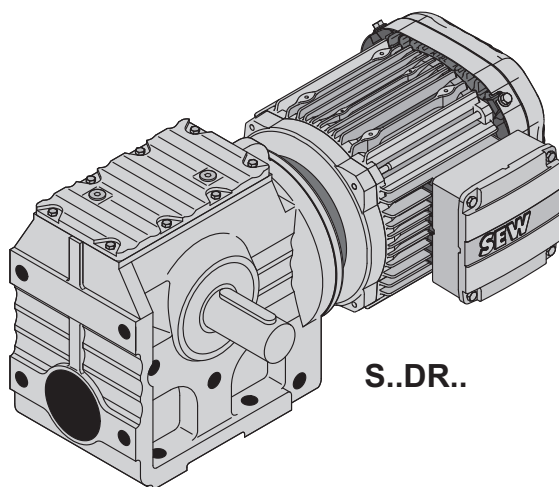
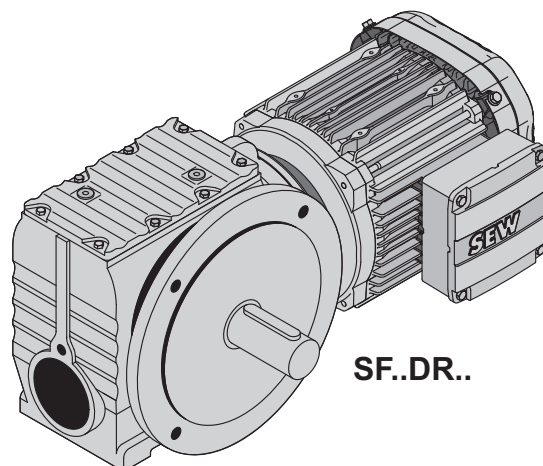


11 Helical-worm gearmotors

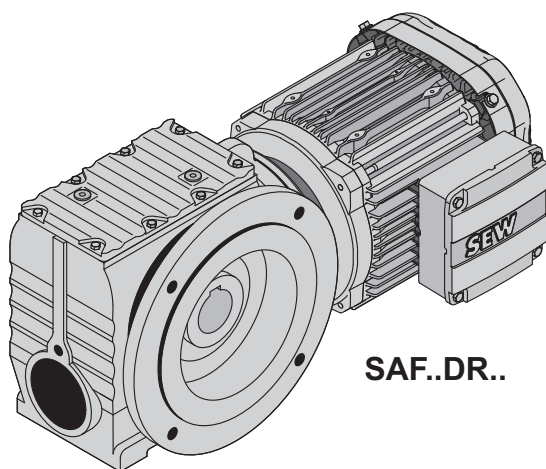
11.1 S..DRN.. designs



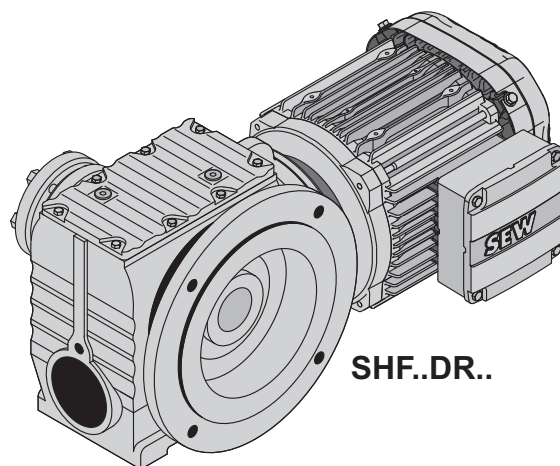
S..DRN..



SF..DRN..

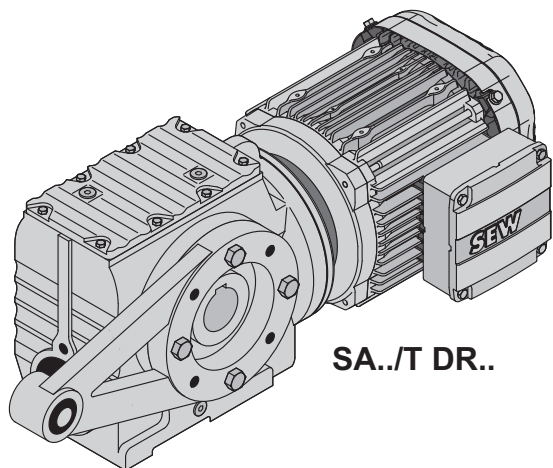
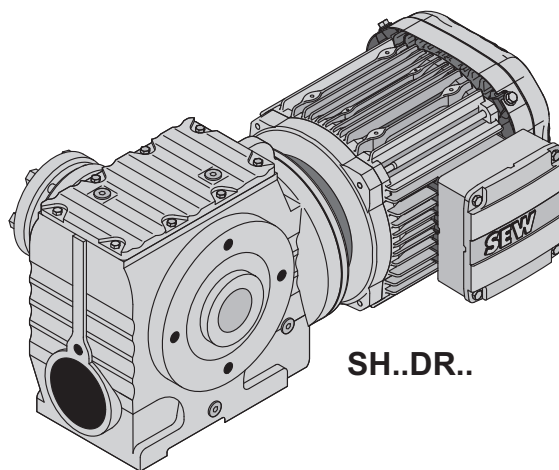
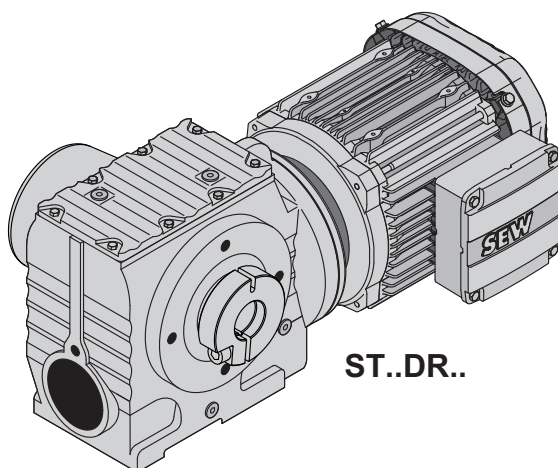
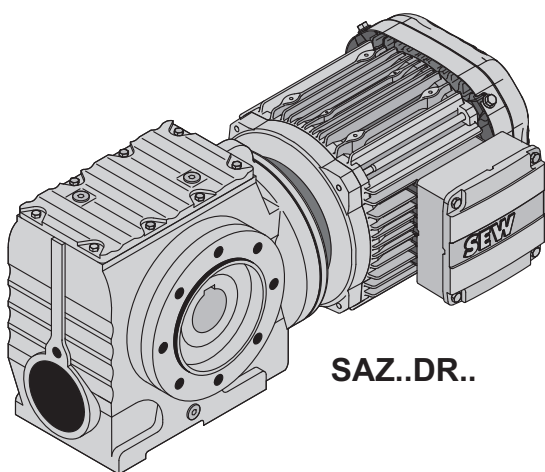
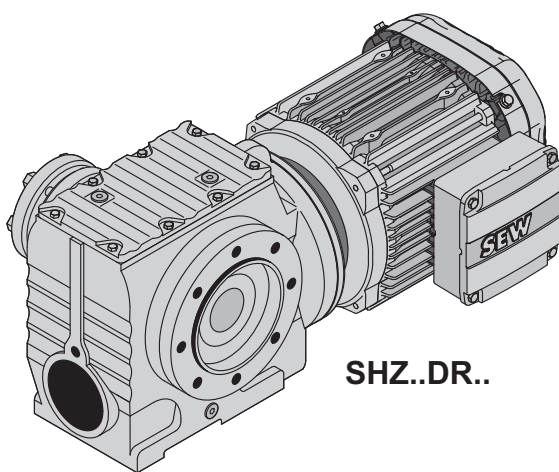


SAF..DRN..



SHF..DRN..

8664873611

**SA../T DR..****SH..DR..****ST..DR..****SAZ..DR..****SHZ..DR..**

8664875531

21284997/EN – 03/2015

11.2 Possible geometrical combinations of S..DRN..

S37, $n_e=1400$ 1/min					92 Nm		
n_a rpm	M_{amax} Nm	F_{Ra} N	$\varphi_{(R)}$ °	i	DR63S DR63M DR63L DRS71S DRS71M	DRN80M DRN90S	DRN90L
 2							
8.9	92	3000	-	157.43			
9.7	92	3000	-	144.40*			
11	91	3000	-	122.94			
13	88	3000	-	106.00*			
14	87	3000	-	98.80*			
16	86	3000	-	86.36			
17	85	3000	-	80.96			
20	84	3000	-	71.44*			
22	82	3000	-	63.33			
25	81	3000	-	55.93			
26	80	3000	-	53.83			
27	81	3000	-	51.30*			
32	81	3000	-	43.68			
37	79	3000	-	37.66			
40	78	3000	-	35.10*			
46	76	2860	-	30.68			
49	75	2800	-	28.76			
55	74	2660	-	25.38*			
62	73	2530	-	22.50*			
70	52	2470	-	19.89			
73	71	2380	-	19.13*			
77	52	2380	-	18.24*			
90	50	2240	-	15.53			
105	49	2110	-	13.39			
112	48	2060	-	12.48*			
128	48	1940	-	10.91			
137	47	1900	-	10.23			
155	46	1810	-	9.02*			
175	45	1730	-	8.00*			
206	43	1630	-	6.80*			
221	35	1670	-	6.33			
260	34	1570	-	5.38			
288	33	1520	-	4.86*			
353	32	1400	-	3.97			

S37R17, $n_e=1400$ 1/min					92 Nm		
n_a rpm	M_{amax} Nm	F_{Ra} N	$\varphi_{(R)}$ °	i	DR63S DR63M DR63L DRS71S DRS71M	DRN80M	
 2  3							
0.14	92	3000	-	10037			
0.16	92	3000	-	8654			
0.17	92	3000	-	8066			
0.20	92	3000	-	7051			

S37R17, $n_e=1400$ 1/min					92 Nm	
n_a rpm	M_{amax} Nm	F_{Ra} N	$\Phi_{(R)}$ °	i	DR63S DR63M DR63L DRS71S DRS71M	DRN80M
0.23	92	3000	-	6079		
0.26	92	3000	-	5431		
0.29	92	3000	-	4747		
0.34	92	3000	-	4155		
0.39	92	3000	-	3632		
0.49	92	3000	-	2866		
0.57	92	3000	-	2471		
0.65	92	3000	-	2160		
0.74	92	3000	-	1887		
0.84	92	3000	-	1665		
0.96	92	3000	-	1456		
1.1	92	3000	-	1271		
1.2	92	3000	-	1121		
1.4	92	3000	-	994		
1.6	92	3000	-	869		
 2  2						
1.8	92	3000	-	774		
2.1	92	3000	-	666		
2.3	92	3000	-	596		
2.7	92	3000	-	521		
3.1	92	3000	-	456		
3.5	92	3000	-	398		
4.0	92	3000	-	351		
4.6	92	3000	-	303		
5.3	92	3000	-	265		
6.0	92	3000	-	232		
6.9	92	3000	-	202		
7.8	92	3000	-	179		
8.9	92	3000	-	158		
9.7	92	3000	-	144		
12	92	3000	-	118		
13	92	3000	-	110*		

S47, $n_e=1400$ 1/min					170 Nm			
n_a rpm	M_{amax} Nm	F_{Ra} N	$\Phi_{(R)}$ °	i	DR63S DR63M DR63L DRS71S DRS71M	DRN80M DRN90S	DRN90L	DRN100LS DRN100L
 2								
7.0	170	5340	-	201.00*				
7.6	170	5340	-	184.80*				
8.9	170	5340	-	158.12				
10	168	5350	-	137.05				
11	168	5350	-	128.10*				
13	168	5350	-	110.73				
15	168	5350	-	94.08*				
17	167	5360	-	84.00*				
20	167	5360	-	71.75*				

S47, $n_e=1400$ 1/min					170 Nm			
n_a rpm	M_{amax} Nm	F_{Ra} N	$\Phi_{(R)}$ °	i	DR63S DR63M DR63L DRS71S DRS71M	DRN80M DRN90S	DRN90L	DRN100LS DRN100L
20	155	5370	-	69.39				
21	167	5360	-	67.20*				
22	155	5370	-	63.80*				
25	165	5320	-	56.61				
26	155	5150	-	54.59				
30	155	4850	-	47.32				
32	155	4710	-	44.22*				
37	155	4420	-	38.23				
43	155	4120	-	32.48*				
48	155	3920	-	29.00*				
57	155	3650	-	24.77				
60	152	3570	-	23.20*				
69	110	3370	-	20.33				
72	144	3370	-	19.54				
79	110	3160	-	17.62				
85	110	3060	-	16.47*				
98	110	2850	-	14.24				
116	109	2650	-	12.10*				
130	109	2500	-	10.80*				
152	109	2310	-	9.23*				
162	109	2230	-	8.64*				
192	103	2110	-	7.28				
205	78	2300	-	6.83				
219	76	2260	-	6.40*				
260	74	2110	-	5.39				
294	72	2010	-	4.76				
350	61	1980	-	4.00*				

S47R17, n _e =1400 1/min					185 Nm	
n _a rpm	M _{amax} Nm	F _{Ra} N	Φ _(/R) °	i	DR63S DR63M DR63L DRS71S DRS71M	DRN80M
 2  3						
0.11	185	5250	-	12909		
0.13	185	5250	-	11189		
0.13	185	5250	-	10374		
0.16	185	5250	-	8992		
0.18	185	5250	-	7860		
0.20	185	5250	-	6887		
0.23	185	5250	-	6055		
0.26	185	5250	-	5292		
0.30	185	5250	-	4637		
0.34	185	5250	-	4092		
0.39	185	5200	-	3582		
0.45	185	5200	-	3131		
0.52	185	5200	-	2714		
0.58	185	5200	-	2412		
0.66	185	5200	-	2131		

S47R17, $n_e=1400$ 1/min					185 Nm	
n_a rpm	M_{amax} Nm	F_{Ra} N	$\Phi_{(R)}$ °	i	DR63S DR63M DR63L DRS71S DRS71M	DRN80M
0.75	185	5200	-	1863		
0.84	185	5200	-	1663		
0.98	185	5200	-	1435		
1.1	185	5200	-	1254		
1.2	185	5200	-	1120		
1.3	185	5200	-	1083		
1.5	183	5210	-	956		
 2  2						
1.5	185	5200	-	965		
1.6	185	5200	-	865		
1.9	185	5200	-	750		
2.1	185	5200	-	655		
2.4	185	5200	-	574		
2.8	185	5200	-	506		
3.2	185	5200	-	438		
3.6	185	5200	-	388		
4.2	185	5200	-	336		
4.8	185	5200	-	294		
5.4	185	5260	-	257*		
6.1	185	5200	-	229		
7.0	185	5200	-	200		
7.5	185	5200	-	187		
8.5	185	5200	-	165		
9.5	185	5200	-	148		
11	185	5200	-	131		

S57, $n_e=1400$ 1/min					295 Nm			
n_a rpm	M_{amax} Nm	F_{Ra} N	$\Phi_{(R)}$ °	i	DR63S DR63M DR63L DRS71S DRS71M	DRN80M DRN90S	DRN90L	DRN100LS DRN100L
 2								
7.0	295	7130	-	201.00*				
7.6	295	7130	-	184.80*				
8.9	295	7130	-	158.12				
10	295	7130	-	137.05				
11	295	7130	-	128.10*				
13	295	7130	-	110.73				
15	295	7130	-	94.08*				
17	295	7130	-	84.00*				
20	290	7170	-	71.75*				
20	245	7520	-	69.39				
21	285	7220	-	67.20*				
22	245	7520	-	63.80*				
25	265	7370	-	56.61				
26	245	7520	-	54.59				
30	245	7520	-	47.32				
32	245	7520	-	44.22*				

S57, $n_e=1400$ 1/min					295 Nm			
n_a rpm	M_{amax} Nm	F_{Ra} N	$\Phi_{(R)}$ °	i	DR63S DR63M DR63L DRS71S DRS71M	DRN80M DRN90S	DRN90L	DRN100LS DRN100L
37	245	7320	-	38.23				
43	245	6840	-	32.48*				
48	245	6520	-	29.00*				
57	245	6100	-	24.77				
60	245	5930	-	23.20*				
69	168	5690	-	20.33				
72	215	5720	-	19.54				
79	168	5350	-	17.62				
85	168	5200	-	16.47*				
98	169	4860	-	14.24				
116	169	4520	-	12.10*				
130	169	4290	-	10.80*				
152	169	3990	-	9.23*				
162	166	3900	-	8.64*				
192	146	3790	-	7.28				
205	100	4100	-	6.83				
219	98	4010	-	6.40*				
260	95	3760	-	5.39				
294	93	3590	-	4.76				
350	88	3380	-	4.00*				

S57R17, n _e =1400 1/min						330 Nm
n _a rpm	M _{amax} Nm	F _{Ra} N	Φ _(/R) °	i	DR63S DR63M DR63L DRS71S DRS71M	DRN80M
 2  3						
0.11	330	6800	-	12909		
0.13	330	6800	-	11189		
0.13	330	6800	-	10374		
0.16	330	6800	-	8992		
0.18	330	6800	-	7860		
0.20	330	6800	-	6887		
0.23	330	6800	-	6055		
0.26	330	6800	-	5292		
0.30	330	6800	-	4637		
0.34	330	6800	-	4092		
0.39	330	6800	-	3628		
0.45	300	7080	-	3131		
0.52	300	7080	-	2714		
0.58	300	7080	-	2412		
0.66	300	7080	-	2131		
0.75	300	7080	-	1863		
0.84	300	7080	-	1663		
0.98	300	7080	-	1435		
1.1	300	7080	-	1254		
1.3	300	7080	-	1083		

S57R17, $n_e=1400$ 1/min					330 Nm	
n_a rpm	M_{amax} Nm	F_{Ra} N	$\varphi_{(R)}$ °	i	DR63S DR63M DR63L DRS71S DRS71M	DRN80M
 2  2						
1.5	300	7080	-	965		
1.6	300	7080	-	865		
1.9	300	7080	-	750		
2.1	300	7080	-	655		
2.4	300	7080	-	574		
2.8	300	7080	-	506		
3.2	300	7080	-	438		
3.6	300	7080	-	388		
4.2	300	7080	-	336		
4.8	300	7080	-	294		
5.2	300	7080	-	269		
6.1	300	7080	-	229		
6.9	300	7080	-	204		
7.5	300	7080	-	187		
8.5	300	7080	-	165		
11	300	7080	-	131		

S67, $n_e=1400$ 1/min					520 Nm					
n_a rpm	M_{amax} Nm	F_{Ra} N	$\varphi_{(R)}$ °	i	DR63S DR63M DR63L DRS71S DRS71M	DRN80M DRN90S	DRN90L	DRN100LS DRN100L	DRN112M	DRN132S DRN132M
 2										
6.4	520	8680	-	217.41						
7.4	520	8680	-	190.11						
7.8	520	8680	-	180.60*						
8.8	520	8680	-	158.45						
10	520	8680	-	134.40*						
12	520	8680	-	121.33						
13	520	8680	-	106.75*						
14	520	8680	-	100.80*						
16	520	8680	-	85.83						
18	520	8680	-	78.00*						
19	480	9020	-	75.06						
21	520	8680	-	67.57						
21	480	9020	-	65.63						
22	480	9020	-	62.35*						
24	500	8850	-	58.80*						
26	480	8670	-	54.70						
30	480	8060	-	46.40*						
33	480	7690	-	41.89						
38	480	7250	-	36.85						
40	480	7060	-	34.80*						
47	480	6540	-	29.63						
52	480	6240	-	26.93						
57	340	6040	-	24.44						
60	480	5810	-	23.33						

S67, $n_e=1400$ 1/min										520 Nm
n_a rpm	M_{amax} Nm	F_{Ra} N	$\Phi_{(R)}$ °	i	DR63S DR63M DR63L DRS71S DRS71M	DRN80M DRN90S	DRN90L	DRN100LS DRN100L	DRN112M	DRN132S DRN132M
60	340	5890	-	23.22*						
69	340	5520	-	20.37						
69	425	5760	-	20.30*						
81	340	5080	-	17.28*						
90	340	4820	-	15.60*						
102	340	4510	-	13.73*						
108	340	4310	-	12.96*						
127	340	3660	-	11.03						
140	340	3290	-	10.03						
161	335	2860	-	8.69						
185	295	3220	-	7.56*						

S67R37, $n_e=1400$ 1/min										570 Nm
n_a rpm	M_{amax} Nm	F_{Ra} N	$\Phi_{(R)}$ °	i	DR63S DR63M DR63L DRS71S DRS71M	DRN80M DRN90S	DRN90L	DRN100LS DRN100L		
2 3										
0.07	570	8190	-	21362*						
0.07	570	8190	-	19594*						
0.08	570	8190	-	18120*						
0.08	570	8190	-	16682						
0.10	570	8190	-	14383						
0.11	570	8190	-	12774						
0.13	570	8190	-	11013						
0.14	570	8190	-	9694*						
0.16	570	8190	-	8529*						
0.19	570	8190	-	7455*						
0.21	570	8190	-	6531						
0.24	570	8190	-	5759						
0.28	570	8190	-	4965						
0.32	570	8190	-	4410						
0.36	570	8190	-	3880						
0.41	570	8190	-	3432						
0.48	570	8190	-	2944*						
0.53	570	8190	-	2630						
0.61	570	8190	-	2279						
0.70	570	8190	-	2014						
0.79	570	8190	-	1772						
0.90	570	8190	-	1559						
1.0	570	8190	-	1363						
1.2	570	8190	-	1194						
1.3	570	8190	-	1045						
1.5	570	8190	-	914						
2 2										
1.7	570	8190	-	809						
2.0	570	8190	-	712						
2.3	570	8190	-	615						

S67R37, $n_e=1400$ 1/min**570 Nm**

n_a rpm	M_{amax} Nm	F_{Ra} N	$\Phi_{(R)}$ °	i	DR63S DR63M DR63L DRS71S DRS71M	DRN80M DRN90S	DRN90L	DRN100LS DRN100L
2.6	570	8190	-	543				
3.0	570	8190	-	469				
3.3	570	8190	-	424				
3.8	570	8190	-	365				
4.4	570	8190	-	319				
5.0	570	8190	-	281				
5.7	570	8190	-	246				
6.3	570	8190	-	221				
7.1	570	8190	-	198				
8.3	570	8190	-	168				
9.0	570	8190	-	156				

S77, $n_e=1400$ 1/min**1270 Nm**

n_a rpm	M_{amax} Nm	F_{Ra} N	$\Phi_{(R)}$ °	i	DR63S DR63M DR63L DRS71S DRS71M	DRN80M DRN90S	DRN90L	DRN100LS DRN100L	DRN112M	DRN132S DRN132M	DRN132L DRN160M DRN160L
 2											
5.5	1270	11700	-	256.47							
6.2	1270	11700	-	225.26							
6.5	1270	11700	-	214.00*							
7.4	1270	11700	-	189.09							
8.7	1260	11800	-	161.60*							
9.4	1240	12000	-	148.15							
11	1210	12200	-	130.00*							
11	1200	12300	-	123.20*							
13	1170	12600	-	107.83							
14	1140	12800	-	97.14							
16	1100	13100	-	85.22							
19	1070	12800	-	75.20*							
19	1100	11900	-	75.09							
20	1100	11600	-	71.33							
21	1040	12300	-	66.67							
22	1100	10900	-	63.03							
25	990	11600	-	56.92							
26	1100	10100	-	53.87							
28	1100	9650	-	49.38							
32	1100	9010	-	43.33							
34	1100	8750	-	41.07							
39	1100	8140	-	35.94							
43	1090	7720	-	32.38							
49	1050	7370	-	28.41							
56	1020	7010	-	25.07							
61	705	5960	-	22.89							
63	980	6740	-	22.22							
67	705	5380	-	20.99							
74	930	6390	-	18.97							
76	705	4550	-	18.42							
80	710	4120	-	17.45							

