	16600	1.10	FFA 78 AM100 FFA 78 B5T3	100L2-4 B14a 100L2-4 B5T3
	24	1190	58.32	17500	1.25		
	25	1130	55.27	17800	1.35		
	29	990	48.37	18300	1.50		
	32	890	43.58	18700	1.70		
	37	780	38.23	19000	1.90		
	38	750	36.58	19100	1.50		
	44	645	31.51	19400	2.10		
49	590	28.75	19500	2.40			
55	520	25.50	19700	2.90			
65	440	21.43	19800	3.40			

P_{1n} =
Rated Motor
Power [kW]

n_2 =
Output Speed
[min⁻¹]



M_{2n} =
Rated Output torque
[Nm]



M_{2max} =
Maximum permissible
output torque [Nm]

F_{r2} =
Permitted Overhung
Load Output Side [N]

i = Gear unit Ratio
 η % = Transmission
Efficiency %

f_s = Service Factor

P_{1n} [kW]	n_2 min-1	M_{2n} [Nm]	i	F_{t2} [N]	f_s					
4.0	52	735	27.41	11000	1.10	FFA 68 AM112 FFA 68 B5T2	112M-4 B14a 112M-4 B5T2			
	57	675	25.13	11400	1.20					
	64	595	22.05	11900	1.40					
	68	560	20.90	12100	1.45					
	78	490	18.29	12400	1.65					
	86	445	16.48	12700	1.85					
	98	390	14.46	12900	2.10					
	111	345	12.76	13000	2.40					
	126	305	11.31	13000	2.70					
	147	260	9.66	13000	3.20					
	156	245	9.08	13000	2.20					
	165	230	8.60	12800	2.50					
	189	205	7.53	12400	3.00					
	209	183	6.78	12100	3.40					
	239	160	5.95	11700	3.80					
	270	141	5.25	11400	4.20					
	305	125	4.66	11000	4.50					
	357	107	3.97	10600	4.70					
		26	1490	55.27	15800			1.00	FFA 78 AM112 FFA 78 B5T3	112M-4 B14a 112M-4 B5T3
		29	1300	48.37	16900			1.15		
33		1170	43.58	17600	1.30					
37		1030	38.23	18200	1.45					
42		910	33.74	18600	1.65					
47		800	29.91	19000	1.85					
56		685	25.54	19300	2.10					
45		850	31.51	18800	1.65					
49		775	28.75	19100	1.85					
56		685	25.50	19300	2.20					
66		575	21.43	19500	2.60					
72		530	19.70	19600	2.80					
5.5	65	810	22.05	10400	1.00	FFA 68 AM132 FFA 68 B5T2	132S-4 B14a 132S-4 B5T2			
	68	770	20.90	10800	1.05					
	78	670	18.29	11500	1.20					
	87	605	16.48	11900	1.35					
	99	530	14.46	12300	1.55					
	112	470	12.76	12500	1.75					
	126	415	11.31	12800	1.95					
	148	355	9.66	12900	2.30					
	158	335	9.08	12400	1.60					
	166	315	8.60	12300	1.80					
	190	275	7.53	12000	2.20					
	211	250	6.78	11700	2.50					
	240	220	5.95	11400	2.80					
	272	193	5.25	11100	3.10					
	307	171	4.66	10700	3.30					
360	146	3.97	10300	3.40						