S77, n _e =1400 1/min											1270 Nm
n _a rpm	M _{amax} Nm	F _{Ra} N	Φ _(/R) °	i	DR63S DR63M DR63L DRS71S DRS71M	DRN80M DRN90S	DRN90L	DRN100LS DRN100L	DRN112M	DRN132S DRN132M	DRN132L DRN160M DRN160L
92	710	3320	-	15.28							
102	710	2710	-	13.76							
116	720	1800	-	12.07							
131	720	1130	-	10.65							
148	725	415	-	9.44							
174	680	440	-	8.06							

S77R37, n _e =1400 1/min						1270 Nm		
n _a rpm	M _{amax} Nm	F _{Ra} N	φ _(/R) '	i	DR63S DR63M DR63L DRS71S DRS71M	DRN80M DRN90S	DRN90L	DRN100LS DRN100L
⚙️ 2 ⚙️ 3								
0.05	1270	11700	-	25493				
0.06	1270	11700	-	21787				
0.07	1270	11700	-	19907				
0.08	1270	11700	-	17013				
0.10	1270	11700	-	14668				
0.11	1270	11700	-	13110				
0.12	1270	11700	-	11569				
0.14	1270	11700	-	9887				
0.16	1270	11700	-	8817				
0.18	1270	11700	-	7735				
0.21	1270	11700	-	6735				
0.24	1270	11700	-	5943				
0.27	1270	11700	-	5214				
0.30	1270	11700	-	4618				
0.35	1270	11700	-	3992				
0.40	1270	11700	-	3540				
0.45	1270	11700	-	3098				
0.51	1240	12000	-	2753				
0.59	1240	12000	-	2374				
0.67	1240	12000	-	2083				
0.77	1240	12000	-	1813				
0.80	1240	12000	-	1745				
0.88	1240	12000	-	1600				
1.00	1240	12000	-	1404				
1.1	1240	12000	-	1245				
⚙️ 2 ⚙️ 2								
1.3	1240	12000	-	1100				
1.5	1240	12000	-	954				
1.7	1240	12000	-	837				
2.0	1240	12000	-	714				
2.2	1240	12000	-	637				
2.4	1240	12000	-	574				
2.8	1240	12000	-	499				
3.2	1240	12000	-	438				
3.6	1240	12000	-	389				

S77R37, $n_e=1400$ 1/min**1270 Nm**

n_a rpm	M_{amax} Nm	F_{Ra} N	$\Phi_{(R)}$ °	i	DR63S DR63M DR63L DRS71S DRS71M	DRN80M DRN90S	DRN90L	DRN100LS DRN100L
4.3	1240	12000	-	327				
4.8	1240	12000	-	289				
5.6	1240	12000	-	250				
6.4	1240	12000	-	219				

S87, $n_e=1400$ 1/min**2280 Nm**

n_a rpm	M_{amax} Nm	F_{Ra} N	$\Phi_{(R)}$ °	i	DRS71M	DRN80M DRN90S	DRN90L	DRN100LS DRN100L	DRN112M	DRN132S DRN132M	DRN132L DRN160M DRN160L	DRN180M DRN180L
 2												
4.9	2280	27900	-	288.00*								
5.4	2280	27900	-	258.18								
6.3	2280	27900	-	222.40*								
6.9	2260	28000	-	202.96								
7.8	2210	28100	-	180.00*								
9.3	2150	28200	-	151.30								
10	2100	28300	-	139.05								
11	2060	28300	-	123.48								
13	2000	28400	-	110.40*								
14	1960	28500	-	99.26								
15	1510	29100	-	91.20*								
16	1880	28600	-	86.15								
17	1600	29000	-	81.76								
18	1820	28700	-	77.14								
20	1600	29000	-	70.43								
22	1600	29000	-	64.27								
22	1700	28900	-	64.00*								
25	1600	29000	-	57.00*								
29	1600	29000	-	47.91								
32	1600	29000	-	44.03								
36	1600	28200	-	39.10								
40	1600	27100	-	34.96*								
45	1600	26000	-	31.43								
51	1600	24700	-	27.28								
55	1240	23400	-	25.50*								
57	1600	23700	-	24.43								
65	1240	21800	-	21.43								
69	1600	22100	-	20.27								
71	1240	21100	-	19.70								
80	1240	20200	-	17.49								
90	1240	19300	-	15.64*								
100	1240	18500	-	14.06								
115	1240	17400	-	12.21								
128	1240	16400	-	10.93								
154	1140	15900	-	9.07								
178	1010	15700	-	7.88								

S87R57, $n_e=1400$ 1/min**2500 Nm**

n_a rpm	M_{amax} Nm	F_{Ra} N	$\phi_{(R)}$ °	i	DR63S DR63M DR63L DRS71S DRS71M	DRN80M DRN90S	DRN90L	DRN100LS DRN100L	DRN112M	DRN132S DRN132M
 2  3										
0.05	2500	27500	-	25987						
0.06	2500	27500	-	23940						
0.07	2500	27500	-	20568						
0.08	2500	27500	-	18265						
0.08	2500	27500	-	16774						
0.09	2500	27500	-	14820						
0.11	2500	27500	-	13160						
0.12	2500	27500	-	11200						
0.14	2500	27500	-	9904						
0.16	2500	27500	-	8549						
0.18	2500	27500	-	7643						
0.21	2500	27500	-	6706						
0.24	2500	27500	-	5875						
0.27	2500	27500	-	5187						
0.30	2500	27500	-	4606						
0.36	2500	27500	-	3872						
 2  2										
0.40	2500	27500	-	3475						
0.48	2500	27500	-	2905						
0.54	2500	27500	-	2586						
0.60	2500	27500	-	2335						
0.68	2500	27500	-	2054						
0.77	2500	27500	-	1824						
0.86	2500	27500	-	1631*						
1.1	2500	27500	-	1332						
1.2	2500	27500	-	1191						
1.4	2500	27500	-	1032*						
1.5	2500	27500	-	930						
1.7	2500	27500	-	831						
1.9	2500	27500	-	719						
2.2	2500	27500	-	624						
2.5	2500	27500	-	558						
2.9	2500	27500	-	485						
3.2	2450	27600	-	435						
3.7	2450	27600	-	378						
4.3	2400	27700	-	323						
5.0	2400	27700	-	281						
5.5	1980	28400	-	255						
6.3	1980	28400	-	222						
6.8	1980	28400	-	205						

Helical-worm gearmotors

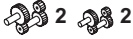
Possible geometrical combinations of S..DRN..

S97, $n_e=1400$ 1/min						4000 Nm							
n_a rpm	M_{amax} Nm	F_{Ra} N	$\Phi_{(R)}$ °	i	DRS71M	DRN80M DRN90S	DRN90L	DRN100LS DRN100L	DRN112M	DRN132S DRN132M	DRN132L DRN160M DRN160L	DRN180M DRN180L	DRN200L DRN225S
 2													
4.9	4000	33200	-	286.40*									
5.3	4000	33200	-	262.22									
6.0	4000	33200	-	231.67									
7.1	4000	33200	-	196.52									
7.7	3920	33400	-	180.95									
8.7	3840	33500	-	161.74									
9.6	3730	33700	-	145.60*									
11	3650	33900	-	131.85									
12	3510	34100	-	116.92									
13	3440	34300	-	105.71									
16	3240	34600	-	89.60*									
17	3230	34600	-	80.85									
18	3080	34800	-	78.26									
20	3300	34500	-	71.43									
21	2900	35100	-	65.45									
23	3300	34500	-	60.59									
25	3300	34500	-	55.79									
28	3300	34500	-	49.87									
31	3300	34100	-	44.89									
34	3300	32800	-	40.65									
39	3300	31300	-	36.05									
43	3200	30400	-	32.60									
51	3010	29000	-	27.63									
53	2600	26100	-	26.39									
58	2870	28000	-	24.13									
59	2600	24500	-	23.59									
66	2600	22800	-	21.23									
73	2600	21200	-	19.23									
82	2570	19700	-	17.05									
91	2470	19400	-	15.42									
107	2330	18800	-	13.07									
123	2210	18400	-	11.41									
147	2040	18200	-	9.55									
169	1770	18800	-	8.26									

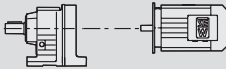
S97R57, n _e =1400 1/min										4200 Nm
n _a rpm	M _{amax} Nm	F _{Ra} N	Φ _(/R) °	i	DR63S DR63M DR63L DRS71S DRS71M	DRN80M DRN90S	DRN90L	DRN100LS DRN100L	DRN112M	DRN132S DRN132M
 2  3										
0.04	4200	32800	-	33818						
0.04	4200	32800	-	31154						
0.05	4200	32800	-	27847						
0.06	4200	32800	-	24641						
0.07	4200	32800	-	21537						
0.07	4200	32800	-	18749*						

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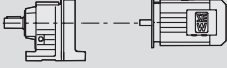
S97R57, $n_e=1400$ 1/min**4200 Nm**

n_a rpm	M_{amax} Nm	F_{Ra} N	$\Phi_{(R)}$ °	i	DR63S DR63M DR63L DRS71S DRS71M	DRN80M DRN90S	DRN90L	DRN100LS DRN100L	DRN112M	DRN132S DRN132M
0.09	4200	32800	-	16233						
0.10	4200	32800	-	14576						
0.11	4200	32800	-	12752						
0.12	4200	32800	-	11267						
0.14	4200	32800	-	10078						
0.16	4200	32800	-	8608						
0.19	4200	32800	-	7554						
0.21	4200	31300	-	6640						
0.24	4200	31300	-	5780*						
0.28	4200	31300	-	4937						
0.32	4200	31300	-	4444						
0.35	4200	31300	-	4017						
0.41	4200	31300	-	3453						
0.45	4200	31300	-	3108						
0.53	4200	31300	-	2654						
0.60	4200	31300	-	2329						
0.67	4200	31300	-	2081						
0.75	4200	31300	-	1860						
0.89	4200	31300	-	1574*						
 2 										
1.0	4200	31300	-	1394						
1.1	4200	31300	-	1223						
1.3	4200	31300	-	1070						
1.5	4200	31300	-	928						
1.7	4200	31300	-	824						
2.0	4200	32800	-	714						
2.2	4200	31300	-	626*						
2.6	4200	31300	-	538						
2.9	4200	31400	-	484*						
3.3	4200	31400	-	420						
3.7	4200	31400	-	376						
4.3	4200	31500	-	327						
4.9	4200	31500	-	287						
5.6	4200	31500	-	252						
6.4	4200	31600	-	219						
6.8	4200	31600	-	205						

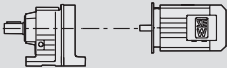
11.3 S..DRN.. selection tables in kW

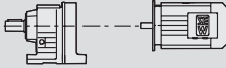
P _m = 0.12 kW										
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
0.12	4740	11267	25100	0.90	S	97R57	DR	63S4	170	653
0.14	4330	10078	32500	0.95	SF	97R57	DR	63S4	200	653
0.16	3590	8608	34000	1.15	SA	97R57	DR	63S4	160	653
0.18	3180	7554	34700	1.30	SAF	97R57	DR	63S4	190	653
0.21	2690	6706	27100	0.95	S	87R57	DR	63S4	110	653
0.23	2400	5875	27700	1.05	SF	87R57	DR	63S4	130	653
0.27	1980	5187	28500	1.25	SA	87R57	DR	63S4	105	653
0.30	1760	4606	28800	1.40	SAF	87R57	DR	63S4	120	653
0.36	1460	3872	29200	1.70						
0.39	1370	3540	7240	0.90						
0.45	1200	3098	12300	1.05						
0.58	1320	2374	10600	0.95	S	77R37	DR	63S4	59	653
0.66	1160	2083	12600	1.05	SF	77R37	DR	63S4	68	653
0.76	980	1813	13900	1.25	SA	77R37	DR	63S4	58	653
0.79	930	1745	14200	1.30	SAF	77R37	DR	63S4	65	653
0.86	860	1600	14600	1.45						
0.98	755	1404	15100	1.65						
1.1	660	1245	15500	1.90						
1.2	585	1194	7990	0.95	S	67R37	DR	63S4	39	653
1.3	530	1045	8560	1.05	SF	67R37	DR	63S4	46	653
1.5	455	914	9180	1.25	SA	67R37	DR	63S4	40	653
					SAF	67R37	DR	63S4	45	653
1.7	415	809	9460	1.35						
1.9	365	712	9780	1.55	S	67R37	DR	63S4	39	653
2.2	305	615	10100	1.85	SF	67R37	DR	63S4	46	653
2.5	275	543	10200	2.1	SA	67R37	DR	63S4	40	653
2.9	225	469	10400	2.5	SAF	67R37	DR	63S4	45	653
3.3	200	424	10500	2.8						
3.8	187	365	10500	3.0						
2.1	325	655	6800	0.90						
2.4	285	574	7200	1.05	S	57R17	DR	63S4	20	653
2.7	250	506	7480	1.20	SF	57R17	DR	63S4	24	653
3.2	215	438	7700	1.40	SA	57R17	DR	63S4	20	653
3.6	189	388	7850	1.60	SAF	57R17	DR	63S4	23	653
4.1	169	336	7950	1.80						
4.7	145	294	8050	2.1						
5.1	139	269	8070	2.2						
3.2	215	438	5010	0.85						
3.6	189	388	5170	1.00	S	47R17	DR	63S4	17	653
4.1	168	336	5290	1.10	SF	47R17	DR	63S4	20	653
4.7	143	294	5420	1.30	SA	47R17	DR	63S4	18	653
5.4	98	257	5660	1.90	SAF	47R17	DR	63S4	19	653
6.0	118	229	5550	1.55						
6.9	102	200	5610	1.80						
7.4	96	187	5640	1.95						
6.8	103	202	3000	0.90						
7.7	91	179	3000	1.00	S	37R17	DR	63S4	14	653
8.7	82	158	3000	1.15	SF	37R17	DR	63S4	15	653
9.6	75	144	3000	1.20	SA	37R17	DR	63S4	13	653
12	61	118	3000	1.50	SAF	37R17	DR	63S4	15	653
13	57	110	3000	1.60						
4.5	143	201.00*	8050	2.1	S	57	DR	63M6	17	628
4.9	133	184.80*	8090	2.2	SF	57	DR	63M6	21	629
5.7	116	158.12	8140	2.5	SA	57	DR	63M6	17	630
6.6	103	137.05	8180	2.9	SAF	57	DR	63M6	20	629
4.5	138	201.00*	5490	1.30	S	47	DR	63M6	14	623
4.9	129	184.80*	5540	1.40	SF	47	DR	63M6	17	624
5.7	112	158.12	5610	1.55	SA	47	DR	63M6	15	625
6.6	99	137.05	5660	1.75	SAF	47	DR	63M6	16	624
7.0	93	128.10*	5680	1.85						

P_m = 0.12 kW

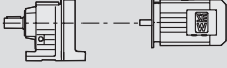
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
6.9	95	201.00*	5680	1.80	S SF SA SAF	47	DR	63S4	14	623
7.5	89	184.80*	5700	1.90						
8.7	77	158.12	5740	2.2						
10	68	137.05	5780	2.5						
11	64	128.10*	5790	2.6						
12	57	110.73	5810	3.0				63S4	16	624
5.7	107	157.43	3000	0.85	S SF SA SAF	37	DR	63M6	11	619
6.2	99	144.40*	3000	0.95						
7.3	86	122.94	3000	1.05						
8.5	76	106.00*	3000	1.20						
9.1	71	98.80*	3000	1.30						
10	64	86.36	3000	1.45				63M6	12	620
8.8	74	157.43	3000	1.25	S SF SA SAF	37	DR	63S4	11	619
9.6	68	144.40*	3000	1.35						
11	60	122.94	3000	1.55						
13	52	106.00*	3000	1.70						
14	49	98.80*	3000	1.75						
16	44	86.36	3000	1.95				63S4	12	620
17	41	80.96	3000	2.1				63S4		
19	37	71.44*	3000	2.3	S SF SA SAF	37	DR	63S4	11	619
22	33	63.33	3000	2.5						
25	35	55.93	3000	2.3						
27	33	51.30*	3000	2.5						
32	28	43.68	3000	2.9						
37	24	37.66	3000	3.2						
39	23	35.10*	3000	3.4						
45	20	30.68	3000	3.7						
48	19	28.76	3000	3.9						
54	17	25.38*	3000	4.4						
61	15	22.50*	3000	4.8						
69	14	19.89	3000	3.6						
76	13	18.24*	3000	3.9						
89	11	15.53	2870	4.4						

P_m = 0.18 kW

n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
0.29	3010	4606	19200	0.85	S SF SA SAF	87R57	DR	63M4	110	653
0.34	2510	3872	27500	1.00						
0.38	2420	3475	27700	1.05	S SF SA SAF	87R57	DR	63M4	105	653
0.45	2030	2905	28400	1.25						
0.51	1760	2586	28800	1.40						
0.57	1570	2335	29100	1.60						
0.64	1360	2054	29300	1.85						
0.72	1200	1824	29500	2.1						
0.81	1080	1631	29600	2.3				63M4	120	653
0.94	1240	1404	11900	1.00	S SF SA SAF	77R37	DR	63M4	59	653
1.1	1090	1245	13200	1.15						
1.2	1020	1100	13700	1.20	S SF SA SAF	77R37	DR	63M4	58	653
1.4	870	954	14500	1.40						
1.6	770	837	15000	1.60						
1.8	640	714	15600	1.95						
2.1	565	637	15800	2.2						
2.3	515	574	16000	2.4						
1.9	600	712	7860	0.95	S SF SA SAF	67R37	DR	63M4	39	653
2.2	505	615	8800	1.15						
2.4	450	543	9230	1.25						
2.8	375	469	9720	1.50						
3.1	340	424	9930	1.65						
3.6	305	365	10100	1.85				63M4	45	653

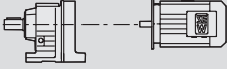
P _m = 0.18 kW										
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
3.0	355	438	6520	0.85	S SF SA SAF	57R17	DR	63M4	20	653
3.4	310	388	6970	0.95						
3.9	275	336	7290	1.10						
4.5	235	294	7560	1.25						
4.9	225	269	7650	1.35						
5.8	193	229	7830	1.55						
6.5	174	204	7920	1.75						
7.0	159	187	7990	1.90						
4.5	235	294	4480	0.80	S SF SA SAF	47R17	DR	63M4	17	653
5.1	162	257	5380	1.15						
5.8	190	229	5170	0.95						
6.6	167	200	5300	1.10						
7.0	156	187	5360	1.20						
8.0	138	165	5450	1.35						
9.0	124	148	5520	1.50						
10	110	131	5580	1.70						
4.0	250	217.41	10300	2.2	S	67	DR	63L6	29	633
4.6	220	190.11	10400	2.5	SF	67	DR	63L6	35	634
4.8	210	180.60*	10400	2.6	SA	67	DR	63L6	30	635
					SAF	67	DR	63L6	34	634
4.3	220	201.00*	7670	1.35	S	57	DR	63L6	18	628
4.7	205	184.80*	7760	1.45	SF	57	DR	63L6	22	629
5.5	180	158.12	7900	1.65	SA	57	DR	63L6	18	630
6.4	158	137.05	7990	1.85	SAF	57	DR	63L6	21	629
6.6	154	201.00*	8010	1.90	S	57	DR	63M4	17	628
7.1	143	184.80*	8050	2.1	SF	57	DR	63M4	21	629
8.4	125	158.12	8120	2.4	SA	57	DR	63M4	17	630
9.6	110	137.05	8160	2.7	SAF	57	DR	63M4	20	629
4.3	210	201.00*	5090	0.85	S	47	DR	63L6	14	623
4.7	199	184.80*	5180	0.90	SF	47	DR	63L6	18	624
5.5	173	158.12	5320	1.00	SA	47	DR	63L6	15	625
6.4	153	137.05	5420	1.10	SAF	47	DR	63L6	17	624
6.8	144	128.10*	5460	1.20						
6.6	149	201.00*	5440	1.15	S SF SA SAF	47	DR	63M4	14	623
7.1	138	184.80*	5490	1.25						
8.4	121	158.12	5570	1.40						
9.6	106	137.05	5630	1.60						
10	100	128.10*	5660	1.65						
12	88	110.73	5700	1.90						
14	77	94.08*	5750	2.2						
16	69	84.00*	5770	2.4						
18	60	71.75*	5800	2.8						
19	69	69.39	5750	2.2						
8.4	115	157.43	3000	0.80	S SF SA SAF	37	DR	63M4	11	619
9.1	107	144.40*	3000	0.85						
11	93	122.94	3000	1.00						
12	82	106.00*	3000	1.10						
13	77	98.80*	3000	1.15						
15	68	86.36	3000	1.25						
16	64	80.96	3000	1.30						

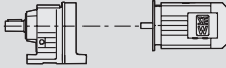
P_m = 0.18 kW

n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
18	58	71.44*	3000	1.45						
21	52	63.33	3000	1.60						
24	55	55.93	3000	1.45						
26	51	51.30*	3000	1.60						
30	44	43.68	3000	1.85						
35	38	37.66	3000	2.1						
38	36	35.10*	3000	2.2						
43	32	30.68	3000	2.4	S	37	DR	63M4	11	619
46	30	28.76	3000	2.5	SF	37	DR	63M4	12	620
52	26	25.38*	3000	2.8	SA	37	DR	63M4	10	621
59	24	22.50*	3000	3.1	SAF	37	DR	63M4	12	620
66	22	19.89	3000	2.3						
72	21	18.24*	2940	2.5						
85	18	15.53	2810	2.8						
99	15	13.39	2700	3.2						
106	14	12.48*	2650	3.4						
121	13	10.91	2550	3.8						
129	12	10.23	2500	4.0						

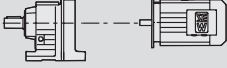
11

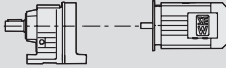
P_m = 0.25 kW

n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
0.45	2930	2905	22200	0.85						
0.50	2560	2586	27400	1.00						
0.56	2290	2335	27900	1.10	S	87R57	DR	63L4	110	653
0.63	1990	2054	28400	1.25	SF	87R57	DR	63L4	130	653
0.71	1770	1824	28800	1.40	SA	87R57	DR	63L4	105	653
0.80	1580	1631	29100	1.60	SAF	87R57	DR	63L4	120	653
1.4	930	930	29700	2.7						
1.4	1250	954	11800	1.00						
1.6	1100	837	13100	1.10	S	77R37	DR	63L4	59	653
1.8	920	714	14200	1.35	SF	77R37	DR	63L4	69	653
2.0	820	637	14800	1.50	SA	77R37	DR	63L4	59	653
2.3	745	574	15200	1.65	SAF	77R37	DR	63L4	65	653
2.6	635	499	15600	1.95						
2.4	650	543	6280	0.85						
2.8	550	469	8390	1.05	S	67R37	DR	63L4	40	653
3.1	495	424	8880	1.15	SF	67R37	DR	63L4	46	653
3.6	440	365	9320	1.30	SA	67R37	DR	63L4	41	653
4.1	380	319	9700	1.50	SAF	67R37	DR	63L4	45	653
4.6	335	281	9960	1.70						
4.4	340	294	6640	0.85						
4.8	320	269	6870	0.95	S	57R17	DR	63L4	21	653
5.7	275	229	7280	1.10	SF	57R17	DR	63L4	25	653
6.4	245	204	7490	1.20	SA	57R17	DR	63L4	21	653
6.9	225	187	7630	1.30	SAF	57R17	DR	63L4	24	653
7.9	200	165	7780	1.50						
9.9	162	131	7980	1.85						
4.1	340	217.41	9920	1.65	S	67	DRS	71S6	31	633
4.7	300	190.11	10100	1.85	SF	67	DRS	71S6	37	634
5.0	290	180.60*	10200	1.90	SA	67	DRS	71S6	32	635
5.6	255	158.45	10300	2.1	SAF	67	DRS	71S6	36	634
6.0	245	217.41	10300	2.1						
6.8	215	190.11	10400	2.4	S	67	DR	63L4	29	633
7.2	205	180.60*	10500	2.5	SF	67	DR	63L4	35	634
8.2	187	158.45	10500	2.8	SA	67	DR	63L4	30	635
9.7	161	134.40*	10600	3.2	SAF	67	DR	63L4	34	634
11	147	121.33	10600	3.5						
12	131	106.75*	10700	4.0						
4.4	300	201.00*	7080	1.00	S	57	DRS	71S6	20	628
4.8	275	184.80*	7270	1.10	SF	57	DRS	71S6	24	629
5.7	240	158.12	7530	1.20	SA	57	DRS	71S6	20	630
6.5	210	137.05	7710	1.35	SAF	57	DRS	71S6	23	629
7.0	200	128.10*	7780	1.45						