P_{1n} [kW]	n_2 min-1	M_{2n} [Nm]	i	F_{r2} [N]	f_s		
5.5	37	1400	38.23	16300	1.05	FFA 78 AM132 FFA 78 B5T3	132S-4 B14a 132S-4 B5T3
	42	1240	33.74	17300	1.20		
	48	1100	29.91	17900	1.35		
	56	940	25.54	18500	1.55		
	56	940	25.50	18500	1.60		
	67	785	21.43	19000	1.90		
	73	725	19.70	19200	2.10		
	82	645	17.49	19400	2.30		
	91	575	15.64	19600	2.60		
	102	515	14.06	19300	2.90		
	117	450	12.20	18600	3.40		
7.5	48	1500	29.91	15700	1.00	FFA 78 AM132 FFA 78 B5T3	132M-4 B14a 132M-4 B5T3
	56	1280	25.54	17000	1.15		
	56	1280	25.50	17100	1.15		
	67	1070	21.43	18000	1.40		
	73	990	19.70	18400	1.50		
	82	880	17.49	18800	1.70		
	91	785	15.64	19000	1.90		
	102	705	14.06	18600	2.10		
	117	610	12.20	18000	2.50		
	131	545	10.93	17600	2.70		
	154	465	9.30	16500	2.30		
	173	415	8.26	16100	2.60		
	194	370	7.39	15700	2.90		
	215	335	6.64	15300	3.30		
	248	290	5.76	14800	3.70		
277	260	5.16	14500	4.20			
334	215	4.28	13800	4.70			

P_{1n} =
Rated Motor
Power [kW]

n_2 =
Output Speed
[Min⁻¹]

M_{2n} =
Rated Output torque
[Nm]

M_{2max} =
Maximum permissible
output torque [Nm]

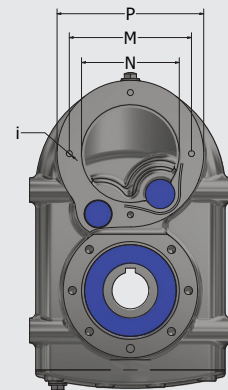
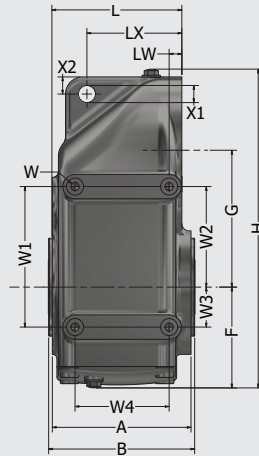
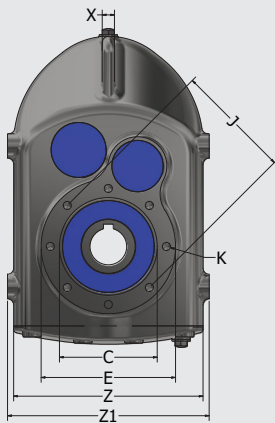
F_{r2} =
Permitted Overhung
Load Output Side [N]

i = Gear unit Ratio
 η % = Transmission
Efficiency %

f_s = Service Factor

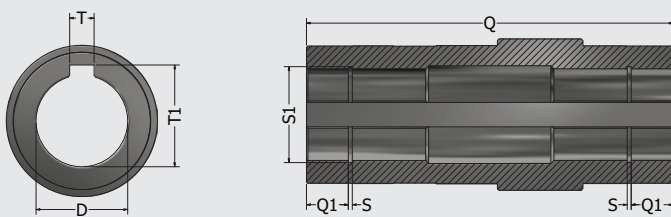
General Dimensions

General Dimensions FFA B5T



Gearbox	A	B	C	E	F	G	H	i	J	K	L	LX	LW	M	N	P	W	W1	W2	W3	W4	X	X1	X2	Z	Z1
FFA 38 B5T1	113.5	119.5	80	110	82.5	112	261	M6	95	M8	106	77.7	10.4	100	80	120	M8	115	82.3	32.7	77	10	14	14	155	165
FFA 48 B5T1	144	150	95	140	92.4	128.1	287	M6	115	M8	132.8	110.8	10.8	100	80	120	M10	145	102	43	91	10	14	17	170	180
FFA 68 B5T2	173	179	110	160	114.5	159.5	361	M8	130	M10	160	121	17.4	130	110	160	M12	190	140	50	112	12	14	21.5	202	212
FFA 78 B5T3	202	208	118	170	120.6	200	428	M12	140	M12	187.2	140.7	16.2	165	130	200	M16	240	170	70	140	21	25	26	260	269