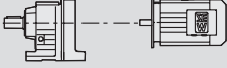
P _m = 0.25 kW										
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
6.5	215	201.00*	7700	1.35	S	57	DR	63L4	18	628
7.0	200	184.80*	7790	1.45						
8.2	176	158.12	7920	1.70						
9.5	155	137.05	8010	1.90						
10	146	128.10*	8040	2.0						
12	128	110.73	8110	2.3						
14	111	94.08*	8160	2.6						
15	100	84.00*	8190	2.9	SF	57	DR	63L4	22	629
6.5	205	201.00*	5120	0.80						
7.0	194	184.80*	5210	0.85						
8.2	170	158.12	5340	1.00						
9.5	150	137.05	5440	1.10						
10	141	128.10*	5480	1.20						
12	124	110.73	5560	1.35						
14	108	94.08*	5630	1.55	SA	57	DR	63L4	18	630
15	98	84.00*	5670	1.70						
18	85	71.75*	5720	1.95						
19	97	69.39	5640	1.60						
19	80	67.20*	5740	2.1						
20	90	63.80*	5670	1.70						
24	78	54.59	5720	2.00						
27	68	47.32	5760	2.3	SAF	57	DR	63L4	21	629
6.5	205	201.00*	5120	0.80						
7.0	194	184.80*	5210	0.85						
8.2	170	158.12	5340	1.00						
9.5	150	137.05	5440	1.10						
10	141	128.10*	5480	1.20						
12	124	110.73	5560	1.35						
14	108	94.08*	5630	1.55	S	47	DR	63L4	14	623
15	98	84.00*	5670	1.70						
18	85	71.75*	5720	1.95						
19	97	69.39	5640	1.60						
19	80	67.20*	5740	2.1						
20	90	63.80*	5670	1.70						
24	78	54.59	5720	2.00						
27	68	47.32	5760	2.3	SF	47	DR	63L4	18	624
13	108	98.80*	3000	0.80						
15	96	86.36	3000	0.90						
16	91	80.96	3000	0.95						
18	81	71.44*	3000	1.05						
21	73	63.33	3000	1.10						
23	78	55.93	3000	1.05						
25	72	51.30*	3000	1.15	SA	47	DR	63L4	15	625
30	62	43.68	3000	1.30						
35	54	37.66	3000	1.45						
37	51	35.10*	3000	1.55						
42	45	30.68	3000	1.70						
45	42	28.76	3000	1.80						
51	37	25.38*	3000	2.00						
58	33	22.50*	3000	2.2	SAF	47	DR	63L4	17	624
65	32	19.89	2870	1.65						
71	29	18.24*	2820	1.80						
84	25	15.53	2710	2.0						
97	22	13.39	2620	2.3						
104	20	12.48*	2570	2.4						
119	18	10.91	2480	2.7						
127	17	10.23	2440	2.8	S	37	DR	63L4	11	619
144	15	9.02*	2360	3.1						
162	13	8.00*	2280	3.4						
191	11	6.80*	2180	3.8						
205	10	6.33	2130	3.3						
241	9.0	5.38	2030	3.8						
267	8.1	4.86*	1980	4.1						
328	6.7	3.97	1860	4.8	SF	37	DR	63L4	13	620
13	108	98.80*	3000	0.80						
15	96	86.36	3000	0.90						
16	91	80.96	3000	0.95						
18	81	71.44*	3000	1.05						
21	73	63.33	3000	1.10						
23	78	55.93	3000	1.05						
25	72	51.30*	3000	1.15	SA	37	DR	63L4	11	621
30	62	43.68	3000	1.30						
35	54	37.66	3000	1.45						
37	51	35.10*	3000	1.55						
42	45	30.68	3000	1.70						
45	42	28.76	3000	1.80						
51	37	25.38*	3000	2.00						
58	33	22.50*	3000	2.2	SAF	37	DR	63L4	13	620
65	32	19.89	2870	1.65						
71	29	18.24*	2820	1.80						
84	25	15.53	2710	2.0						
97	22	13.39	2620	2.3						
104	20	12.48*	2570	2.4						
119	18	10.91	2480	2.7						
127	17	10.23	2440	2.8	S	37	DR	63M2	11	619
144	15	9.02*	2360	3.1						
162	13	8.00*	2280	3.4						
191	11	6.80*	2180	3.8						
205	10	6.33	2130	3.3						
241	9.0	5.38	2030	3.8						
267	8.1	4.86*	1980	4.1						
328	6.7	3.97	1860	4.8	SF	37	DR	63M2	12	620
92	21	28.76	2740	3.0						
105	19	25.38*	2650	3.3						
118	17	22.50*	2560	3.4						
134	16	19.89	2410	2.8						
146	15	18.24*	2350	3.0						
171	12	15.53	2250	3.4						
199	11	13.39	2160	3.8	SAF	37	DR	63M2	12	620
213	10	12.48*	2120	4.0						

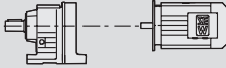
P_m = 0.37 kW

n_a rpm	M_a Nm	i	F_{Ra}¹⁾ N	SEW f_B					m kg	
0.67	2850	2054	24500	0.90	S	87R57	DRS	71S4	110	653
0.76	2530	1824	27400	1.00	SF	87R57	DRS	71S4	130	653
0.85	2260	1631	28000	1.10	SA	87R57	DRS	71S4	105	653
1.5	1340	930	29400	1.85	SAF	87R57	DRS	71S4	125	653
1.7	1210	831	29500	2.1						
1.9	1310	714	11300	0.95	S	77R37	DRS	71S4	61	653
2.2	1160	637	12600	1.05	SF	77R37	DRS	71S4	71	653
2.4	1050	574	13400	1.15	SA	77R37	DRS	71S4	61	653
2.8	900	499	14300	1.35	SAF	77R37	DRS	71S4	67	653
3.2	795	438	14900	1.55						
3.6	705	389	15300	1.75						
3.8	620	365	7560	0.90	S	67R37	DRS	71S4	42	653
4.3	540	319	8450	1.05	SF	67R37	DRS	71S4	48	653
4.9	475	281	9030	1.20	SA	67R37	DRS	71S4	43	653
5.6	430	246	9380	1.30	SAF	67R37	DRS	71S4	47	653
3.5	635	256.47	15600	2.00	S	77	DRS	71M6	53	638
4.0	565	225.26	15800	2.2	SF	77	DRS	71M6	63	639
4.2	540	214.00*	15900	2.3	SA	77	DRS	71M6	52	640
					SAF	77	DRS	71M6	59	639
4.2	500	217.41	8830	1.10	S	67	DRS	71M6	32	633
4.8	445	190.11	9280	1.25	SF	67	DRS	71M6	38	634
5.0	425	180.60*	9410	1.30	SA	67	DRS	71M6	33	635
5.7	380	158.45	9710	1.45	SAF	67	DRS	71M6	37	634
6.4	345	217.41	9900	1.50						
7.3	305	190.11	10100	1.70	S	67	DRS	71S4	31	633
7.6	290	180.60*	10200	1.75	SF	67	DRS	71S4	37	634
8.7	260	158.45	10300	2.00	SA	67	DRS	71S4	32	635
10	225	134.40*	10400	2.3	SAF	67	DRS	71S4	36	634
11	205	121.33	10500	2.5						
5.7	355	158.12	6510	0.85						
6.6	310	137.05	6950	0.95	S	57	DRS	71M6	21	628
7.1	295	128.10*	7110	1.00	SF	57	DRS	71M6	25	629
8.2	260	110.73	7400	1.15	SA	57	DRS	71M6	21	630
9.6	225	94.08*	7640	1.30	SAF	57	DRS	71M6	24	629
11	205	84.00*	7770	1.45						
6.9	300	201.00*	7050	0.95						
7.5	280	184.80*	7230	1.05						
8.7	245	158.12	7510	1.20						
10	215	137.05	7690	1.35						
11	205	128.10*	7770	1.45	S	57	DRS	71S4	20	628
12	180	110.73	7900	1.65	SF	57	DRS	71S4	24	629
15	156	94.08*	8000	1.90	SA	57	DRS	71S4	20	630
16	141	84.00*	8060	2.1	SAF	57	DRS	71S4	23	629
19	122	71.75*	8130	2.4						
20	139	69.39	8070	1.75						
21	115	67.20*	8150	2.5						
22	128	63.80*	8110	1.90						

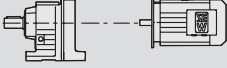
P _m = 0.37 kW																
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg							
10	210	137.05	5110	0.80												
11	198	128.10*	5180	0.85												
12	175	110.73	5320	0.95												
15	151	94.08*	5430	1.10												
16	137	84.00*	5500	1.20												
19	119	71.75*	5580	1.40												
20	136	69.39	5460	1.15												
21	112	67.20*	5610	1.50												
22	126	63.80*	5510	1.25							S	47	DRS	71S4	16	623
25	109	54.59	5590	1.40							SF	47	DRS	71S4	20	624
29	96	47.32	5410	1.60							SA	47	DRS	71S4	17	625
31	90	44.22*	5330	1.75							SAF	47	DRS	71S4	19	624
36	78	38.23	5140	2.00												
42	67	32.48*	4930	2.3												
48	60	29.00*	4790	2.6												
56	52	24.77	4590	3.0												
59	49	23.20*	4510	3.1												
68	46	20.33	4180	2.4												
78	40	17.62	4030	2.8												
84	37	16.47*	3960	3.0												
22	103	63.33	3000	0.80												
27	101	51.30*	3000	0.80												
32	87	43.68	3000	0.95												
37	76	37.66	3000	1.05												
39	71	35.10*	3000	1.10												
45	62	30.68	3000	1.20												
48	59	28.76	3000	1.30												
54	52	25.38*	2940	1.40												
61	47	22.50*	2870	1.55												
69	44	19.89	2610	1.20												
76	41	18.24*	2570	1.30							S	37	DRS	71S4	13	619
89	35	15.53	2500	1.45							SF	37	DRS	71S4	15	620
103	30	13.39	2420	1.60							SA	37	DRS	71S4	13	621
111	28	12.48*	2390	1.70							SAF	37	DRS	71S4	15	620
126	25	10.91	2320	1.95												
135	23	10.23	2280	2.0												
153	21	9.02*	2220	2.2												
172	18	8.00*	2150	2.4												
203	16	6.80*	2070	2.7												
218	15	6.33	2020	2.4												
256	12	5.38	1930	2.7												
284	11	4.86*	1880	2.9												
348	9.3	3.97	1780	3.4												
104	28	25.38*	2540	2.2												
118	25	22.50*	2460	2.3												
133	24	19.89	2290	1.85												
145	22	18.24*	2240	2.0							S	37	DR	63L2	11	619
171	19	15.53	2160	2.3							SF	37	DR	63L2	13	620
198	16	13.39	2080	2.6							SA	37	DR	63L2	11	621
212	15	12.48*	2040	2.7							SAF	37	DR	63L2	13	620
243	13	10.91	1970	3.0												
259	12	10.23	1940	3.1												
294	11	9.02*	1870	3.3												

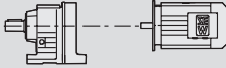
P_m = 0.55 kW

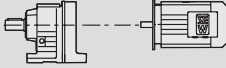
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
1.0	2840	1332	24800	0.90	S SF SA SAF	87R57	DRS	71M4	110	653
1.1	2560	1191	27300	0.95						
1.3	2230	1032	28000	1.10						
1.5	2060	930	28300	1.20						
1.6	1860	831	28700	1.35						
1.9	1620	719	29000	1.55						
2.2	1410	624	29300	1.75						
2.4	1280	558	29400	1.95						
3.1	1020	435	29700	2.4	S SF SA SAF	77R37	DRS	71M4	62	653
3.1	1220	438	12100	1.00						
3.5	1080	389	13200	1.15						
4.2	920	327	14300	1.35						
4.7	830	289	14800	1.50						
5.4	715	250	15300	1.70	S SF SA SAF	67R37	DRS	71M4	43	653
5.5	655	246	5530	0.85						
6.2	585	221	7990	0.95						
6.9	535	198	8520	1.05						
8.1	460	168	9170	1.25						
3.2	1110	288.00*	29600	2.2	S SF SA SAF	87	DRS	80S6	91	643
3.5	1000	258.18	29700	2.4						
4.1	880	222.40*	29800	2.7						
4.5	810	202.96	29800	2.9						
3.6	940	256.47	14200	1.35	S SF SA SAF	77	DRS	80S6	55	638
4.1	830	225.26	14700	1.50						
4.3	800	214.00*	14900	1.60						
4.8	715	189.09	15300	1.75						
5.7	620	161.60*	15600	2.0						
5.3	660	256.47	15500	1.90	S SF SA SAF	77	DRS	71M4	53	638
6.0	585	225.26	15800	2.2						
6.4	560	214.00*	15800	2.3						
7.2	500	189.09	16000	2.5						
6.3	520	217.41	8660	1.00	S SF SA SAF	67	DRS	71M4	32	633
7.2	460	190.11	9150	1.10						
7.5	440	180.60*	9300	1.15						
8.6	390	158.45	9620	1.30						
10	340	134.40*	9930	1.55						
11	310	121.33	10100	1.65						
13	275	106.75*	10200	1.85						
13	260	100.80*	10300	1.95						
16	225	85.83	10400	2.3						
18	230	75.06	10400	2.1						
21	200	65.63	10500	2.4	S SF SA SAF	57	DRS	80S6	23	628
9.7	330	94.08*	6760	0.90						
11	300	84.00*	7070	1.00						
13	260	71.75*	7390	1.10						
14	245	67.20*	7500	1.20						
17	240	54.59	7540	1.10						
19	210	47.32	7730	1.30						
21	199	44.22*	7800	1.35						
24	173	38.23	7930	1.55						

P _m = 0.55 kW										
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
8.6	370	158.12	6330	0.80	S SF SA SAF	57 57 57 57	DRS DRS DRS DRS	71M4 71M4 71M4 71M4	21 25 21 24	628 629 630 629
9.9	325	137.05	6820	0.90						
11	305	128.10*	7000	0.95						
12	270	110.73	7320	1.10						
14	230	94.08*	7580	1.25						
16	210	84.00*	7720	1.40						
19	184	71.75*	7880	1.55						
20	174	67.20*	7930	1.65						
25	167	54.59	7960	1.45						
29	146	47.32	8040	1.70						
31	137	44.22*	8080	1.80						
36	120	38.23	8130	2.0						
42	103	32.48*	7980	2.4						
47	92	29.00*	7730	2.7						
55	79	24.77	7390	3.1						
59	75	23.20*	7260	3.3						
67	69	20.33	6790	2.4						
16	205	84.00*	5140	0.80	S SF SA SAF	47 47 47 47	DRS DRS DRS DRS	71M4 71M4 71M4 71M4	17 21 18 20	623 624 625 624
19	179	71.75*	5290	0.95						
20	169	67.20*	5350	1.00						
25	165	54.59	5140	0.95						
29	144	47.32	5020	1.10						
31	135	44.22*	4960	1.15						
36	118	38.23	4820	1.30						
42	101	32.48*	4660	1.55						
47	91	29.00*	4540	1.70						
55	78	24.77	4380	2.00						
59	74	23.20*	4320	2.1						
67	69	20.33	3950	1.60						
77	60	17.62	3840	1.85						
83	56	16.47*	3780	1.95						
96	49	14.24	3660	2.2						
112	42	12.10*	3520	2.6						
126	37	10.80*	3420	2.9						
147	32	9.23*	3280	3.4						
44	94	30.68	2680	0.80	S SF SA SAF	37 37 37 37	DRS DRS DRS DRS	71M4 71M4 71M4 71M4	14 16 14 16	619 620 621 620
47	89	28.76	2670	0.85						
54	79	25.38*	2640	0.95						
60	70	22.50*	2600	1.05						
71	60	19.13*	2540	1.20						
88	52	15.53	2260	0.95						
102	46	13.39	2220	1.10						
109	43	12.48*	2200	1.15						
125	37	10.91	2160	1.30						
133	35	10.23	2130	1.35						
151	31	9.02*	2080	1.50						
170	28	8.00*	2040	1.60						
200	24	6.80*	1970	1.80						
215	22	6.33	1920	1.60						
253	19	5.38	1850	1.80						
280	17	4.86*	1810	1.95						
343	14	3.97	1720	2.3						
98	45	28.76	2400	1.45	S SF SA SAF	37 37 37 37	DRS DRS DRS DRS	71M2 71M2 71M2 71M2	14 16 14 16	619 620 621 620
111	40	25.38*	2340	1.55						
125	35	22.50*	2290	1.60						
141	33	19.89	2090	1.35						
154	30	18.24*	2060	1.45						
181	26	15.53	2000	1.60						
210	23	13.39	1930	1.80						
225	21	12.48*	1900	1.90						
258	18	10.91	1850	2.1						
275	17	10.23	1820	2.2						
311	15	9.02*	1770	2.3						
351	14	8.00*	1710	2.6						
413	12	6.80*	1640	2.5						

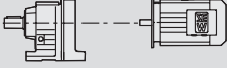
P_m = 0.75 kW

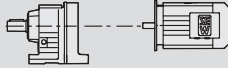
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
1.2	4690	1223	24000	0.90	S SF SA SAF	97R57 97R57 97R57 97R57	DRN DRN DRN DRN	80M4 80M4 80M4 80M4	175	653
1.4	4110	1070	32700	1.00					210	653
1.6	3540	928	34100	1.20					170	653
1.8	3130	824	34800	1.35					195	653
2.0	2230	714	35900	1.90						
2.3	2380	626	35800	1.75						
2.7	2040	538	36100	2.1						
3.0	1840	484	36300	2.3						
1.4	2930	1032	22000	0.85	S SF SA SAF	87R57 87R57 87R57 87R57	DRN DRN DRN DRN	80M4 80M4 80M4 80M4	115	653
1.6	2700	930	27000	0.90					135	653
1.7	2440	831	27600	1.00					115	653
2.0	2120	719	28200	1.15					130	653
2.3	1860	624	28700	1.35						
2.6	1680	558	28900	1.50						
3.3	1340	435	29400	1.80						
4.5	1020	323	29700	2.3						
4.4	1190	327	12300	1.05	S SF SA SAF	77R37 77R37 77R37 77R37	DRN DRN DRN DRN	80M4 80M4 80M4 80M4	67	653
5.0	1070	289	13300	1.15					77	653
5.8	930	250	14200	1.35					66	653
6.6	820	219	14800	1.50					73	653
5.0	1000	288.00*	29700	2.3	S SF SA SAF	87 87 87 87	DRN DRN DRN DRN	80M4 80M4 80M4 80M4	94	643
5.6	910	258.18	29800	2.5					115	644
6.5	795	222.40*	29800	2.8					91	645
7.1	730	202.96	29900	3.0					105	644
5.6	850	256.47	14600	1.50	S SF SA SAF	77 77 77 77	DRN DRN DRN DRN	80M4 80M4 80M4 80M4	58	638
6.4	760	225.26	15100	1.65					67	639
6.7	725	214.00*	15200	1.75					57	640
7.6	650	189.09	15500	1.90					64	639
8.9	560	161.60*	15800	2.2						
9.7	520	148.15	16000	2.3						
11	460	130.00*	16000	2.5						
12	440	123.20*	16000	2.6						
13	390	107.83	16000	2.8						
7.6	600	190.11	7850	0.85	S SF SA SAF	67 67 67 67	DRN DRN DRN DRN	80M4 80M4 80M4 80M4	37	633
8.0	570	180.60*	8140	0.90					43	634
9.1	510	158.45	8750	1.00					38	635
11	440	134.40*	9310	1.20					42	634
12	400	121.33	9570	1.30						
13	355	106.75*	9830	1.45						
14	340	100.80*	9930	1.50						
17	290	85.83	10100	1.75						
19	295	75.06	10100	1.60						
22	260	65.63	10300	1.80						
23	250	62.35*	10300	1.90						
26	220	54.70	10200	2.2						
31	190	46.40*	9740	2.5						
13	350	110.73	6560	0.85	S SF SA SAF	57 57 57 57	DRN DRN DRN DRN	80M4 80M4 80M4 80M4	26	628
15	300	94.08*	7040	1.00					30	629
17	275	84.00*	7300	1.05					26	630
20	235	71.75*	7560	1.15					28	629
21	225	67.20*	7650	1.15						
26	215	54.59	7700	1.15						
30	189	47.32	7850	1.30						
33	177	44.22*	7910	1.40						
38	155	38.23	7910	1.60						
44	132	32.48*	7590	1.85						
50	119	29.00*	7370	2.1						
58	102	24.77	7070	2.2						
62	96	23.20*	6950	2.2						
71	89	20.33	6450	1.90						
82	78	17.62	6230	2.2						
87	73	16.47*	6120	2.3						
101	63	14.24	5890	2.7						

P _m = 0.75 kW										
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
30	186	47.32	4520	0.85	S SF SA SAF	47	DRN	80M4	22	623
33	175	44.22*	4490	0.90						
38	153	38.23	4400	1.00						
44	131	32.48*	4290	1.20						
50	118	29.00*	4210	1.30						
58	101	24.77	4080	1.45	S SF SA SAF	47	DRN	80M4	22	623
62	95	23.20*	4030	1.50						
71	89	20.33	3630	1.25						
82	77	17.62	3550	1.40						
87	73	16.47*	3510	1.50						
101	63	14.24	3410	1.75						
119	54	12.10*	3300	2.0						
133	48	10.80*	3220	2.2						
156	41	9.23*	3110	2.5						
167	39	8.64*	3060	2.6						
198	33	7.28	2940	2.6						
225	29	6.40*	2830	2.6						
267	25	5.39	2700	2.6						
302	22	4.76	2620	2.6						
360	18	4.00*	2500	2.6						
75	78	19.13*	2260	0.85	S SF SA SAF	37	DRN	80M4	19	619
115	55	12.48*	1960	0.85						
132	48	10.91	1940	0.95						
141	45	10.23	1930	1.00						
160	40	9.02*	1900	1.05						
180	36	8.00*	1870	1.20						
212	31	6.80*	1820	1.35						
227	29	6.33	1780	1.20						
267	24	5.38	1730	1.40						
296	22	4.86*	1690	1.50						
363	18	3.97	1620	1.75						

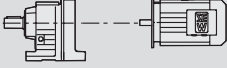
P _m = 1.1 kW										
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
1.8	4590	824	25600	0.90	S SF SA SAF	97R57	DRN	90S4	180	653
2.0	3280	714	34500	1.30					215	653
2.3	3490	626	34200	1.20					175	653
2.7	3000	538	34900	1.40					200	653
3.0	2710	484	35400	1.55						
3.5	2350	420	35800	1.80						
2.3	2740	624	26500	0.90	S SF SA SAF	87R57	DRN	90S4	120	653
2.6	2480	558	27500	1.00					145	653
3.0	2180	485	28100	1.15					120	653
3.4	1980	435	28500	1.25					135	653
3.8	1740	378	28800	1.40						
4.5	1510	323	29100	1.60						
5.2	1330	281	29400	1.80						
5.7	1420	255	29200	1.40						
6.6	1240	222	29400	1.60						
7.1	1160	205	29500	1.70						
6.6	1200	219	12200	1.05	S	77R37	DRN	90S4	73	653
					SF	77R37	DRN	90S4	82	653
					SA	77R37	DRN	90S4	72	653
					SAF	77R37	DRN	90S4	79	653
5.0	1460	288.00*	29200	1.55	S SF SA SAF	87	DRN	90S4	99	643
5.6	1320	258.18	29400	1.70					120	644
6.5	1150	222.40*	29500	1.90					96	645
7.2	1060	202.96	29600	2.0					110	644
8.1	950	180.00*	29700	2.2						
9.6	810	151.30	29800	2.5						

P_m = 1.1 kW

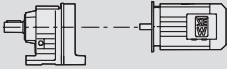
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
6.5	1100	225.26	13100	1.15	S SF SA SAF	77	DRN	90S4	63	638
6.8	1050	214.00*	13400	1.20						
7.7	940	189.09	14100	1.30						
9.0	820	161.60*	14800	1.50						
9.8	755	148.15	15100	1.60						
11	670	130.00*	15500	1.75						
12	640	123.20*	15600	1.80						
13	565	107.83	15800	1.95						
15	510	97.14	16000	2.1						
17	455	85.22	16000	2.3						
12	585	121.33	8020	0.90	S SF SA SAF	67	DRN	90S4	43	633
14	520	106.75*	8660	1.00						
14	495	100.80*	8890	1.05						
17	425	85.83	9400	1.20						
19	390	78.00*	9640	1.30						
22	380	65.63	9690	1.25						
23	365	62.35*	9740	1.30						
27	320	54.70	9500	1.50						
31	275	46.40*	9170	1.75						
35	250	41.89	8970	1.90						
39	220	36.85	8700	2.2						
42	210	34.80*	8590	2.3						
49	180	29.63	8260	2.7						
20	345	71.75*	6620	0.80	S SF SA SAF	57	DRN	90S4	32	628
22	325	67.20*	6830	0.80						
26	275	56.61	7260	0.80						
31	270	47.32	7300	0.90						
33	255	44.22*	7430	0.95	S SF SA SAF	57	DRN	90S4	32	628
38	220	38.23	7360	1.10						
45	192	32.48*	7120	1.25						
50	173	29.00*	6950	1.40						
59	149	24.77	6710	1.50						
63	140	23.20*	6610	1.50						
74	119	19.54	6340	1.55						
83	113	17.62	5860	1.50						
88	106	16.47*	5780	1.60						
102	92	14.24	5590	1.85						
120	78	12.10*	5380	2.2						
135	70	10.80*	5230	2.4						
158	60	9.23*	5030	2.5						
50	171	29.00*	3720	0.90	S SF SA SAF	47	DRN	90S4	28	623
59	147	24.77	3660	1.00						
63	138	23.20*	3630	1.05						
74	117	19.54	3550	1.05						
83	113	17.62	3120	0.95						
88	105	16.47*	3110	1.05						
102	92	14.24	3070	1.20	S SF SA SAF	47	DRN	90S4	28	623
120	78	12.10*	3010	1.40						
135	70	10.80*	2960	1.55						
158	60	9.23*	2880	1.75						
168	56	8.64*	2850	1.75						
200	48	7.28	2750	1.80						
227	42	6.40*	2660	1.80						
270	36	5.39	2560	1.80						
306	32	4.76	2490	1.85						
364	27	4.00*	2390	1.80						
182	52	8.00*	1620	0.85	S SF SA SAF	37	DRN	90S4	25	619
214	44	6.80*	1610	0.95						
230	42	6.33	1570	0.85						
270	35	5.38	1540	0.95						
299	32	4.86*	1530	1.05						
367	26	3.97	1490	1.20						

P _m = 1.5 kW										
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
2.0	4490	714	30600	0.95	S SF SA SAF	97R57	DRN	90L4	185	653
2.3	4770	626	22600	0.90		97R57	DRN	90L4	220	653
2.7	4110	538	32800	1.00		97R57	DRN	90L4	180	653
3.0	3710	484	33700	1.15		97R57	DRN	90L4	205	653
3.5	3230	420	34600	1.30						
3.9	2920	376	35100	1.45						
4.5	2560	327	35500	1.65						
3.0	2990	485	20100	0.85	S SF SA SAF	87R57	DRN	90L4	125	653
3.4	2710	435	27000	0.90		87R57	DRN	90L4	145	653
3.9	2390	378	27700	1.00		87R57	DRN	90L4	125	653
4.5	2070	323	28300	1.15		87R57	DRN	90L4	140	653
5.2	1820	281	28700	1.30						
5.7	1940	255	28500	1.00						
6.6	1700	222	28900	1.15						
7.1	1590	205	29000	1.25						
5.1	2060	286.40*	36100	1.95	S	97	DRN	90L4	160	648
5.6	1900	262.22	36300	2.1	SF	97	DRN	90L4	195	649
6.3	1690	231.67	36400	2.3	SA	97	DRN	90L4	155	650
7.4	1450	196.52	36600	2.6	SAF	97	DRN	90L4	180	649
5.1	1990	288.00*	28500	1.15	S SF SA SAF	87	DRN	90L4	100	643
5.7	1800	258.18	28800	1.25						
6.6	1570	222.40*	29100	1.40						
7.2	1440	202.96	29200	1.50						
8.1	1290	180.00*	29400	1.65						
9.7	1100	151.30	29600	1.85						
11	1020	139.05	29700	2.00						
12	910	123.48	29800	2.1						
13	820	110.40*	29800	2.3						
15	745	99.26	29900	2.5						
7.7	1280	189.09	11500	0.95	S SF SA SAF	77	DRN	90L4	66	638
9.0	1110	161.60*	13000	1.10						
9.9	1030	148.15	13600	1.15						
11	910	130.00*	14300	1.30						
12	870	123.20*	14600	1.30						
14	765	107.83	15000	1.45						
15	695	97.14	15400	1.55						
17	615	85.22	15300	1.70						
19	625	75.09	14100	1.75						
20	595	71.33	13900	1.85						
22	490	66.67	14400	1.95						
23	530	63.03	13600	2.1						
26	420	56.92	13900	2.2						
27	455	53.87	13100	2.4						
30	420	49.38	12900	2.6						
34	370	43.33	12500	3.0						
17	580	85.83	8060	0.90	S	67	DRN	90L4	46	633
19	530	78.00*	8560	0.95	SF	67	DRN	90L4	53	634
22	520	65.63	8670	0.90	SA	67	DRN	90L4	47	635
					SAF	67	DRN	90L4	52	634
23	495	62.35*	8880	0.95	S SF SA SAF	67	DRN	90L4	46	633
27	435	54.70	8770	1.10						
31	375	46.40*	8550	1.30						
35	340	41.89	8400	1.40						
40	300	36.85	8200	1.60						
42	285	34.80*	8110	1.70						
49	245	29.63	7850	1.95						
54	220	26.93	7690	2.0						
60	210	24.44	7040	1.60						
63	200	23.22*	6970	1.65						
72	180	20.37	6800	1.90						
85	153	17.28*	6580	2.2						
94	139	15.60*	6430	2.4						
106	123	13.73*	6250	2.8						

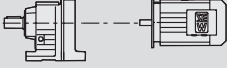
P_m = 1.5 kW

n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
45	260	32.48*	6610	0.95	S SF SA SAF	57	DRN	90L4	35	628
50	230	29.00*	6490	1.05						
59	200	24.77	6310	1.10						
63	190	23.20*	6230	1.10						
75	161	19.54	6020	1.15						
83	153	17.62	5460	1.10						
89	144	16.47*	5400	1.15						
103	125	14.24	5260	1.35						
121	107	12.10*	5100	1.60						
135	95	10.80*	4980	1.75						
158	82	9.23*	4810	1.80	S SF SA SAF	47	DRN	90L4	31	623
103	124	14.24	2680	0.90						
121	106	12.10*	2680	1.05						
135	95	10.80*	2660	1.15						
158	82	9.23*	2630	1.30						
169	77	8.64*	2610	1.30						
201	65	7.28	2550	1.35						
228	58	6.40*	2470	1.30						
271	49	5.39	2400	1.35						
307	43	4.76	2350	1.35						
365	36	4.00*	2270	1.30	S SF SA SAF	47	DRN	90L4	31	623
169	77	8.64*	2610	1.30						
201	65	7.28	2550	1.35						
228	58	6.40*	2470	1.30						
271	49	5.39	2400	1.35						
307	43	4.76	2350	1.35						
365	36	4.00*	2270	1.30						
169	77	8.64*	2610	1.30						
201	65	7.28	2550	1.35						
228	58	6.40*	2470	1.30						

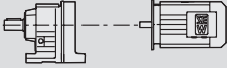
P_m = 2.2 kW

n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
3.4	4810	420	22200	0.85	S SF SA SAF	97R57	DRN	100LS4	190	653
3.9	4340	376	29600	0.95						
4.4	3800	327	33600	1.10						
5.0	3360	287	34400	1.25						
5.8	2940	252	35000	1.40						
5.1	3040	286.40*	34900	1.30	S SF SA SAF	97	DRN	100LS4	165	648
5.5	2810	262.22	35200	1.40						
6.3	2500	231.67	35600	1.60						
7.4	2150	196.52	36000	1.80						
8.0	1990	180.95	36200	1.90						
9.0	1790	161.74	36400	2.0						
10.0	1620	145.60*	36500	2.2						
11	1480	131.85	36600	2.3						
12	1320	116.92	36700	2.5						
14	1200	105.71	36800	2.7						
16	1020	89.60*	36900	2.9	S SF SA SAF	87	DRN	100LS4	105	643
5.6	2660	258.18	27100	0.85						
6.5	2320	222.40*	27900	0.95						
7.1	2130	202.96	28200	1.00						
8.1	1910	180.00*	28600	1.10						
9.6	1630	151.30	29000	1.25						
10	1500	139.05	29200	1.35						
12	1350	123.48	29300	1.45						
13	1210	110.40*	29500	1.55						
15	1100	99.26	29600	1.65						
17	960	86.15	29700	1.85						
18	1030	81.76	29600	1.55						
19	860	77.14	29800	1.95						
21	890	70.43	29800	1.80						
23	810	64.27	29800	1.95						
25	730	57.00*	29900	2.2						

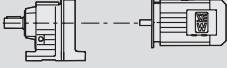
P_m = 2.2 kW

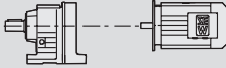
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
11	1350	130.00*	9150	0.85	S SF SA SAF	77	DRN	100LS4	70	638
12	1280	123.20*	11500	0.90						
13	1130	107.83	12800	1.00						
15	1030	97.14	13600	1.05						
17	910	85.22	14000	1.15						
19	810	75.20*	13800	1.25						
22	725	66.67	13500	1.35						
23	780	63.03	12400	1.40						
25	625	56.92	13000	1.45						
27	670	53.87	12100	1.65						
29	620	49.38	11900	1.75						
33	545	43.33	11700	2.0						
35	515	41.07	11500	2.1						
40	455	35.94	11200	2.3						
45	410	32.38	11000	2.5						
51	360	28.41	10700	2.7						
58	320	25.07	10400	3.0						
63	300	22.89	9550	2.3	S SF SA SAF	67	DRN	100LS4	50	633
69	275	20.99	9390	2.5						
31	550	46.40*	7480	0.85						
35	500	41.89	7430	0.95						
39	445	36.85	7350	1.10						
42	420	34.80*	7300	1.15						
49	360	29.63	7160	1.35						
54	330	26.93	7060	1.40						
62	285	23.33	6900	1.40						
71	265	20.37	6130	1.30						
84	225	17.28*	6010	1.50						
93	205	15.60*	5920	1.65						
106	181	13.73*	5800	1.90						
112	171	12.96*	5740	2.00						
131	146	11.03	5570	2.3						
145	133	10.03	5470	2.4						
167	116	8.69	5300	2.4	S SF SA SAF	57	DRN	100LS4	39	628
102	184	14.24	4700	0.90						
120	158	12.10*	4620	1.05						
134	141	10.80*	4560	1.20						
157	121	9.23*	4450	1.25						
168	114	8.64*	4400	1.25						
199	96	7.28	4270	1.25						
227	85	6.40*	4120	1.15						
269	72	5.39	3980	1.30						
304	64	4.76	3870	1.30						
362	54	4.00*	3720	1.30						

P_m = 3.0 kW

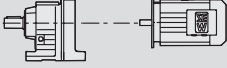
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
5.1	4580	287	26000	0.90	S SF SA SAF	97R57	DRN	100L4	195	653
5.8	4020	252	33100	1.05						
6.6	3510	219	34100	1.20						
7.1	3300	205	34500	1.25						
5.1	4140	286.40*	32900	0.95	S SF SA SAF	97	DRN	100L4	170	648
5.6	3820	262.22	33600	1.05						
6.3	3400	231.67	34300	1.15						
7.4	2920	196.52	35100	1.30						
8.0	2710	180.95	35400	1.40						
9.0	2440	161.74	35700	1.50						
10	2210	145.60*	36000	1.60						
11	2010	131.85	36200	1.70						
12	1790	116.92	36300	1.85						
14	1630	105.71	36500	1.95						
16	1390	89.60*	36700	2.2						
18	1410	80.85	36600	2.3						

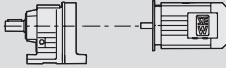
P_m = 3.0 kW

n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
8.1	2600	180.00*	27300	0.80						
9.6	2210	151.30	28100	0.95						
10	2050	139.05	28400	1.00						
12	1830	123.48	28700	1.05						
13	1650	110.40*	29000	1.15						
15	1490	99.26	29200	1.25						
17	1310	86.15	29400	1.35	S	87	DRN	100L4	115	643
18	1400	81.76	29300	1.15	SF	87	DRN	100L4	135	644
19	1180	77.14	29500	1.45	SA	87	DRN	100L4	110	645
21	1210	70.43	29500	1.30	SAF	87	DRN	100L4	125	644
23	1110	64.27	29600	1.45						
26	990	57.00*	29700	1.60						
30	830	47.91	29800	1.90						
33	770	44.03	29900	2.1						
37	685	39.10	29900	2.3						
42	615	34.96*	29900	2.6						
17	1240	85.22	12000	0.85	S	77	DRN	100L4	77	638
19	1100	75.20*	12500	0.90	SF	77	DRN	100L4	87	639
22	980	66.67	12300	1.00	SA	77	DRN	100L4	77	640
23	1060	63.03	10900	1.05	SAF	77	DRN	100L4	83	639
26	850	56.92	12000	1.10						
27	910	53.87	10900	1.20						
29	840	49.38	10800	1.30						
34	740	43.33	10700	1.50						
35	705	41.07	10600	1.55						
41	620	35.94	10400	1.70						
45	560	32.38	10200	1.85						
51	490	28.41	10000	2.0	S	77	DRN	100L4	77	638
58	435	25.07	9790	2.2	SF	77	DRN	100L4	87	639
64	410	22.89	8790	1.70	SA	77	DRN	100L4	77	640
69	375	20.99	8690	1.85	SAF	77	DRN	100L4	83	639
79	330	18.42	8520	2.1						
83	315	17.45	8450	2.2						
95	275	15.28	8250	2.6						
106	250	13.76	8090	2.9						
121	220	12.07	7880	3.3						
137	195	10.65	7670	3.7						
42	570	34.80*	6370	0.85	S	67	DRN	100L4	57	633
49	490	29.63	6350	1.00	SF	67	DRN	100L4	64	634
54	445	26.93	6320	1.00	SA	67	DRN	100L4	58	635
					SAF	67	DRN	100L4	63	634
62	390	23.33	6260	1.05						
71	360	20.37	5360	0.95						
84	305	17.28*	5350	1.10						
93	275	15.60*	5320	1.20	S	67	DRN	100L4	57	633
106	245	13.73*	5270	1.40	SF	67	DRN	100L4	64	634
112	230	12.96*	5240	1.45	SA	67	DRN	100L4	58	635
132	199	11.03	5150	1.70	SAF	67	DRN	100L4	63	634
145	181	10.03	5080	1.75						
168	157	8.69	4960	1.80						
193	137	7.56*	4840	1.80						
135	192	10.80*	4060	0.90						
158	164	9.23*	4030	0.90						
169	154	8.64*	4000	0.90	S	57	DRN	100L4	46	628
200	130	7.28	3930	0.95	SF	57	DRN	100L4	50	629
228	116	6.40*	3810	0.85	SA	57	DRN	100L4	46	630
270	98	5.39	3710	0.95	SAF	57	DRN	100L4	49	629
306	87	4.76	3630	0.95						
364	73	4.00*	3520	0.95						

P _m = 4.0 kW										
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
6.7	4670	219	24500	0.90	S SF SA SAF	97R57	DRN	112M4	205	653
7.1	4390	205	28900	0.95		97R57	DRN	112M4	240	653
						97R57	DRN	112M4	200	653
						97R57	DRN	112M4	225	653
6.3	4520	231.67	30300	0.90	S SF SA SAF	97	DRN	112M4	180	648
7.4	3880	196.52	33400	1.00						
8.1	3590	180.95	34000	1.05						
9.0	3230	161.74	34600	1.15						
10	2930	145.60*	35100	1.20						
11	2670	131.85	35400	1.30						
13	2380	116.92	35800	1.40						
14	2170	105.71	36000	1.50						
16	1850	89.60*	36300	1.65						
18	1880	80.85	36300	1.75						
20	1660	71.43	36500	2.00						
24	1420	60.59	36600	2.3						
26	1310	55.79	36700	2.5						
12	2430	123.48	27600	0.80	S SF SA SAF	87	DRN	112M4	125	643
13	2190	110.40*	28100	0.85						
15	1980	99.26	28500	0.95						
17	1730	86.15	28900	1.00						
19	1560	77.14	29100	1.10						
21	1610	70.43	29000	1.00						
23	1470	64.27	29200	1.10						
26	1310	57.00*	29400	1.20						
31	1110	47.91	29600	1.45						
33	1020	44.03	29700	1.55						
37	910	39.10	29700	1.75						
42	810	34.96*	29700	1.95						
47	735	31.43	28900	2.2						
54	640	27.28	28000	2.5						
57	615	25.50*	26600	2.0						
26	1120	56.92	10800	0.80						
27	1210	53.87	9340	0.90	SF	77	DRN	112M4	96	639
30	1110	49.38	9390	1.00	SA	77	DRN	112M4	86	640
34	980	43.33	9420	1.10	SAF	77	DRN	112M4	93	639
36	930	41.07	9410	1.15	S SF SA SAF	77	DRN	112M4	86	638
41	820	35.94	9370	1.30						
45	740	32.38	9300	1.40						
52	655	28.41	9190	1.50						
58	580	25.07	9060	1.65						
64	545	22.89	7840	1.30						
70	500	20.99	7820	1.40						
79	440	18.42	7760	1.60						
84	415	17.45	7720	1.70						
96	365	15.28	7620	1.95						
106	330	13.76	7520	2.2						
121	290	12.07	7380	2.5						
137	255	10.65	7220	2.8						
155	225	9.44	7070	2.8						
182	197	8.06	6850	2.9						
85	405	17.28*	4060	0.85						
94	365	15.60*	4400	0.90						
107	325	13.73*	4620	1.05						
113	305	12.96*	4620	1.10						
133	260	11.03	4620	1.30						
146	240	10.03	4600	1.30						
169	205	8.69	4540	1.35						
194	182	7.56*	4480	1.35						

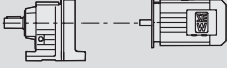
P_m = 5.5 kW

n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
9.0	4460	161.74	31300	0.80	S SF SA SAF	97	DRN	132S4	190	648
10	4040	145.60*	33100	0.90					225	649
11	3680	131.85	33800	0.95					185	650
12	3280	116.92	34500	1.00					215	649
14	2980	105.71	35000	1.05						
16	2550	89.60*	35600	1.20						
19	2240	78.26	35900	1.30						
20	2290	71.43	35900	1.45						
22	1890	65.45	36300	1.40						
24	1960	60.59	36200	1.70						
26	1800	55.79	36300	1.80						
29	1620	49.87	36500	2.0						
33	1460	44.89	36600	2.2						
36	1320	40.65	36700	2.4						
19	2150	77.14	28200	0.80	S	87	DRN	132S4	135	643
23	1800	64.00*	28700	0.85	SF	87	DRN	132S4	155	644
26	1810	57.00*	28700	0.90	SA	87	DRN	132S4	130	645
30	1530	47.91	29100	1.05	SAF	87	DRN	132S4	150	644
33	1410	44.03	29300	1.15	S SF SA SAF	87	DRN	132S4	135	643
37	1250	39.10	29100	1.25					155	644
42	1120	34.96*	28500	1.40					130	645
46	1010	31.43	27900	1.55					150	644
54	880	27.28	27100	1.80						
57	840	25.50*	25400	1.45						
68	715	21.43	24600	1.75						
74	655	19.70	24200	1.90						
84	585	17.49	23600	2.1						
93	525	15.64*	23000	2.4						
104	470	14.06	22500	2.6						
120	410	12.21	21800	3.0						
134	365	10.93	21200	3.1						
36	1290	41.07	7660	0.85	S	77	DRN	132S4	98	638
41	1130	35.94	7830	0.95	SF	77	DRN	132S4	105	639
45	1020	32.38	7910	1.00	SA	77	DRN	132S4	97	640
					SAF	77	DRN	132S4	105	639
51	900	28.41	7970	1.10	S SF SA SAF	77	DRN	132S4	98	638
58	800	25.07	7980	1.20					105	639
66	710	22.22	7950	1.30					97	640
79	605	18.42	6230	1.15					105	639
84	575	17.45	6460	1.25						
96	505	15.28	6680	1.40						
106	455	13.76	6670	1.55						
121	400	12.07	6630	1.80						
137	355	10.65	6570	2.0						
155	315	9.44	6490	2.1						
181	270	8.06	6360	2.1						
132	360	11.03	3120	0.95	S	67	DRN	132S4	78	633
146	330	10.03	3430	0.95	SF	67	DRN	132S4	85	634
168	285	8.69	3820	0.95	SA	67	DRN	132S4	79	635
193	250	7.56*	3940	1.00	SAF	67	DRN	132S4	84	634

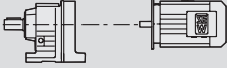
P _m = 7.5 kW										
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
14	4050	105.71	33100	0.80	S SF SA SAF	97	DRN	132M4	210	648
16	3460	89.60*	34200	0.85						
19	3040	78.26	34900	0.95						
21	3120	71.43	34800	1.05						
22	2560	65.45	35500	1.05						
24	2660	60.59	35400	1.25						
26	2450	55.79	35700	1.35						
29	2200	49.87	36000	1.50						
33	1980	44.89	36200	1.65						
36	1800	40.65	36300	1.80						
41	1600	36.05	36100	1.95						
45	1450	32.60	35300	2.0						
56	1210	26.39	32100	2.2						
62	1080	23.59	31400	2.4						
69	970	21.23	30800	2.6						
76	880	19.23	30100	2.8						
33	1910	44.03	27800	0.85	S	87	DRN	132M4	150	643
38	1700	39.10	27400	0.95	SF	87	DRN	132M4	175	644
42	1530	34.96*	26900	1.05	SA	87	DRN	132M4	150	645
					SAF	87	DRN	132M4	165	644
47	1380	31.43	26500	1.15	S SF SA SAF	87	DRN	132M4	150	643
54	1200	27.28	25800	1.35						
58	1150	25.50*	23700	1.10						
68	970	21.43	23200	1.30						
75	890	19.70	22900	1.40						
84	795	17.49	22400	1.55						
94	710	15.64*	22000	1.75						
104	640	14.06	21600	1.95						
120	555	12.21	21000	2.2						
134	500	10.93	20500	2.2						
162	415	9.07	19700	2.3	S SF SA SAF	77	DRN	132M4	115	638
186	360	7.88	19100	2.3						
52	1220	28.41	6340	0.80						
59	1080	25.07	6540	0.90						
66	960	22.22	6670	0.95	SF	77	DRN	132M4	125	639
80	820	18.42	2360	0.85	SA	77	DRN	132M4	115	640
					SAF	77	DRN	132M4	120	639
84	785	17.45	2770	0.90	S SF SA SAF	77	DRN	132M4	115	638
96	685	15.28	3660	1.05						
107	620	13.76	4250	1.15						
122	545	12.07	4880	1.35						
138	480	10.65	5380	1.50						
155	425	9.44	5700	1.50						
182	365	8.06	5690	1.55						