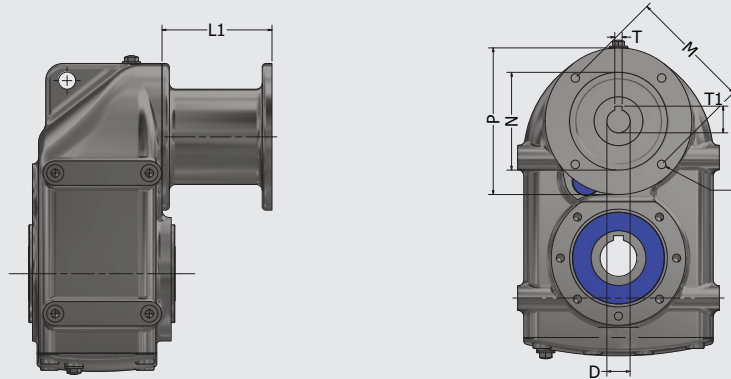
Hollow Shaft Dimensions



Gearbox	D	T	T1	Q	Q1	S	S1
FFA 38	30	8	33.3	120	13.7	1.3	31.4
FFA 48	35	10	38.3	150	16.7	1.6	37
FFA 68	40	12	43.3	179	22.5	1.85	42.5
FFA 78	50	14	53.8	208	26	2.65	53

Different hollow shaft dimensions possible on request

FFA AM Input Dimensions



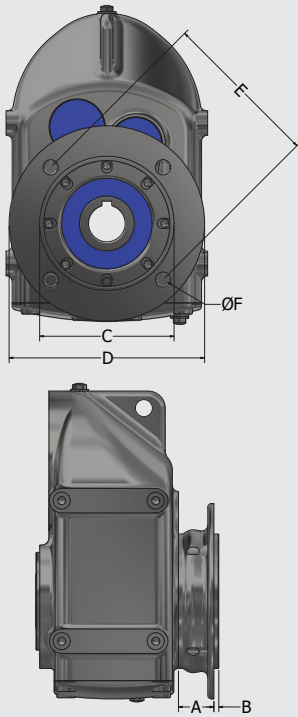
FKA 38 AM	D	i	L1	M	N	P	T	T1
FFA 38 AM63	11	9	90	115	95	140	4	12.8
FFA 38 AM71	14	9	90	130	110	160	5	16.3
FFA 38 AM80	19	7	90	100	80	120	6	21.8
FFA 38 AM90	24	9	90	115	95	140	8	27.3
FFA 38 AM100	28	9	90	130	110	160	8	31.3

FKA 68 AM	D	i	L1	M	N	P	T	T1
FFA 68 AM63	11	9	90	115	95	140	4	12.8
FFA 68 AM71	14	9	90	130	110	160	5	16.3
FFA 68 AM80	19	7	90	100	80	120	6	21.8
FFA 68 AM90	24	9	90	115	95	140	8	27.3
FFA 68 AM100	28	9	90	130	110	160	8	31.3
FFA 68 AM112	28	9	90	130	110	160	8	31.3
FFA 68 AM132	38	11	125	165	130	200	10	41.3

FKA 48 AM	D	i	L1	M	N	P	T	T1
FFA 48 AM63	11	9	90	115	95	140	4	12.8
FFA 48 AM71	14	9	90	130	110	160	5	16.3
FFA 48 AM80	19	7	90	100	80	120	6	21.8
FFA 48 AM90	24	9	90	115	95	140	8	27.3
FFA 48 AM100	28	9	90	130	110	160	8	31.3

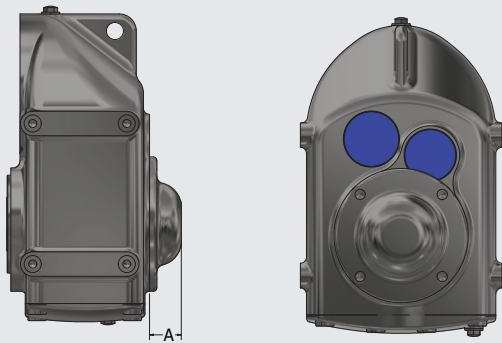
FKA 78 AM	D	i	L1	M	N	P	T	T1
FFA 78 AM71	14	9	105	130	110	160	5	16.3
FFA 78 AM80	19	9	105	100	80	120	6	21.8
FFA 78 AM90	24	9	105	115	95	140	8	27.3
FFA 78 AM100	28	9	105	130	110	160	8	31.3
FFA 78 AM112	28	9	105	130	110	160	8	31.3
FFA 78 AM132	38	11	125	165	130	200	10	41.3