P _m = 9.2 kW										
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
19	3730	78.26	33700	0.75	S	97	DRN	132L4	220	648
22	3140	65.45	34700	0.85	SF	97	DRN	132L4	250	649
26	3000	55.79	34900	1.10	SA	97	DRN	132L4	215	650
					SAF	97	DRN	132L4	240	649
29	2690	49.87	35400	1.20	S SF SA SAF	97	DRN	132L4	220	648
33	2430	44.89	35700	1.35						
36	2210	40.65	35700	1.45						
41	1960	36.05	34900	1.60						
45	1780	32.60	34300	1.65						
56	1480	26.39	30900	1.75						
62	1320	23.59	30400	1.95						
69	1190	21.23	29800	2.2						
76	1080	19.23	29300	2.3						
86	960	17.05	28600	2.5						
95	870	15.42	28000	2.6						
112	740	13.07	27000	2.9						
129	645	11.41	26200	3.1						

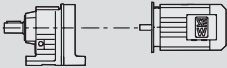
P_m = 9.2 kW

n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
42	1870	34.96*	25600	0.85	S	87	DRN	132L4	160	643
47	1690	31.43	25300	0.95	SF	87	DRN	132L4	180	644
54	1470	27.28	24800	1.10	SA	87	DRN	132L4	160	645
60	1320	24.43	24400	1.20	SAF	87	DRN	132L4	175	644
73	1100	20.27	23600	1.30	S SF SA SAF	87	DRN	132L4	160	643
75	1090	19.70	21800	1.15						
84	970	17.49	21500	1.25						
94	870	15.64*	21100	1.40						
105	785	14.06	20800	1.55						
120	680	12.21	20300	1.80						
135	610	10.93	19900	1.85						
162	510	9.07	19200	1.85	S SF SA SAF	77	DRN	132L4	125	638
186	440	7.88	18600	1.85						
77	1010	18.97	5840	0.85						
107	760	13.76	1770	0.95						
122	670	12.07	2660	1.10						
138	590	10.65	3380	1.20						
156	525	9.44	3970	1.25						
182	450	8.06	4590	1.30						

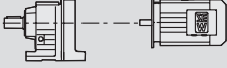
P_m = 11.0 kW

n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
26	3590	55.79	34000	0.90	S SF SA SAF	97	DRN	160M4	250	648
30	3210	49.87	34600	1.05						
33	2900	44.89	34800	1.15						
36	2630	40.65	34300	1.20						
41	2340	36.05	33700	1.35						
45	2120	32.60	33200	1.40						
56	1760	26.39	29700	1.45						
62	1580	23.59	29200	1.65						
69	1420	21.23	28800	1.80						
77	1290	19.23	28300	1.95						
86	1150	17.05	27800	2.1						
96	1040	15.42	27300	2.2						
113	880	13.07	26400	2.4	S SF SA SAF	87	DRN	160M4	190	643
129	770	11.41	25700	2.6						
54	1750	27.28	23700	0.90						
60	1570	24.43	23400	1.00						
73	1310	20.27	22800	1.10						
75	1300	19.70	20700	0.95						
84	1160	17.49	20500	1.05						
94	1040	15.64*	20200	1.20						
105	930	14.06	20000	1.30						
121	810	12.21	19600	1.50						
135	730	10.93	19300	1.55						
162	605	9.07	18700	1.55						
187	530	7.88	18200	1.55						

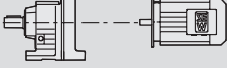
P_m = 15.0 kW

n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
33	3950	44.89	31500	0.85	S	97	DRN	160L4	265	648
36	3590	40.65	31400	0.90	SF	97	DRN	160L4	300	649
41	3190	36.05	31100	0.95	SA	97	DRN	160L4	260	650
					SAF	97	DRN	160L4	290	649

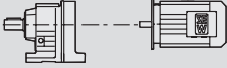
P_m = 15.0 kW

n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
45	2890	32.60	30800	1.05						
56	2410	26.39	26900	1.10						
62	2150	23.59	26700	1.20						
69	1940	21.23	26600	1.30						
77	1760	19.23	26300	1.40	S	97	DRN	160L4	265	648
86	1560	17.05	26000	1.55	SF	97	DRN	160L4	300	649
96	1410	15.42	25600	1.60	SA	97	DRN	160L4	260	650
113	1200	13.07	25000	1.80	SAF	97	DRN	160L4	290	649
129	1050	11.41	24500	1.90						
154	880	9.55	23700	1.90						
178	765	8.26	23000	1.90						
94	1420	15.64*	16800	0.85	S	87	DRN	160L4	210	643
105	1280	14.06	17900	0.95	SF	87	DRN	160L4	230	644
121	1110	12.21	18000	1.10	SA	87	DRN	160L4	205	645
					SAF	87	DRN	160L4	220	644
135	990	10.93	17900	1.15	S	87	DRN	160L4	210	643
163	830	9.07	17500	1.15	SF	87	DRN	160L4	230	644
187	720	7.88	17200	1.15	SA	87	DRN	160L4	205	645
					SAF	87	DRN	160L4	220	644

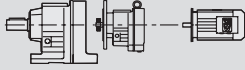
P_m = 18.5 kW

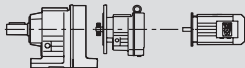
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
41	3930	36.05	28800	0.80						
45	3560	32.60	28700	0.85						
54	3020	27.63	28500	0.95						
61	2650	24.13	28100	1.00						
70	2390	21.23	24500	1.05	S	97	DRN	180M4	290	648
77	2170	19.23	24500	1.15	SF	97	DRN	180M4	320	649
87	1920	17.05	24400	1.25	SA	97	DRN	180M4	285	650
96	1740	15.42	24200	1.30	SAF	97	DRN	180M4	310	649
113	1480	13.07	23800	1.45						
130	1290	11.41	23400	1.55						
155	1080	9.55	22800	1.55						
179	940	8.26	22300	1.55						

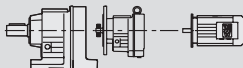
P_m = 22 kW

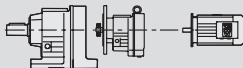
n _a rpm	M _a Nm	i	F _{Ra} ¹⁾ N	SEW f _B					m kg	
53	3600	27.63	26700	0.80						
61	3150	24.13	26600	0.85	S	97	DRN	180L4	305	648
70	2840	21.23	18600	0.90	SF	97	DRN	180L4	340	649
77	2580	19.23	20500	0.95	SA	97	DRN	180L4	300	650
87	2290	17.05	22400	1.05	SAF	97	DRN	180L4	325	649
96	2070	15.42	22800	1.10						
113	1760	13.07	22600	1.25	S	97	DRN	180L4	305	648
129	1540	11.41	22400	1.30	SF	97	DRN	180L4	340	649
155	1290	9.55	21900	1.30	SA	97	DRN	180L4	300	650
179	1120	8.26	21500	1.30	SAF	97	DRN	180L4	325	649

11.4 S..R..DRN.. selection tables for low output speeds in Nm

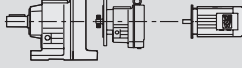
M_{a max} = 92 Nm							
n_a rpm	i	F_{Ra}¹⁾ N					m kg 
0.14	10037	3000	S	37R17	DR	63S4	14 653
0.16	8654	3000					
0.17	8066	3000					
0.20	7051	3000					
0.23	6079	3000					
0.25	5431	3000					
0.29	4747	3000					
0.33	4155	3000					
0.38	3632	3000					
0.48	2866	3000					
0.56	2471	3000					
0.64	2160	3000					
0.73	1887	3000					
0.83	1665	3000					
0.95	1456	3000					
1.1	1271	3000					
1.2	1121	3000					
1.4	994	3000					
1.6	869	3000					
1.8	774	3000	S	37R17	DR	63S4	14 653
2.1	666	3000					
2.3	596	3000					
2.6	521	3000					
3.0	456	3000					
3.5	398	3000					
3.9	351	3000					
4.6	303	3000					
5.2	265	3000					
6.0	232	3000					
6.8	202	3000					
7.4	179	3000	S	37R17	DR	63M4	14 653
8.3	158	3000					
9.1	144	3000					
11	118	3000					
12	110	3000					

M_{a max} = 185 Nm							
n_a rpm	i	F_{Ra}¹⁾ N					m kg 
0.11	12909	5250	S	47R17	DR	63S4	17 653
0.12	11189	5250					
0.13	10374	5250					
0.15	8992	5250					
0.18	7860	5250					
0.20	6887	5250					
0.23	6055	5250					
0.26	5292	5250					
0.30	4637	5250					
0.34	4092	5250					
0.39	3582	5200					
0.44	3131	5200					
0.51	2714	5200					
0.57	2412	5200					
0.65	2131	5200					
0.74	1863	5200					
0.83	1663	5200					
0.96	1435	5200					
1.1	1254	5200					
1.2	1120	5200					
1.3	1083	5200					

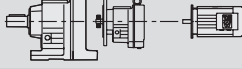
M_{a max} = 185 Nm								
n_a rpm	i	F_{Ra}¹⁾ N					m kg	
1.4	965	5200	S	47R17	DR	63S4	17	653
1.6	865	5200					20	653
1.8	750	5200					18	653
2.1	655	5200					19	653
2.4	574	5200						
2.7	506	5200						
3.2	438	5200						
3.6	388	5200						
3.9	336	5200	SF	47R17	DR	63M4	17	653
4.5	294	5200	SA	47R17	DR	63M4	18	653
			SAF	47R17	DR	63M4	19	653
5.0	257	5260	S	47R17	DR	63L4	17	653
			SF	47R17	DR	63L4	21	653
			SA	47R17	DR	63L4	18	653
			SAF	47R17	DR	63L4	20	653
5.8	229	5200	S	47R17	DR	63M4	17	653
			SF	47R17	DR	63M4	20	653
			SA	47R17	DR	63M4	18	653
			SAF	47R17	DR	63M4	19	653
6.5	200	5200	S	47R17	DR	63L4	17	653
6.9	187	5200	SF	47R17	DR	63L4	21	653
7.9	165	5200	SA	47R17	DR	63L4	18	653
			SAF	47R17	DR	63L4	20	653
9.4	148	5200	S	47R17	DRS	71S4	19	653
11	131	5200	SF	47R17	DRS	71S4	23	653
			SA	47R17	DRS	71S4	20	653
			SAF	47R17	DRS	71S4	22	653

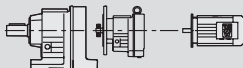
M_{a max} = 300 Nm								
n_a rpm	i	F_{Ra}¹⁾ N					m kg	
0.44	3131	7080	S	57R17	DR	63S4	21	653
0.51	2714	7080					24	653
0.57	2412	7080					20	653
0.65	2131	7080					23	653
0.74	1863	7080						
0.83	1663	7080						
0.96	1435	7080						
1.1	1254	7080	SF	57R17	DR	63S4	21	653
1.3	1083	7080	SA	57R17	DR	63S4	24	653
			SAF	57R17	DR	63S4	20	653
1.4	965	7080	S	57R17	DR	63S4	23	653
1.6	865	7080	SF	57R17	DR	63S4	20	653
1.8	750	7080	SA	57R17	DR	63S4	24	653
2.1	655	7080	SAF	57R17	DR	63S4	20	653
2.3	574	7080	S	57R17	DR	63M4	23	653
2.6	506	7080	SF	57R17	DR	63M4	20	653
3.0	438	7080	SA	57R17	DR	63M4	24	653
3.4	388	7080	SAF	57R17	DR	63M4	21	653
3.9	336	7080	S	57R17	DR	63L4	25	653
4.4	294	7080	SF	57R17	DR	63L4	21	653
4.8	269	7080	SA	57R17	DR	63L4	24	653
			SAF	57R17	DR	63L4		
6.0	229	7080	S	57R17	DRS	71S4	23	653
6.8	204	7080	SF	57R17	DRS	71S4	27	653
7.4	187	7080	SA	57R17	DRS	71S4	23	653
			SAF	57R17	DRS	71S4	25	653
8.2	165	7080	S	57R17	DRS	71M4	24	653
10	131	7080	SF	57R17	DRS	71M4	28	653
			SA	57R17	DRS	71M4	24	653
			SAF	57R17	DRS	71M4	27	653

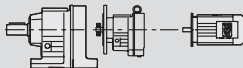
M_{a max} = 330 Nm

n_a rpm	i	$F_{Ra}^{1)}$ N					m kg	
0.11	12909	6800						
0.12	11189	6800						
0.13	10374	6800						
0.15	8992	6800						
0.18	7860	6800	S	57R17	DR	63S4	21	653
0.20	6887	6800	SF	57R17	DR	63S4	24	653
0.23	6055	6800	SA	57R17	DR	63S4	20	653
0.26	5292	6800	SAF	57R17	DR	63S4	23	653
0.30	4637	6800						
0.34	4092	6800						
0.38	3628	6800						

M_{a max} = 570 Nm

n_a rpm	i	$F_{Ra}^{1)}$ N					m kg	
0.06	21362	8190						
0.07	19594	8190						
0.08	18120	8190						
0.08	16682	8190						
0.10	14383	8190						
0.11	12774	8190						
0.13	11013	8190						
0.14	9694	8190						
0.16	8529	8190						
0.19	7455	8190						
0.21	6531	8190	S	67R37	DR	63S4	39	653
0.24	5759	8190	SF	67R37	DR	63S4	46	653
0.28	4965	8190	SA	67R37	DR	63S4	40	653
0.31	4410	8190	SAF	67R37	DR	63S4	45	653
0.36	3880	8190						
0.40	3432	8190						
0.47	2944	8190						
0.52	2630	8190						
0.61	2279	8190						
0.69	2014	8190						
0.78	1772	8190						
0.88	1559	8190						
1.0	1363	8190						
1.2	1194	8190						
1.3	1045	8190	S	67R37	DR	63M4	39	653
1.4	914	8190	SF	67R37	DR	63M4	46	653
			SA	67R37	DR	63M4	40	653
			SAF	67R37	DR	63M4	45	653
1.6	809	8190	S	67R37	DR	63M4	39	653
			SF	67R37	DR	63M4	46	653
1.9	712	8190	SA	67R37	DR	63M4	40	653
			SAF	67R37	DR	63M4	45	653
2.1	615	8190	S	67R37	DR	63L4	40	653
			SF	67R37	DR	63L4	46	653
2.4	543	8190	SA	67R37	DR	63L4	41	653
			SAF	67R37	DR	63L4	45	653
2.9	469	8190	S	67R37	DRS	71S4	42	653
			SF	67R37	DRS	71S4	48	653
3.3	424	8190	SA	67R37	DRS	71S4	43	653
			SAF	67R37	DRS	71S4	47	653
3.8	365	8190						
4.3	319	8190	S	67R37	DRS	71M4	43	653
			SF	67R37	DRS	71M4	49	653
4.8	281	8190	SA	67R37	DRS	71M4	44	653
			SAF	67R37	DRS	71M4	48	653
5.5	246	8190						
6.2	221	8190						
7.3	198	8190	S	67R37	DRN	80M4	48	653
			SF	67R37	DRN	80M4	54	653
			SA	67R37	DRN	80M4	49	653
			SAF	67R37	DRN	80M4	53	653

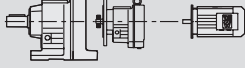
M_{a max} = 1240 Nm								
n_a rpm	i	F_{Ra}¹⁾ N					m kg	
0.50 0.58	2753	12000	S	77R37	DR	63S4	59	653
	2374	12000	SF	77R37	DR	63S4	68	653
			SA	77R37	DR	63S4	58	653
			SAF	77R37	DR	63S4	65	653
0.63 0.73 0.76 0.82 0.94	2083	12000	S	77R37	DR	63M4	59	653
	1813	12000	SF	77R37	DR	63M4	68	653
	1745	12000	SA	77R37	DR	63M4	58	653
	1600	12000	SAF	77R37	DR	63M4	65	653
	1404	12000						
1.0	1245	12000	S	77R37	DR	63L4	59	653
			SF	77R37	DR	63L4	69	653
			SA	77R37	DR	63L4	59	653
			SAF	77R37	DR	63L4	65	653
1.2 1.4	1100	12000	S	77R37	DR	63L4	59	653
	954	12000	SF	77R37	DR	63L4	69	653
			SA	77R37	DR	63L4	59	653
			SAF	77R37	DR	63L4	65	653
1.6 1.9	837	12000	S	77R37	DRS	71S4	61	653
	714	12000	SF	77R37	DRS	71S4	71	653
			SA	77R37	DRS	71S4	61	653
			SAF	77R37	DRS	71S4	67	653
2.1 2.4 2.7	637	12000	S	77R37	DRS	71M4	62	653
	574	12000	SF	77R37	DRS	71M4	72	653
	499	12000	SA	77R37	DRS	71M4	62	653
			SAF	77R37	DRS	71M4	68	653
3.3 3.7	438	12000	S	77R37	DRN	80M4	67	653
	389	12000	SF	77R37	DRN	80M4	77	653
			SA	77R37	DRN	80M4	66	653
			SAF	77R37	DRN	80M4	73	653
4.4 5.0 5.8	327	12000	S	77R37	DRN	90S4	73	653
	289	12000	SF	77R37	DRN	90S4	82	653
	250	12000	SA	77R37	DRN	90S4	72	653
			SAF	77R37	DRN	90S4	79	653
6.7	219	12000	S	77R37	DRN	90L4	76	653
			SF	77R37	DRN	90L4	86	653
			SA	77R37	DRN	90L4	75	653
			SAF	77R37	DRN	90L4	82	653

M_{a max} = 1270 Nm								
n_a rpm	i	F_{Ra}¹⁾ N					m kg	
0.05	25493	11700	S SF SA SAF	77R37	DR	63S4	59	653
0.06	21787	11700						
0.07	19907	11700						
0.08	17013	11700						
0.09	14668	11700						
0.11	13110	11700						
0.12	11569	11700						
0.14	9887	11700						
0.16	8817	11700						
0.18	7735	11700						
0.20	6735	11700						
0.23	5943	11700						
0.26	5214	11700						
0.30	4618	11700						
0.35	3992	11700						
0.39	3540	11700						
0.43	3098	11700	S	77R37	DR	63M4	59	653
			SF	77R37	DR	63M4	68	653
			SA	77R37	DR	63M4	58	653
			SAF	77R37	DR	63M4	65	653

M_{a max} = 2400 Nm								
n_a rpm	i	F_{Ra}¹⁾ N					m kg	
			S	87R57	DRN	100LS4	130	653
4.5	323	27700	SF	87R57	DRN	100LS4	150	653
5.2	281	27700	SA	87R57	DRN	100LS4	125	653
			SAF	87R57	DRN	100LS4	145	653

M_{a max} = 2450 Nm								
n_a rpm	i	F_{Ra}¹⁾ N					m kg	
			S	87R57	DRN	90L4	125	653
3.4	435	27600	SF	87R57	DRN	90L4	145	653
			SA	87R57	DRN	90L4	125	653
			SAF	87R57	DRN	90L4	140	653
			S	87R57	DRN	100LS4	130	653
3.8	378	27600	SF	87R57	DRN	100LS4	150	653
			SA	87R57	DRN	100LS4	125	653
			SAF	87R57	DRN	100LS4	145	653

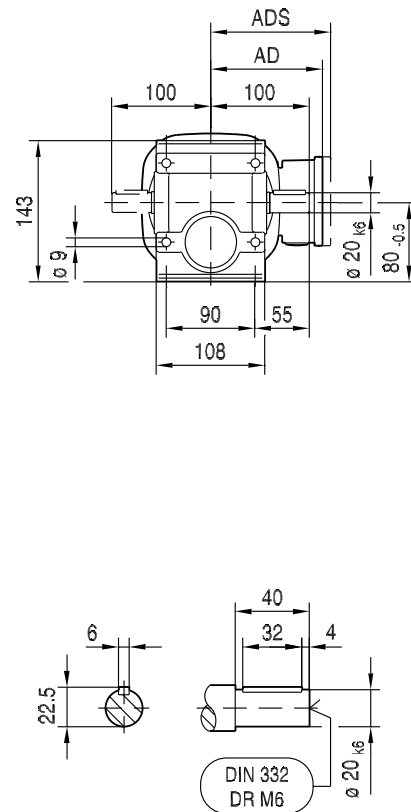
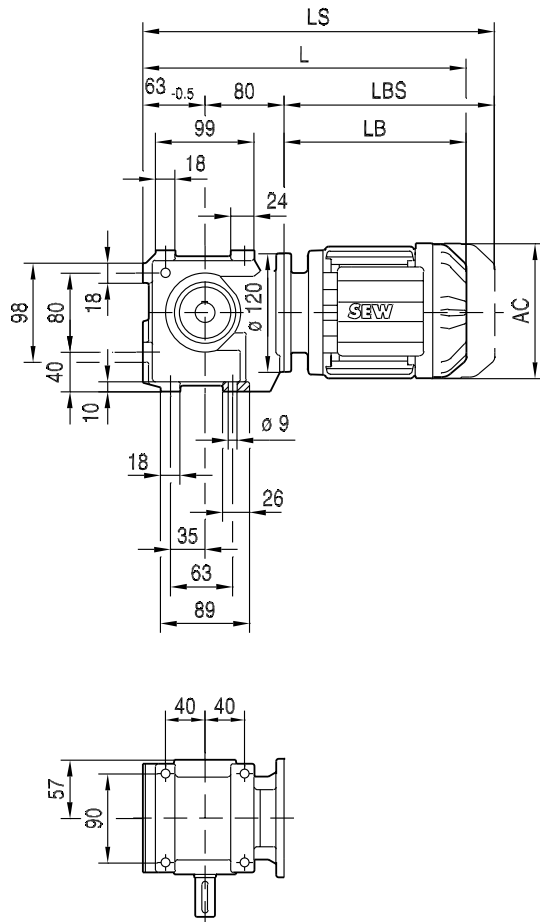
M_{a max} = 2500 Nm								
n_a rpm	i	F_{Ra}¹⁾ N					m kg	
0.05	25987	27500						
0.06	23940	27500						
0.07	20568	27500						
0.08	18265	27500						
0.08	16774	27500	S	87R57	DR	63S4	110	653
0.09	14820	27500	SF	87R57	DR	63S4	130	653
0.10	13160	27500	SA	87R57	DR	63S4	105	653
0.12	11200	27500	SAF	87R57	DR	63S4	120	653
0.14	9904	27500						
0.16	8549	27500						
0.18	7643	27500						
0.21	6706	27500						
0.22	5875	27500	S	87R57	DR	63M4	110	653
0.25	5187	27500	SF	87R57	DR	63M4	130	653
0.29	4606	27500	SA	87R57	DR	63M4	105	653
0.34	3872	27500	SAF	87R57	DR	63M4	120	653
0.37	3475	27500	S	87R57	DR	63L4	110	653
0.45	2905	27500	SF	87R57	DR	63L4	130	653
0.50	2586	27500	SA	87R57	DR	63L4	105	653
			SAF	87R57	DR	63L4	120	653
0.59	2335	27500	S	87R57	DRS	71S4	110	653
0.67	2054	27500	SF	87R57	DRS	71S4	130	653
0.76	1824	27500	SA	87R57	DRS	71S4	105	653
			SAF	87R57	DRS	71S4	125	653
0.83	1631	27500	S	87R57	DRS	71M4	110	653
1.0	1332	27500	SF	87R57	DRS	71M4	130	653
1.1	1191	27500	SA	87R57	DRS	71M4	110	653
			SAF	87R57	DRS	71M4	125	653
1.4	1032	27500	S	87R57	DRN	80M4	115	653
1.6	930	27500	SF	87R57	DRN	80M4	135	653
			SA	87R57	DRN	80M4	115	653
			SAF	87R57	DRN	80M4	130	653
1.8	831	27500	S	87R57	DRN	90S4	120	653
2.0	719	27500	SF	87R57	DRN	90S4	145	653
2.3	624	27500	SA	87R57	DRN	90S4	120	653
			SAF	87R57	DRN	90S4	135	653
2.6	558	27500	S	87R57	DRN	90L4	125	653
3.0	485	27500	SF	87R57	DRN	90L4	145	653
			SA	87R57	DRN	90L4	125	653
			SAF	87R57	DRN	90L4	140	653

M_{a max} = 4200 Nm								
n_a rpm	i	F_{Ra}¹⁾ N					m kg	
0.04	33818	32800	S	97R57	DR	63S4	170	653
0.04	31154	32800		SF	97R57	DR	200	653
0.05	27847	32800		SA	97R57	DR	165	653
0.06	24641	32800		SAF	97R57	DR	190	653
0.06	21537	32800						
0.07	18749	32800						
0.09	16233	32800						
0.09	14576	32800						
0.11	12752	32800						
0.12	11267	32800						
0.14	10078	32800						
0.15	8608	32800	S	97R57	DR	63M4	170	653
0.17	7554	32800	SF	97R57	DR	63M4	200	653
0.20	6640	31500	SA	97R57	DR	63M4	165	653
0.23	5780	31500	SAF	97R57	DR	63M4	190	653
0.27	4937	31500						
0.29	4444	31500	S	97R57	DR	63L4	170	653
0.32	4017	31500	SF	97R57	DR	63L4	200	653
0.38	3453	31500	SA	97R57	DR	63L4	165	653
0.42	3108	31500	SAF	97R57	DR	63L4	190	653
0.52	2654	31500	S	97R57	DRS	71S4	170	653
0.59	2329	31500	SF	97R57	DRS	71S4	205	653
			SA	97R57	DRS	71S4	165	653
			SAF	97R57	DRS	71S4	190	653
0.65	2081	31500	S	97R57	DRS	71M4	170	653
0.73	1860	31500	SF	97R57	DRS	71M4	205	653
0.86	1574	31500	SA	97R57	DRS	71M4	165	653
			SAF	97R57	DRS	71M4	190	653
1.0	1394	31500	S	97R57	DRN	80M4	175	653
1.2	1223	31500	SF	97R57	DRN	80M4	210	653
			SA	97R57	DRN	80M4	170	653
			SAF	97R57	DRN	80M4	195	653
1.4	1070	31500	S	97R57	DRN	90S4	180	653
1.6	928	31500	SF	97R57	DRN	90S4	215	653
1.8	824	31500	SA	97R57	DRN	90S4	175	653
			SAF	97R57	DRN	90S4	200	653
2.0	714	32800	S	97R57	DRN	90L4	185	653
2.3	626	31500	SF	97R57	DRN	90L4	220	653
			SA	97R57	DRN	90L4	180	653
			SAF	97R57	DRN	90L4	205	653
2.7	538	31600	S	97R57	DRN	100LS4	190	653
3.0	484	31600	SF	97R57	DRN	100LS4	220	653
3.4	420	31600	SA	97R57	DRN	100LS4	185	653
3.9	376	31700	SAF	97R57	DRN	100LS4	210	653
4.5	327	31700	S	97R57	DRN	100L4	195	653
5.1	287	31700	SF	97R57	DRN	100L4	230	653
			SA	97R57	DRN	100L4	190	653
			SAF	97R57	DRN	100L4	215	653
5.8	252	31800	S	97R57	DRN	112M4	205	653
6.7	219	31800	SF	97R57	DRN	112M4	240	653
			SA	97R57	DRN	112M4	200	653
			SAF	97R57	DRN	112M4	225	653

11.5 S..DRN.. dimension sheets in mm

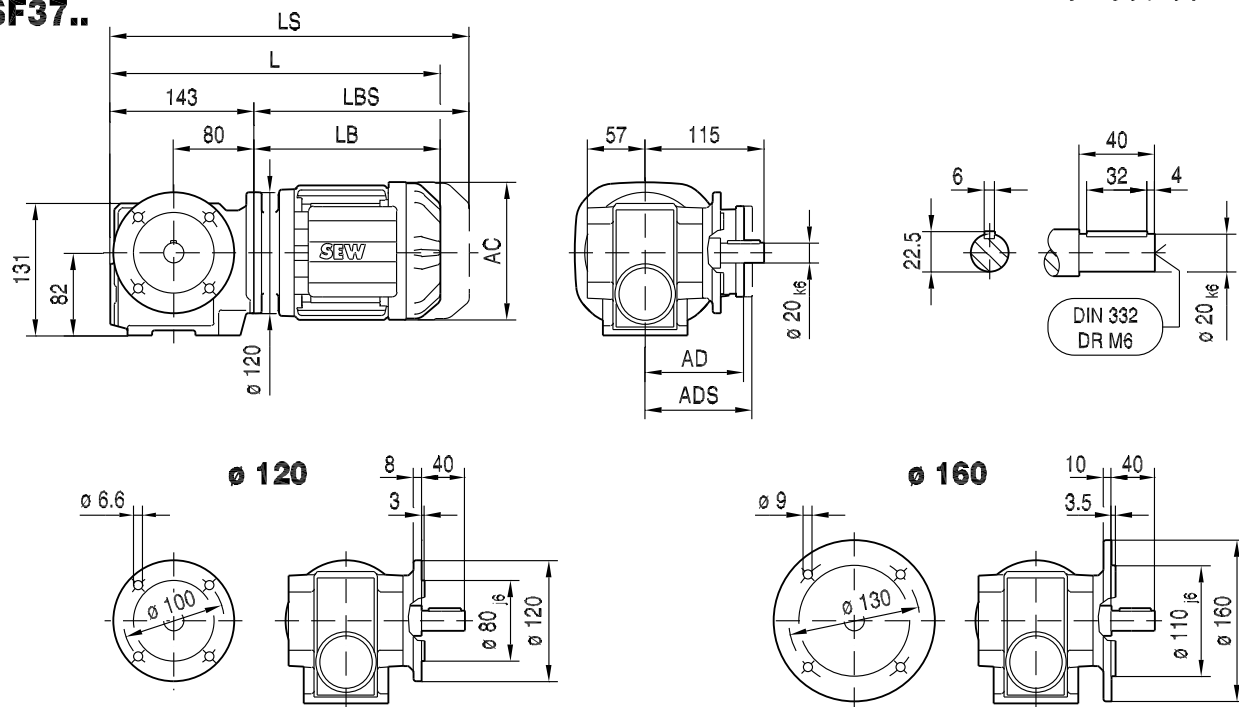
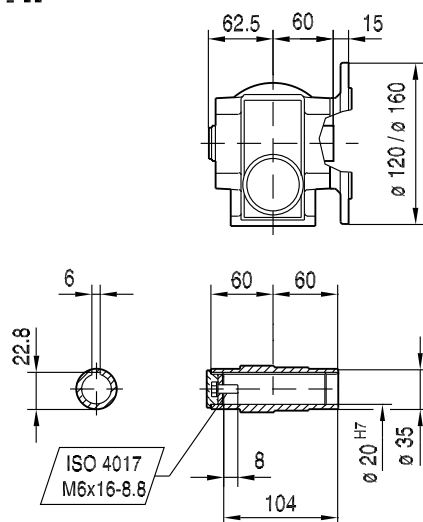
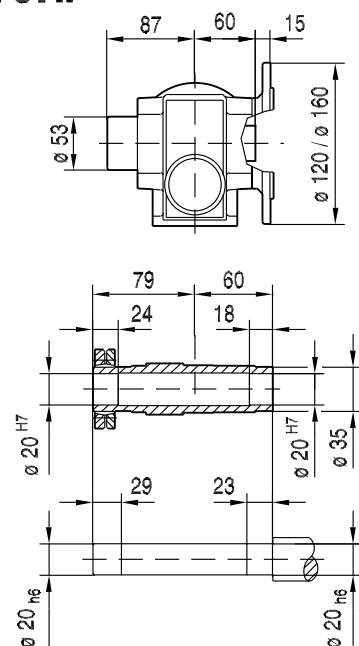
02 008 00 14

S37..



(→ 142)	DR63..	DR71S	DR71M	DRN80M	DRN90S			
AC	132	139	139	156	179			
AD	105	119	119	128	140			
ADS	105	129	129	139	150			
L	334	345	370	425	426			
LS	389	413	438	506	520			
LB	191	202	227	282	283			
LBS	246	270	295	363	377			

02 009 00 14

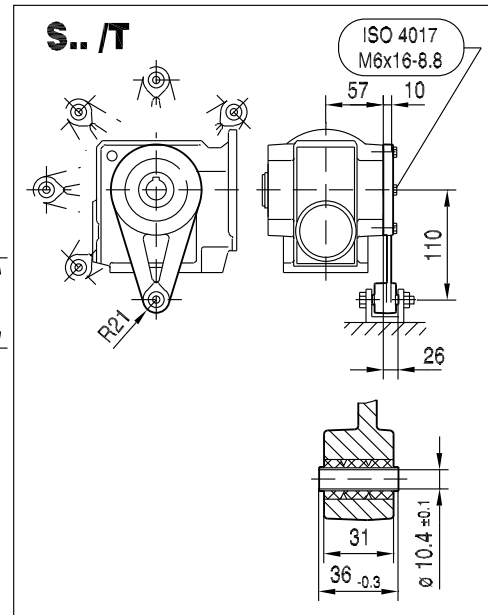
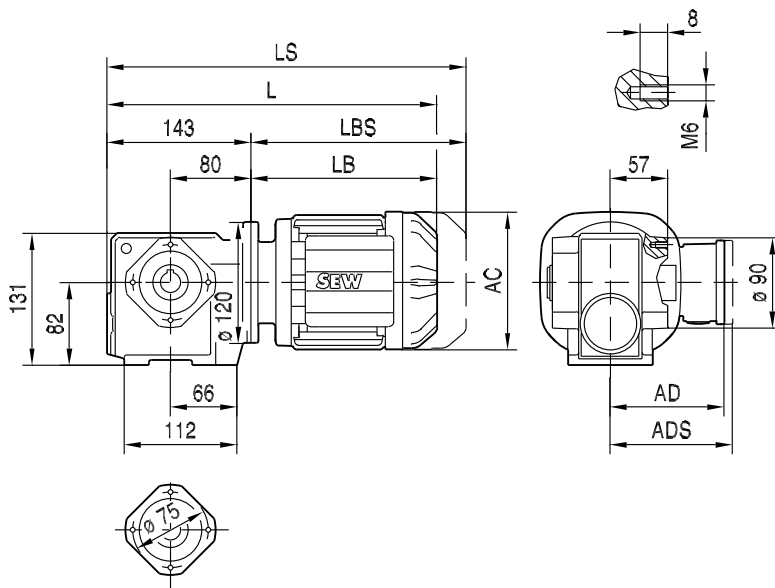
SF37..**SAF37..****SHF37..**

(→ 142)	DR63..	DR71S	DR71M	DRN80M	DRN90S			
AC	132	139	139	156	179			
AD	105	119	119	128	140			
ADS	105	129	129	139	150			
L	334	345	370	425	426			
LS	389	413	438	506	520			
LB	191	202	227	282	283			
LBS	246	270	295	363	377			

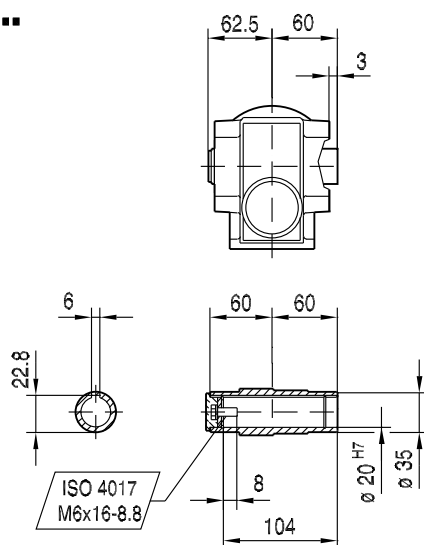
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SA37..

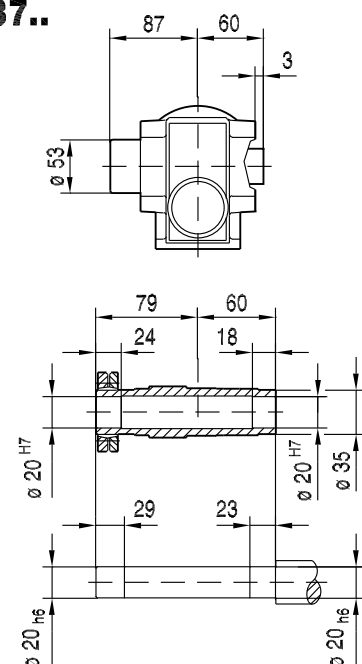
02 010 00 14



SA37..



SH37..

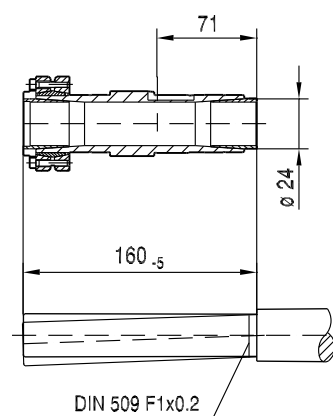
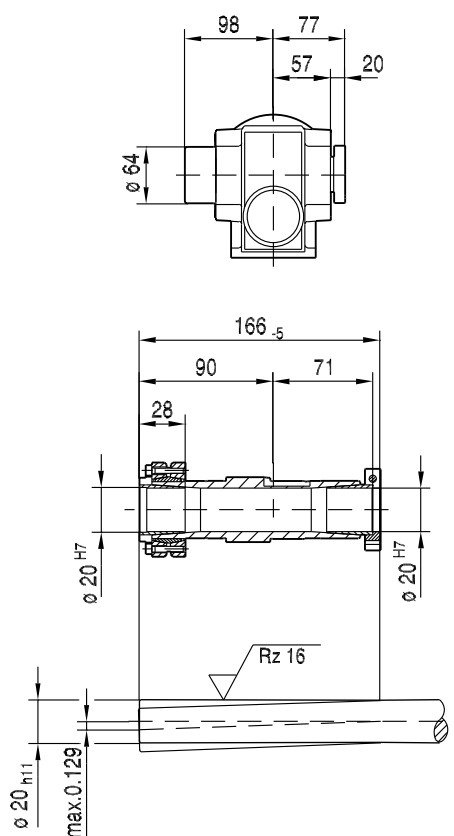
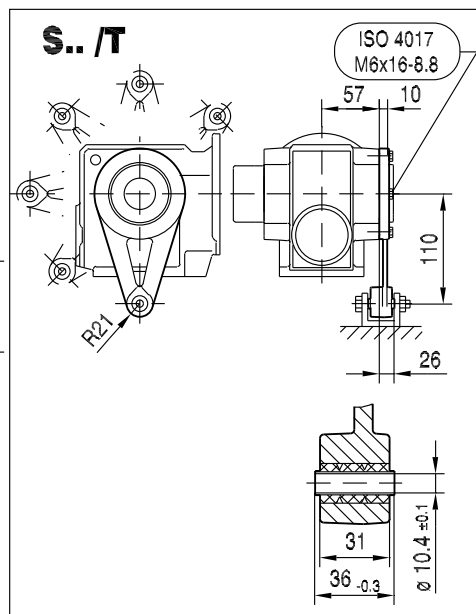
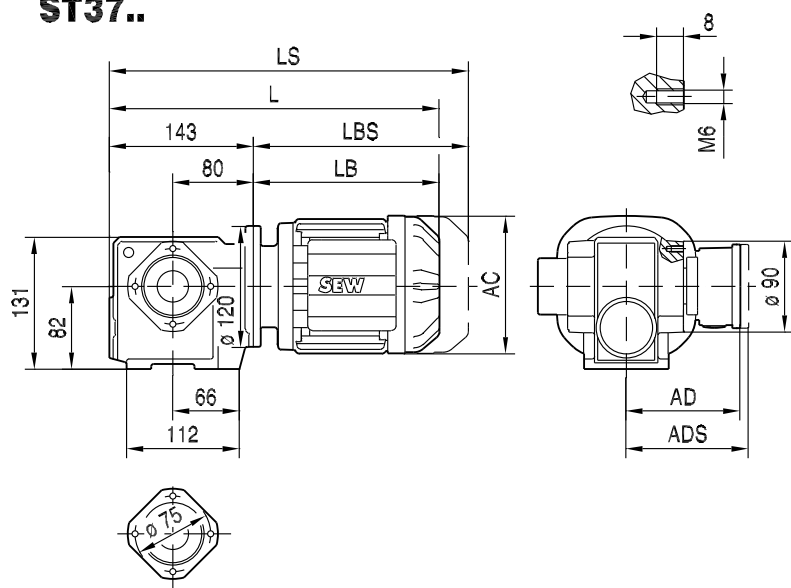


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(→ 142)	DR63..	DR71S	DR71M	DRN80M	DRN90S			
AC	132	139	139	156	179			
AD	105	119	119	128	140			
ADS	105	129	129	139	150			
L	334	345	370	425	426			
LS	389	413	438	506	520			
LB	191	202	227	282	283			
LBS	246	270	295	363	377			

02 011 00 14

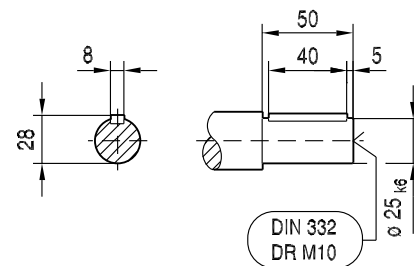
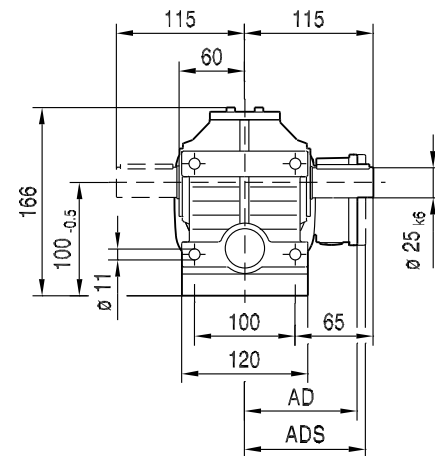
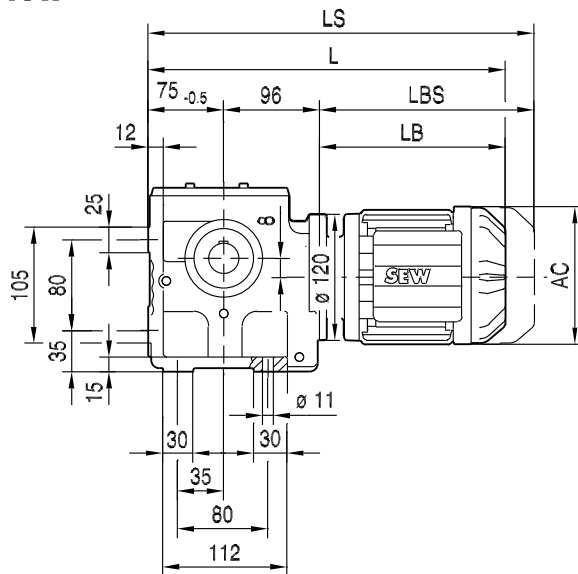
ST37..



(→ 142)	DR63..	DR71S	DR71M	DRN80M	DRN90S			
AC	132	139	139	156	179			
AD	105	119	119	128	140			
ADS	105	129	129	139	150			
L	334	345	370	425	426			
LS	389	413	438	506	520			
LB	191	202	227	282	283			
LBS	246	270	295	363	377			

02 012 00 14

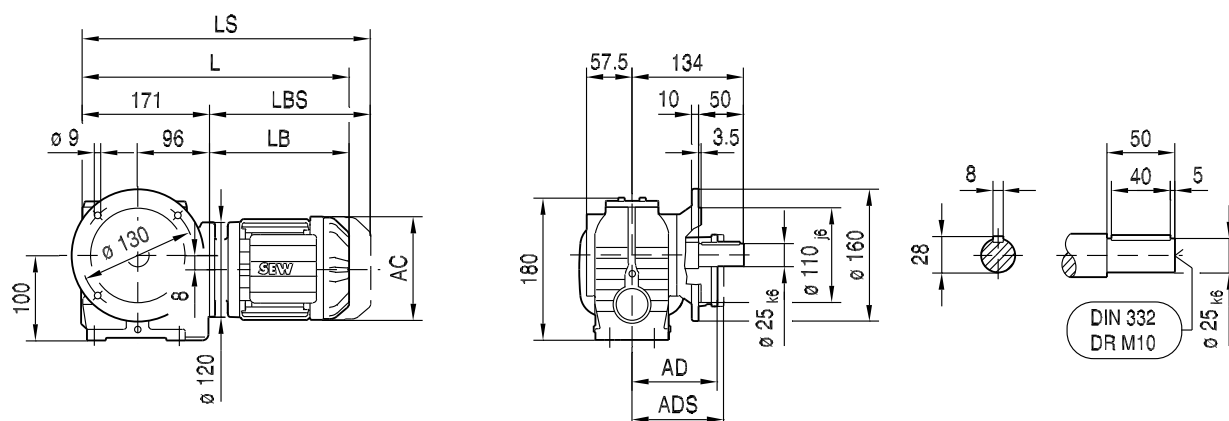
\$47..



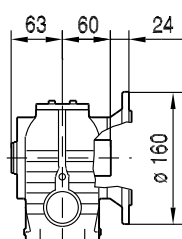
(→ 142)	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L		
AC	132	139	139	156	179	179		
AD	105	119	119	128	140	140		
ADS	105	129	129	139	150	150		
L	362	373	398	453	454	486		
LS	417	441	466	534	548	580		
LB	191	202	227	282	283	315		
LBS	246	270	295	363	377	409		

02 013 00 14

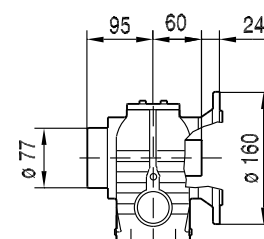
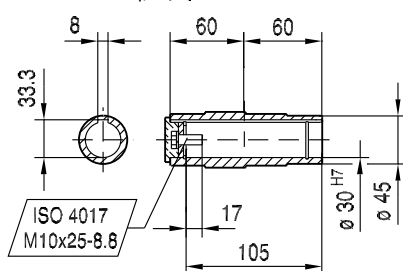
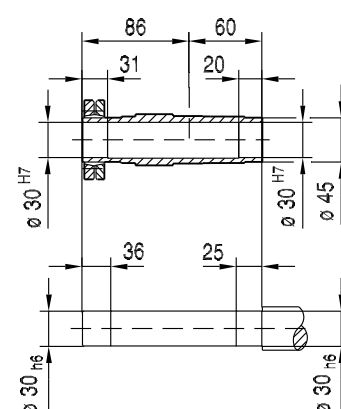
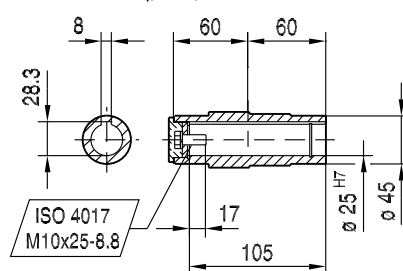
SF47..



SAF47..