Output Flanges



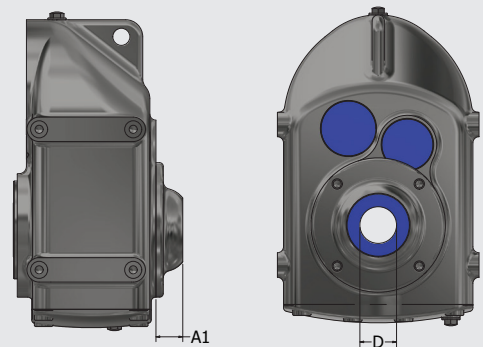
Gearbox	Flange Type	A	B	C	D	E	F
FFA 38	SS 095 FL160	29	4	110	160	130	9
FFA 48	SS 115 FL200	28	3.5	130	200	165	11
FFA 68	SS 130 FL250	26.5	4	180	250	215	13.5
FFA 78	SS 140 FL250	41	4	180	250	215	13.5
FFA 78	SS 140 FL300	41	4	230	300	265	13.5

Closed Cover



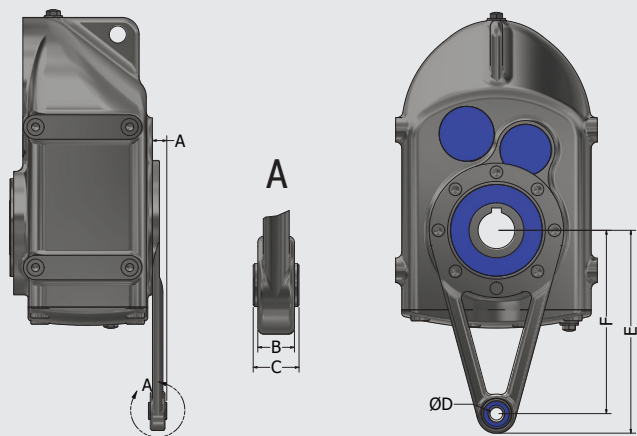
Gearbox	Closed Cover	A
FFA 38	SS 095 CC	26
FFA 48	SS 115 CC	28
FFA 68	SS 130 CC	28
FFA 78	SS 140 CC	29

Open Cover



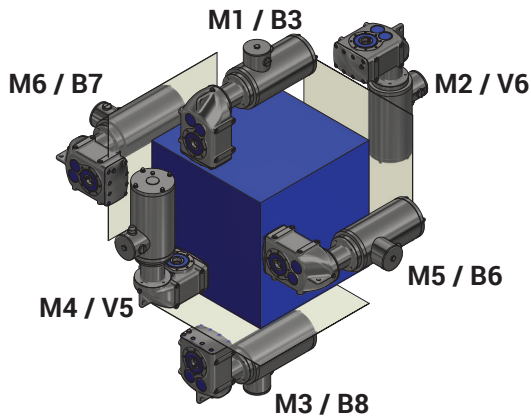
Gearbox	Open Cover	A1	D
FFA 38	SS 095 C030	19.3	30
FFA 48	SS 115 C035	28	35
FFA 68	SS 130 C040	28	40
FFA 78	N.A.		