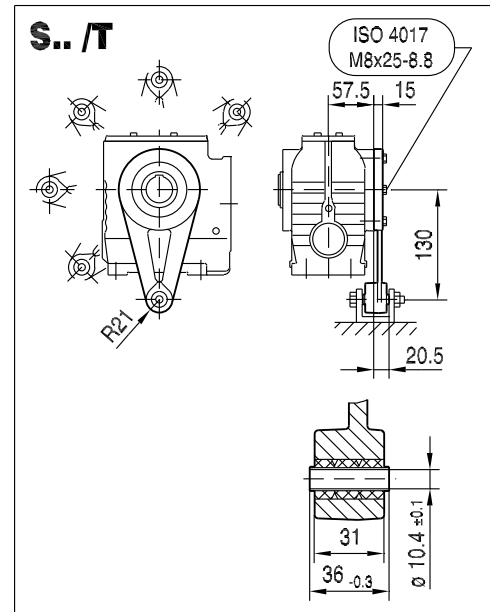
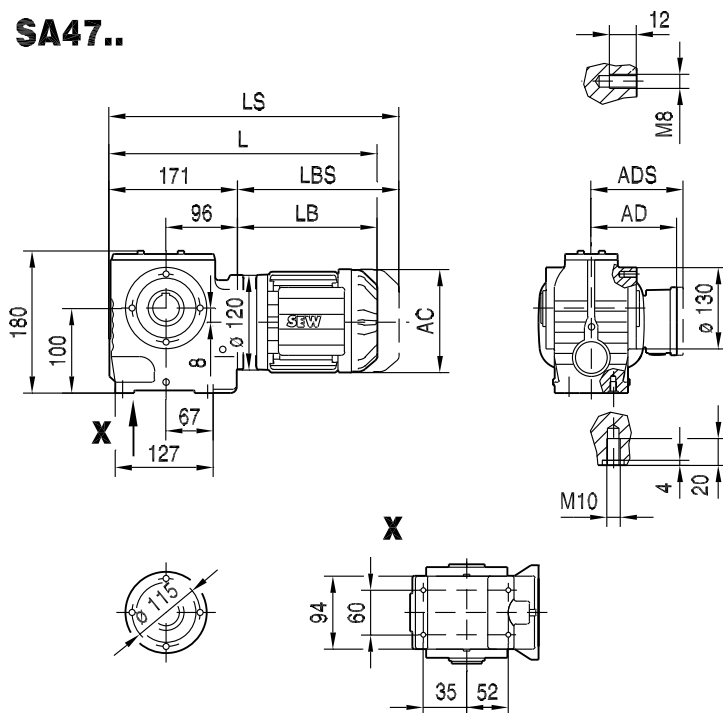
SHF47..

 $\phi 30$ H7 $\phi 25$ H7

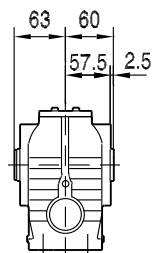
(→ 142)	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L		
AC	132	139	139	156	179	179		
AD	105	119	119	128	140	140		
ADS	105	129	129	139	150	150		
L	362	373	398	453	454	486		
LS	417	441	466	534	548	580		
LB	191	202	227	282	283	315		
LBS	246	270	295	363	377	409		

02 014 00 14

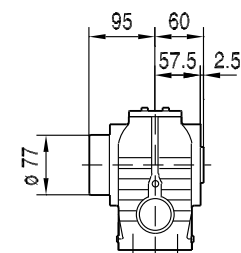
SA47..



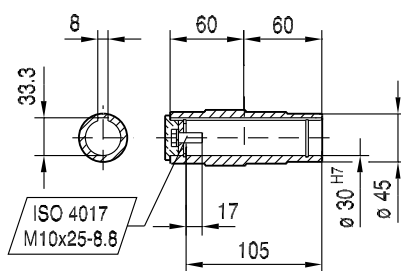
SA47..



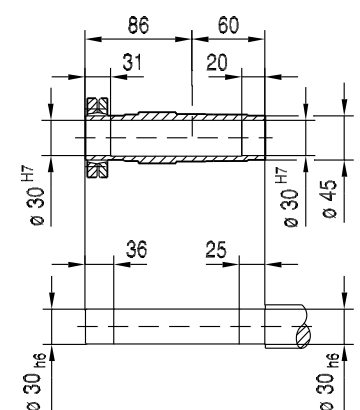
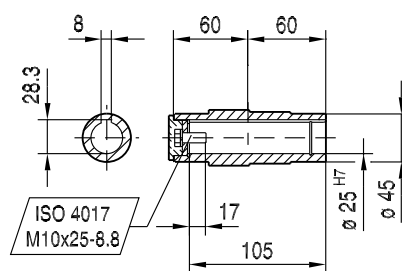
SH47..



SA47..



SH47..

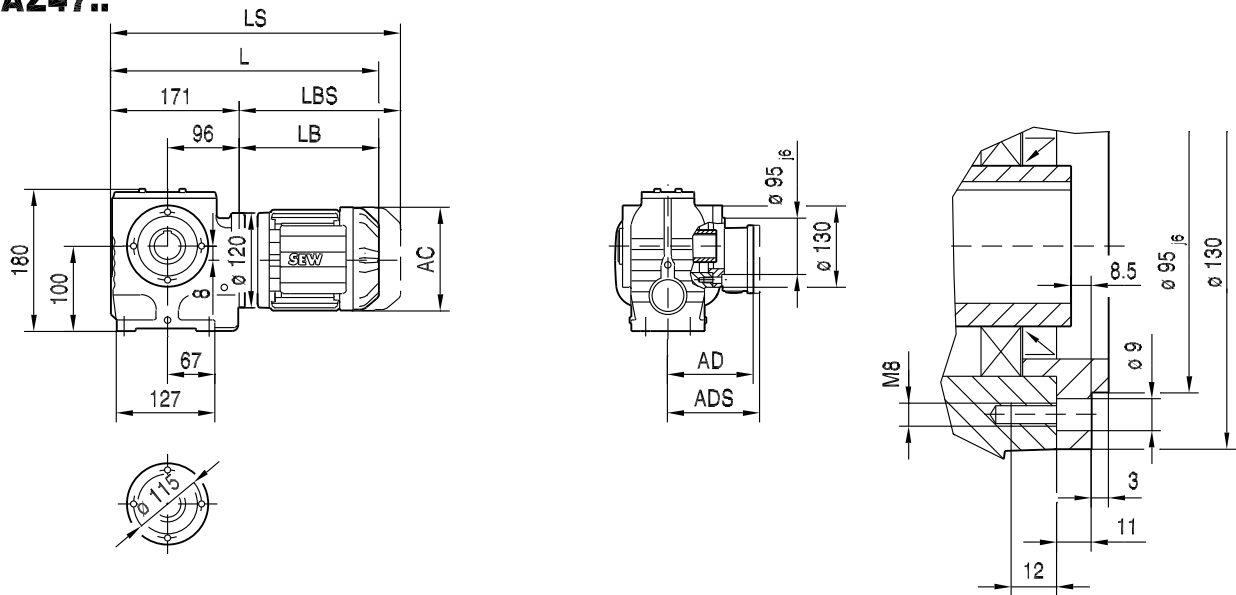


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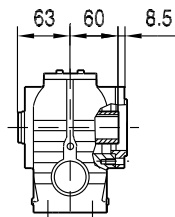
(→ 142)	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L		
AC	132	139	139	156	179	179		
AD	105	119	119	128	140	140		
ADS	105	129	129	139	150	150		
L	362	373	398	453	454	486		
LS	417	441	466	534	548	580		
LB	191	202	227	282	283	315		
LBS	246	270	295	363	377	409		

02 015 00 14

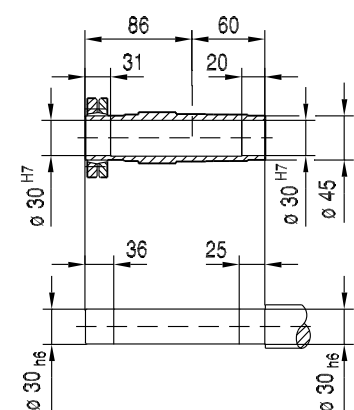
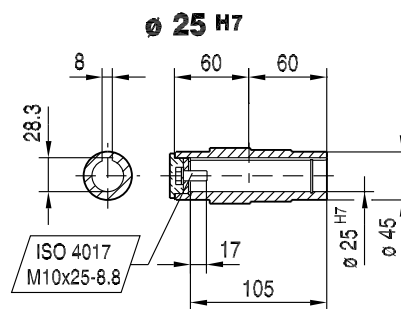
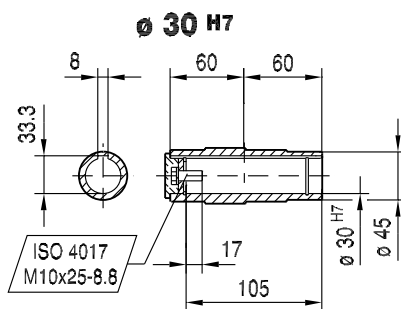
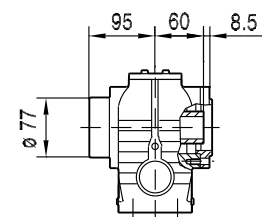
SAZ47..



SAZ47..



SHZ47..

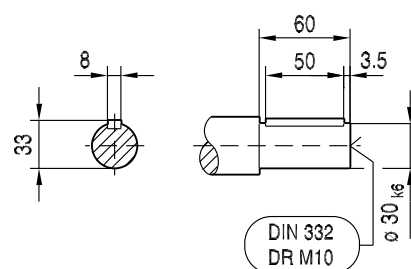
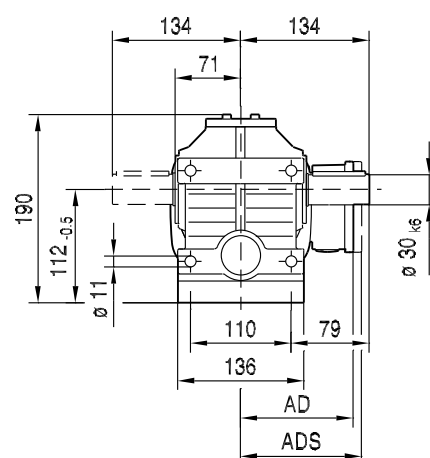
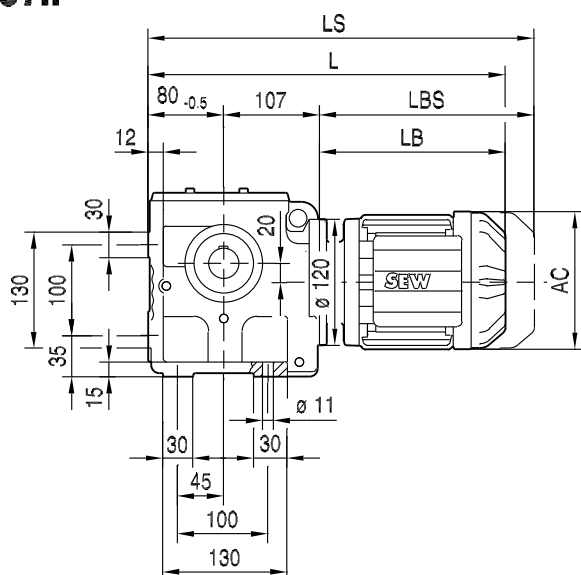


(→ 142)	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L		
AC	132	139	139	156	179	179		
AD	105	119	119	128	140	140		
ADS	105	129	129	139	150	150		
L	362	373	398	453	454	486		
LS	417	441	466	534	548	580		
LB	191	202	227	282	283	315		
LBS	246	270	295	363	377	409		

[illegible]

(→ 142)	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L		
AC	132	139	139	156	179	179		
AD	105	119	119	128	140	140		
ADS	105	129	129	139	150	150		
L	362	373	398	453	454	486		
LS	417	441	466	534	548	580		
LB	191	202	227	282	283	315		
LBS	246	270	295	363	377	409		

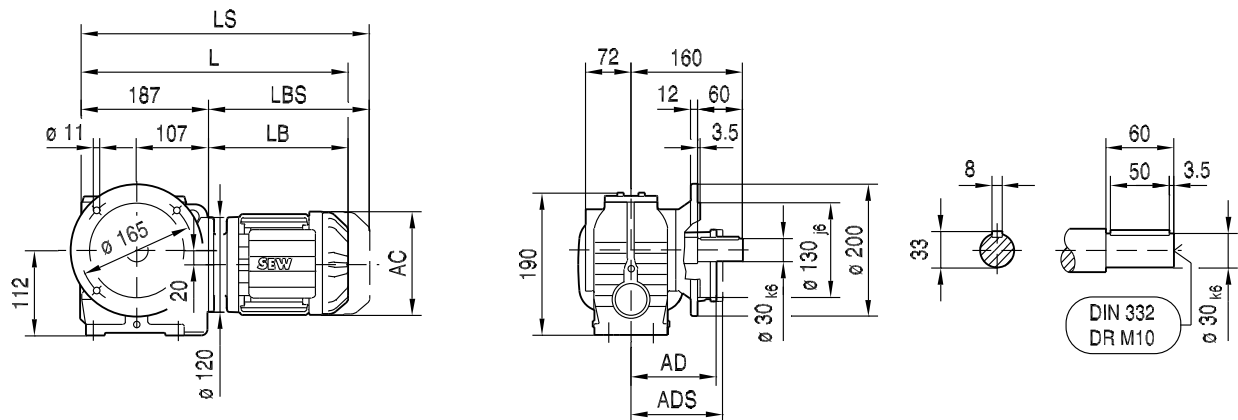
02 017 00 14

S57..

(→ 142)	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L	DRN100LS	DRN100L
AC	132	139	139	156	179	179	197	197
AD	105	119	119	128	140	140	157	157
ADS	105	129	129	139	150	150	158	158
L	378	389	414	469	470	502	501	551
LS	433	457	482	550	564	596	595	645
LB	191	202	227	282	283	315	314	364
LBS	246	270	295	363	377	409	408	458

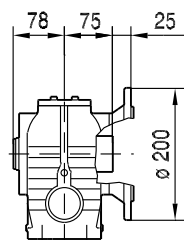
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SF57..

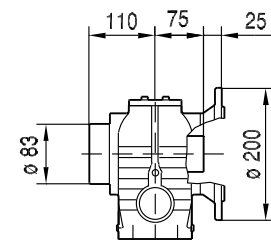


11

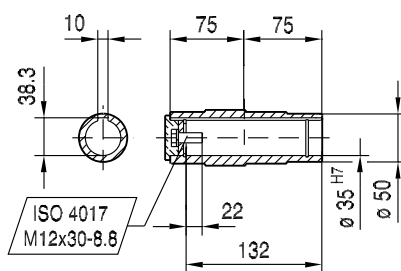
SAF57..



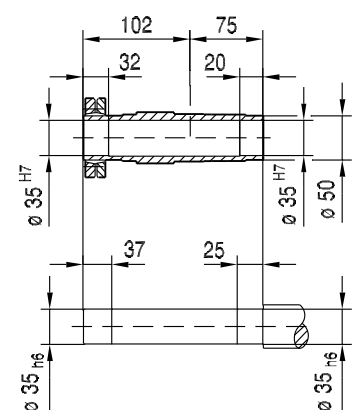
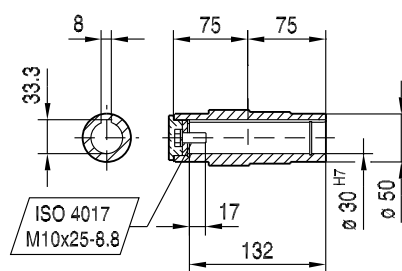
SHF57..



$\phi 35$ H7



$\phi 30$ H7

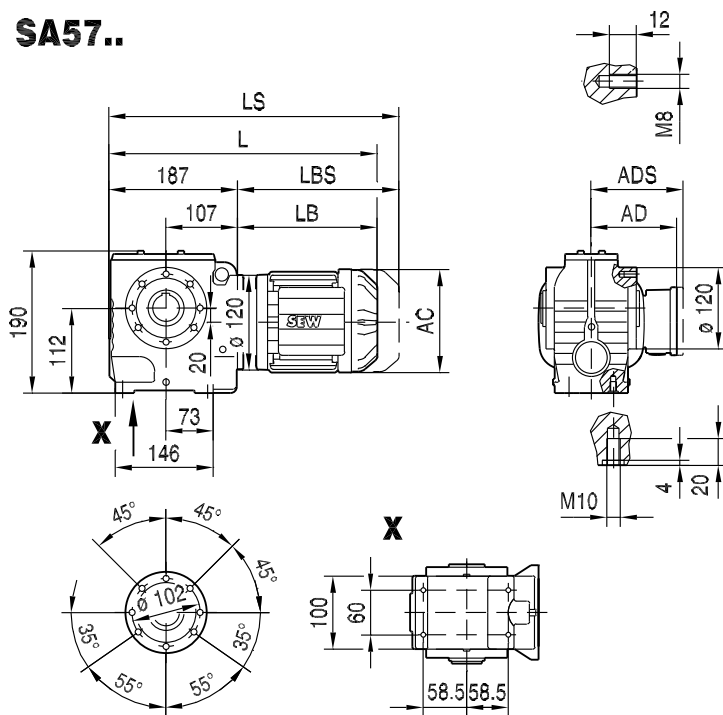


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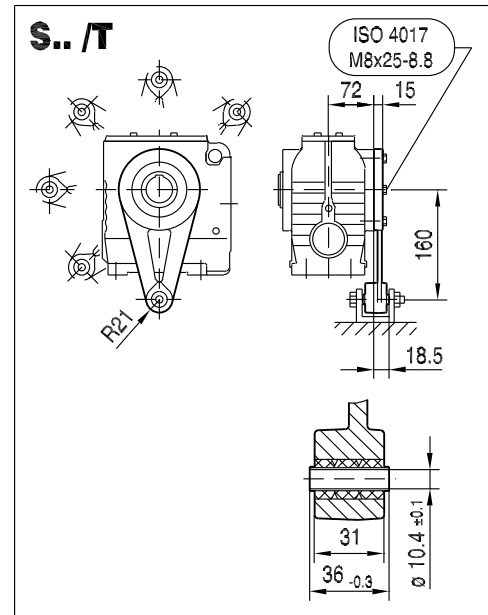
(→ 142)	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L	DRN100LS	DRN100L
AC	132	139	139	156	179	179	197	197
AD	105	119	119	128	140	140	157	157
ADS	105	129	129	139	150	150	158	158
L	378	389	414	469	470	502	501	551
LS	433	457	482	550	564	596	595	645
LB	191	202	227	282	283	315	314	364
LBS	246	270	295	363	377	409	408	458

02 019 00 14

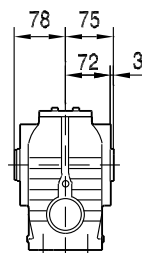
SA57..



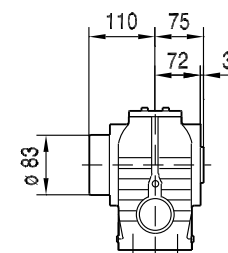
S../T



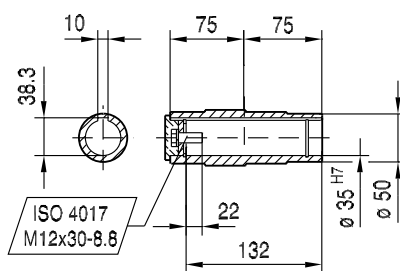
SA57..



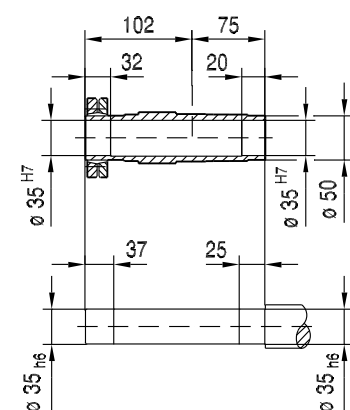
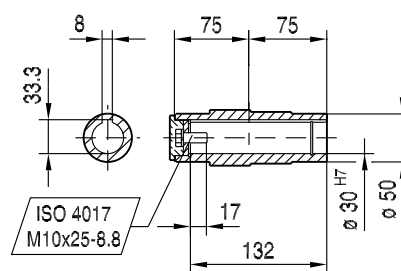
SH57..



ø 35 H7



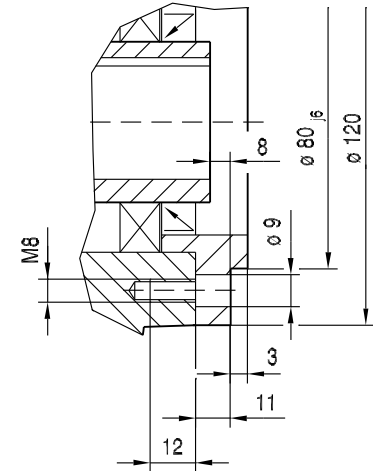
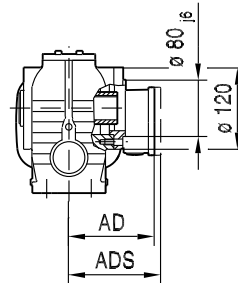
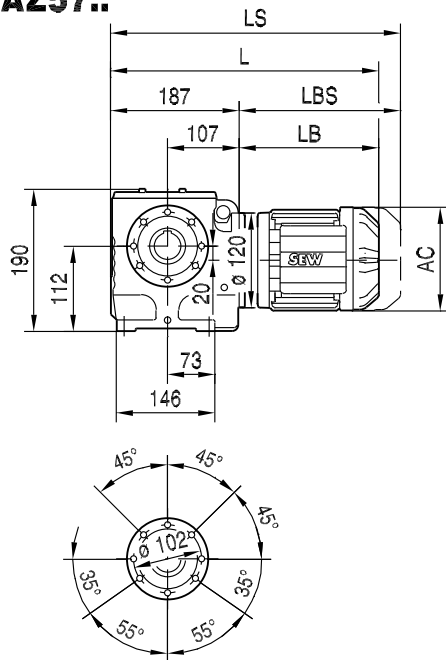
ø 30 H7



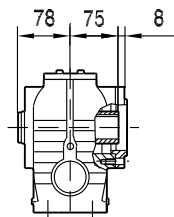
(→ 142)	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L	DRN100LS	DRN100L
AC	132	139	139	156	179	179	197	197
AD	105	119	119	128	140	140	157	157
ADS	105	129	129	139	150	150	158	158
L	378	389	414	469	470	502	501	551
LS	433	457	482	550	564	596	595	645
LB	191	202	227	282	283	315	314	364
LBS	246	270	295	363	377	409	408	458

02 020 00 14

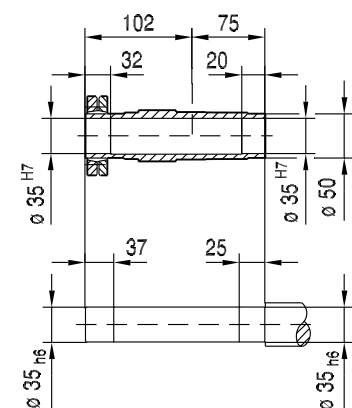
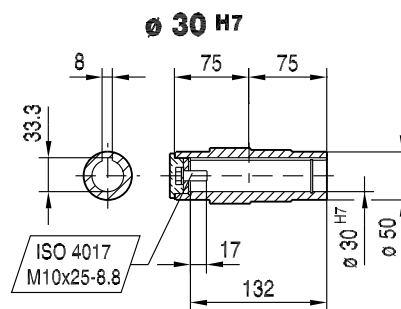
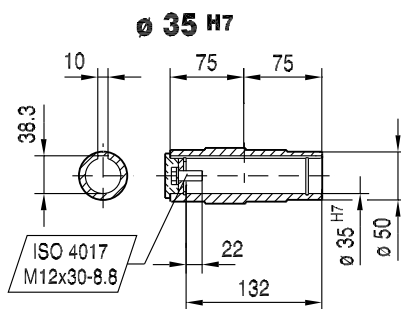
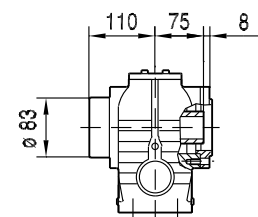
SAZ57..



SAZ57..



SHZ57..