Torque Arm

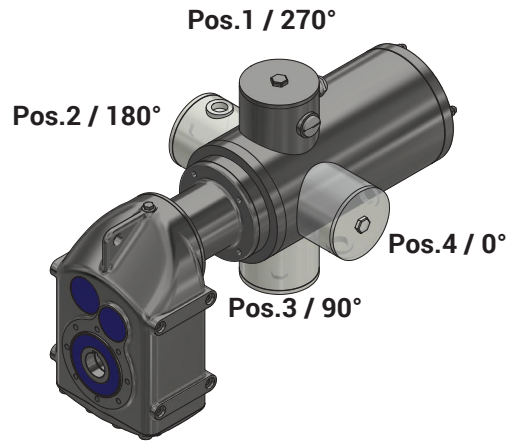


Gearbox	Torque Arm	A	B	C	D	E	F
FFA 38	SS 095 MS L130S	11.8	12	15	10.5	146	130
	SS 095 MS L150	11.8	12	15	10.5	166	150
FFA 48	SS 115 MS L160S	17.3	23	26	20.5	185	160
	SS 115 MS L200	17.3	23	26	20.5	225	200
FFA 68	SS 130 MS L200	18.5	23	26	20.5	225	200
FFA 78	SS 140 MS	Under Development					

Mounting Positions



Terminal Box Positions



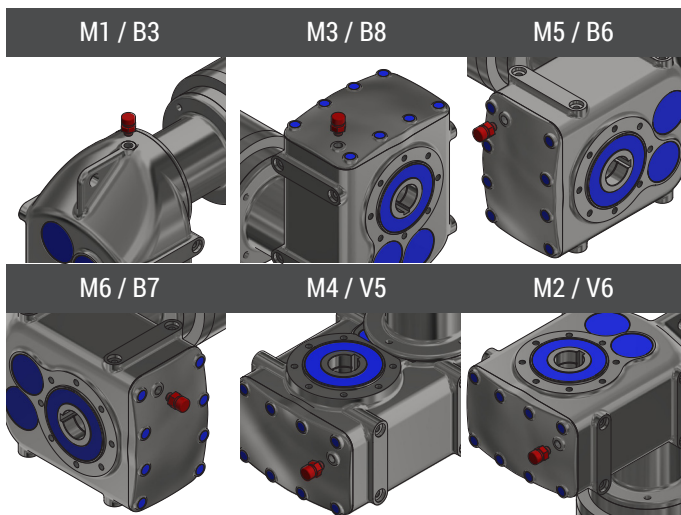
Lubrication Quantity

Oil Quantity in ML.	Mounting Position					
	M1 (B3)	M3 (B8)	M6 (B7)	M5 (B6)	M4 (V5)	M2 (V6)
Gearbox						
FFA 38 B5T1 & AM..	1150	1350	1250	1250	1250	1250
FFA 48 B5T1 & AM..	2000	2100	2000	2000	1950	2000
FFA 68 B5T2 & AM..	3900	3900	3900	3900	3900	3900
FFA 78 B5T3 & AM..	6500	7200	6500	6500	6500	7200

Lubrication Type

Lubrication Brand	Lubrication Type	
Matrix	Foodmax 460	Standard
Castrol	Optileb GT 460	Alternative
Bechem	Berusrsynth 460H1	Alternative
Shell	Casida Fluid GL460	Alternative
Mobil	SHC Cibus 460	Alternative

Debreather Positions



Weight

Gearbox	Weight
FFA 38 B5T1	10.5 Kg
FFA 48 B5T1	15.5 Kg
FFA 68 B5T2	25.5 Kg
FFA 78 B5T3	28.5 Kg

Gearbox	Weight
FFA 38 AM..	14 Kg
FFA 48 AM..	19 Kg
FFA 68 AM..	30 Kg
FFA 78 AM..	36 Kg

Given values are an average and may vary depending on oil quantity.



Dertec

Nijverheidsweg 41
2215 MH Voorhout
The Netherlands

T +31 71 409 24 09
E info@dertec.com

www.dertec.com

dertec[®]

©2020, Dertec[®]. The contents of this catalogue are the copyright of the publisher and may not be reproduced (even extracts) unless permission is granted. Every care has been taken to ensure the accuracy of the information contained in this catalogue but no liability can be accepted for any errors or omissions. Note: Unless otherwise stated all sizes are in millimeters