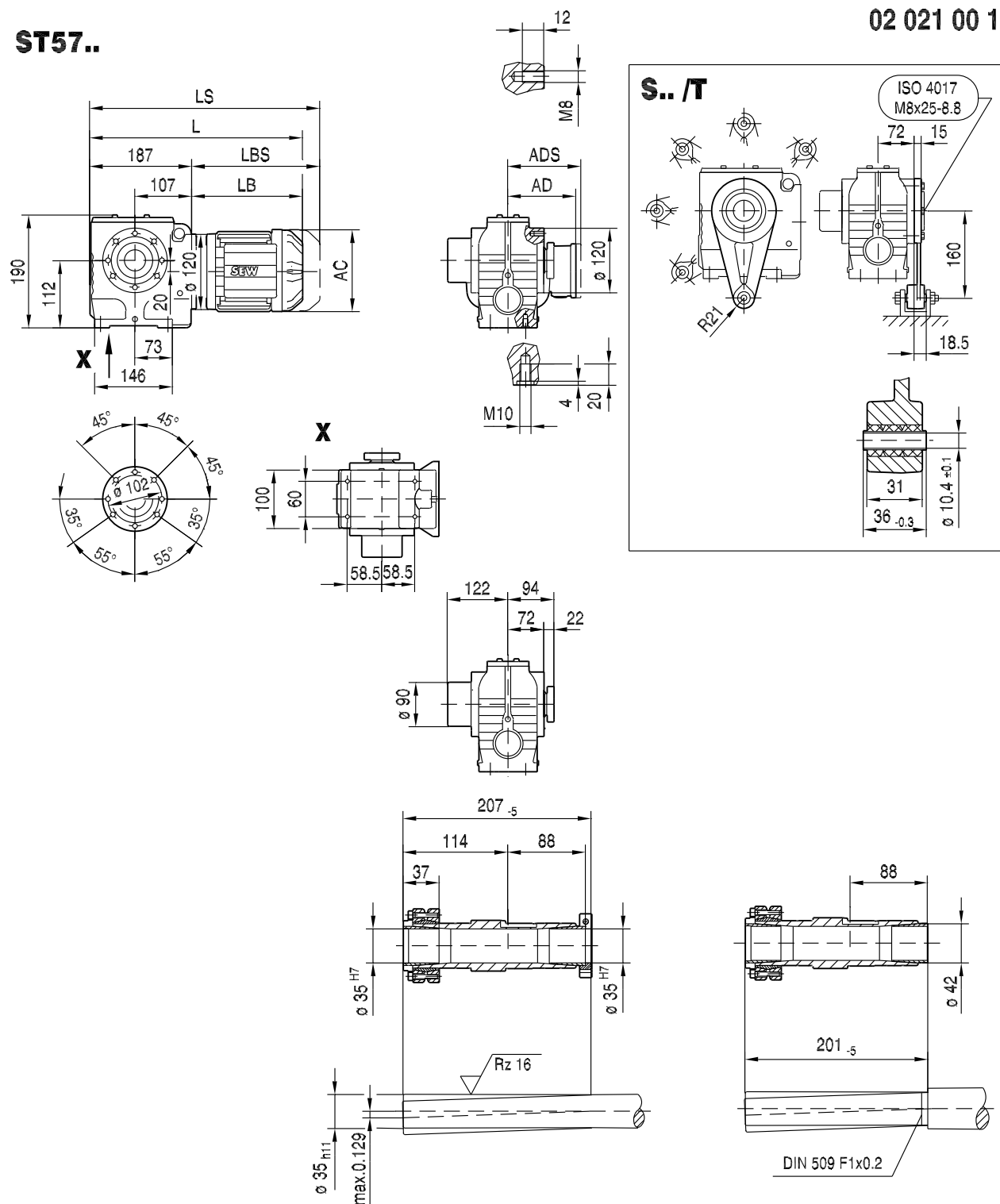


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(→ 142)	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L	DRN100LS	DRN100L
AC	132	139	139	156	179	179	197	197
AD	105	119	119	128	140	140	157	157
ADS	105	129	129	139	150	150	158	158
L	378	389	414	469	470	502	501	551
LS	433	457	482	550	564	596	595	645
LB	191	202	227	282	283	315	314	364
LBS	246	270	295	363	377	409	408	458

ST57..

02 021 00 14

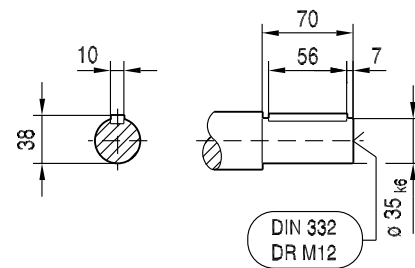
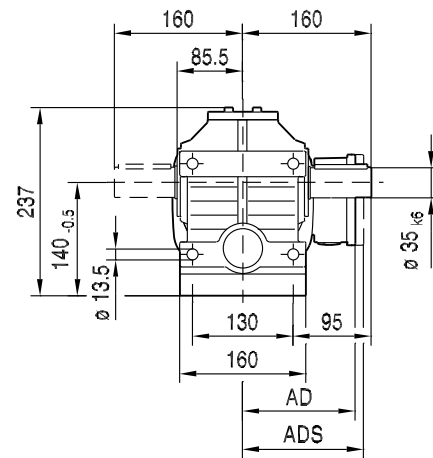
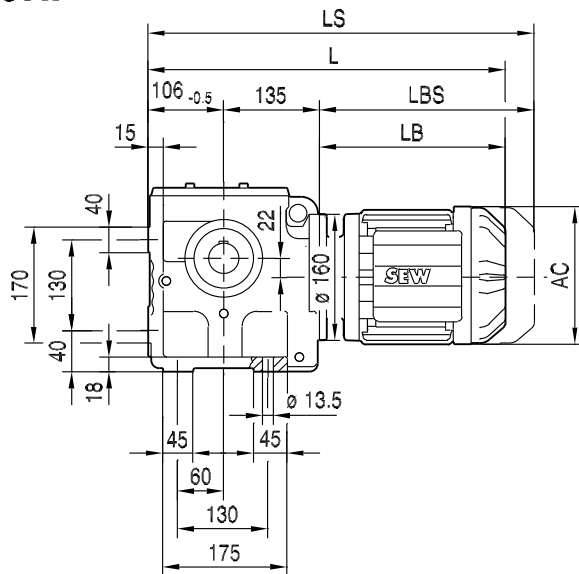


(→ 142)	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L	DRN100LS	DRN100L
AC	132	139	139	156	179	179	197	197
AD	105	119	119	128	140	140	157	157
ADS	105	129	129	139	150	150	158	158
L	378	389	414	469	470	502	501	551
LS	433	457	482	550	564	596	595	645
LB	191	202	227	282	283	315	314	364
LBS	246	270	295	363	377	409	408	458

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02 022 00 14

S67..

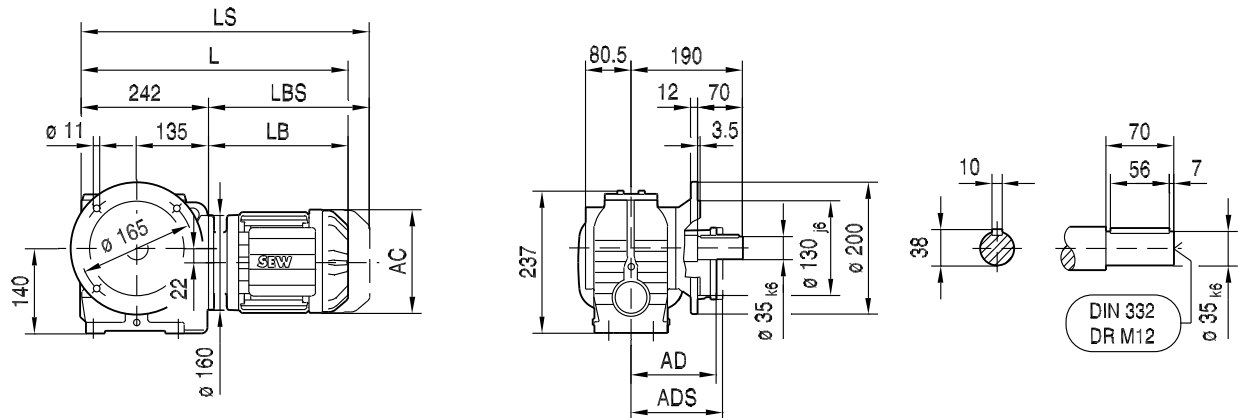


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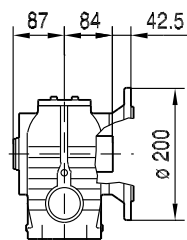
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(→ 142)	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L	DRN100LS	DRN100L	DRN112M	DRN132S
AC	132	139	139	156	179	179	197	197	221	221
AD	105	119	119	128	140	140	157	157	170	170
ADS	105	129	129	139	150	150	158	158	172	172
L	426	437	462	516	518	550	546	596	627	681
LS	481	505	530	597	611	643	640	690	739	793
LB	185	196	221	275	277	309	305	355	386	440
LBS	240	264	289	356	370	402	399	449	498	552

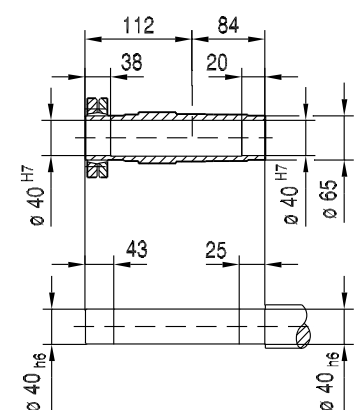
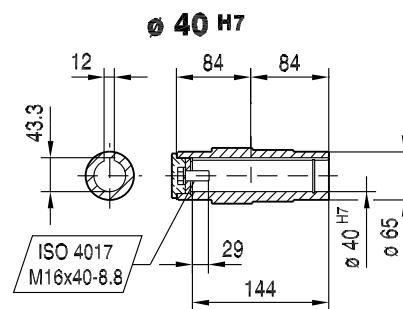
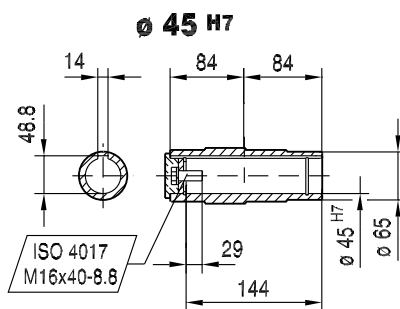
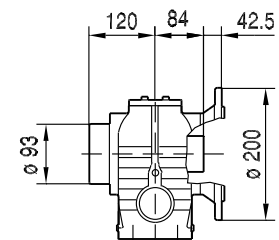
SF67..



SAF67..



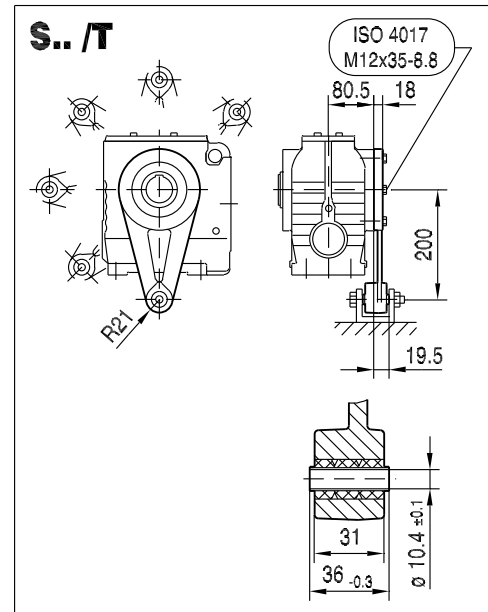
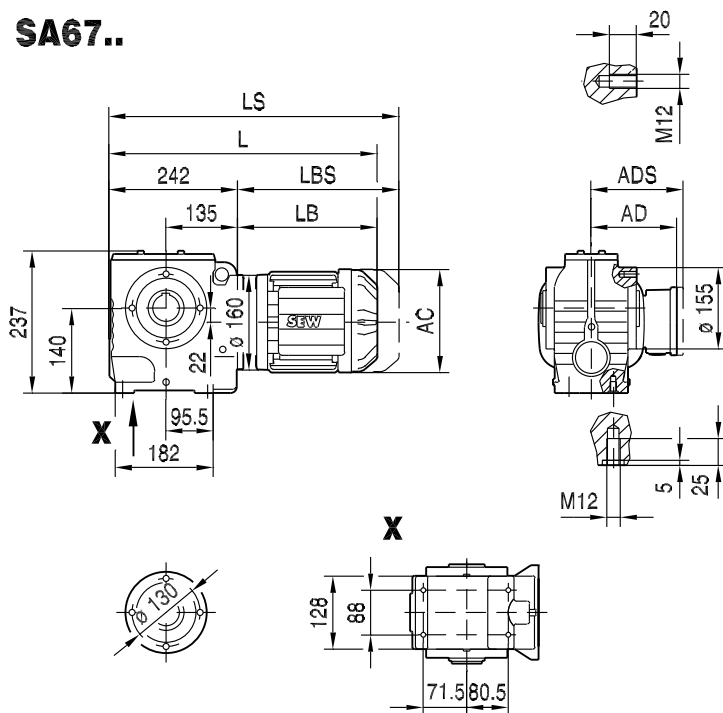
SHF67..



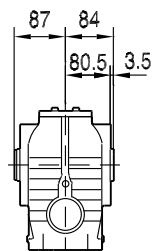
(→ 142)	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L	DRN100LS	DRN100L	DRN112M	DRN132S
AC	132	139	139	156	179	179	197	197	221	221
AD	105	119	119	128	140	140	157	157	170	170
ADS	105	129	129	139	150	150	158	158	172	172
L	427	438	463	517	519	551	547	597	628	682
LS	482	506	531	598	612	644	641	691	740	794
LB	185	196	221	275	277	309	305	355	386	440
LBS	240	264	289	356	370	402	399	449	498	552

02 024 00 14

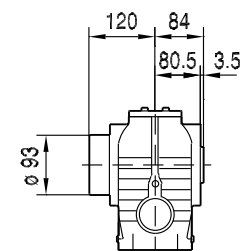
SA67..



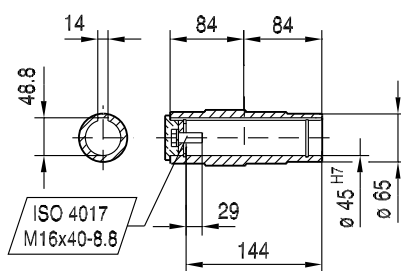
SA67..



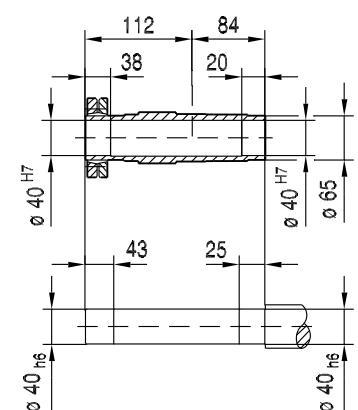
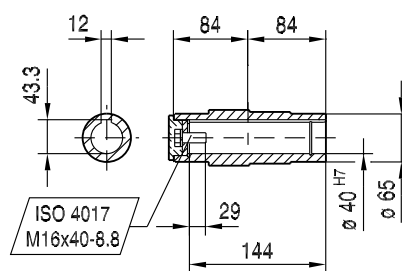
SH67..



Ø 45 H7



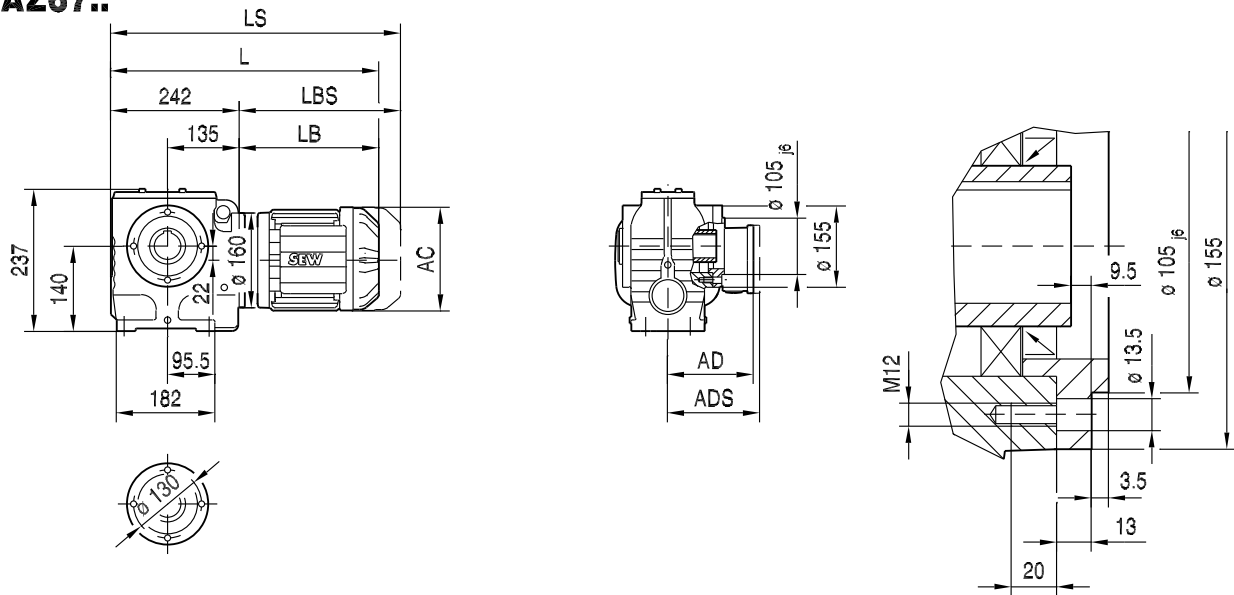
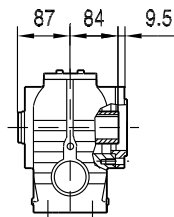
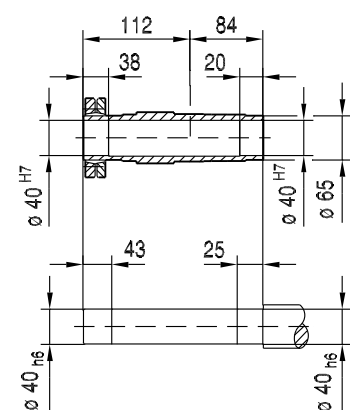
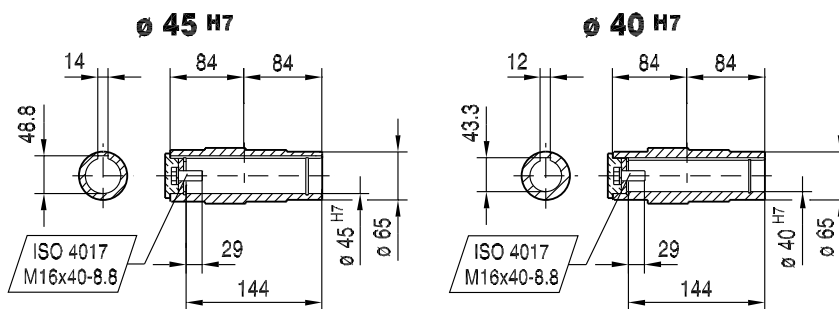
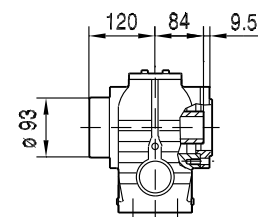
Ø 40 H7



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(→ 142)	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L	DRN100LS	DRN100L	DRN112M	DRN132S
AC	132	139	139	156	179	179	197	197	221	221
AD	105	119	119	128	140	140	157	157	170	170
ADS	105	129	129	139	150	150	158	158	172	172
L	427	438	463	517	519	551	547	597	628	682
LS	482	506	531	598	612	644	641	691	740	794
LB	185	196	221	275	277	309	305	355	386	440
LBS	240	264	289	356	370	402	399	449	498	552

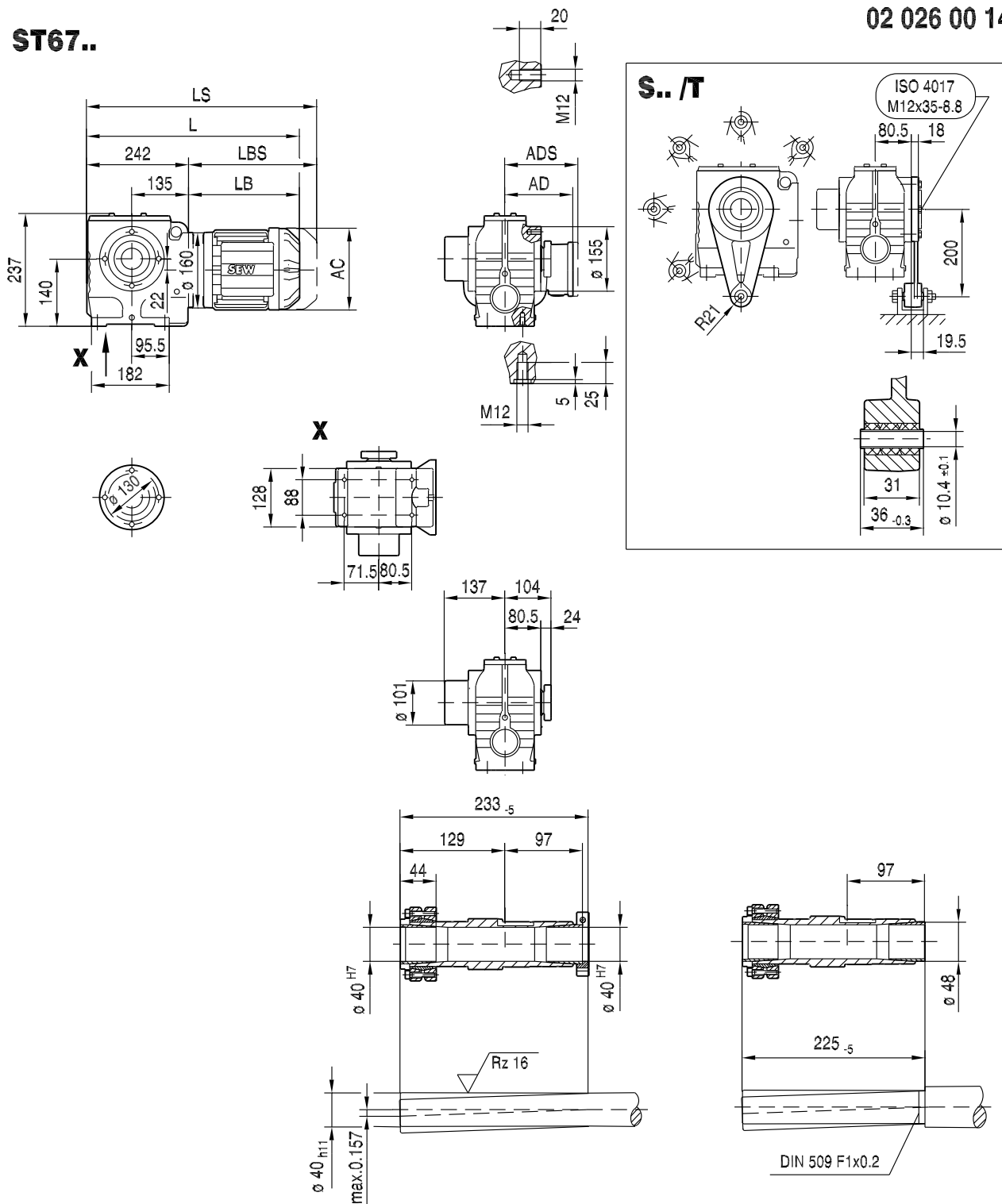
02 025 00 14

SAZ67..**SAZ67..****SHZ67..**

(→ 142)	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L	DRN100LS	DRN100L	DRN112M	DRN132S
AC	132	139	139	156	179	179	197	197	221	221
AD	105	119	119	128	140	140	157	157	170	170
ADS	105	129	129	139	150	150	158	158	172	172
L	427	438	463	517	519	551	547	597	628	682
LS	482	506	531	598	612	644	641	691	740	794
LB	185	196	221	275	277	309	305	355	386	440
LBS	240	264	289	356	370	402	399	449	498	552

ST67..

02 026 00 14

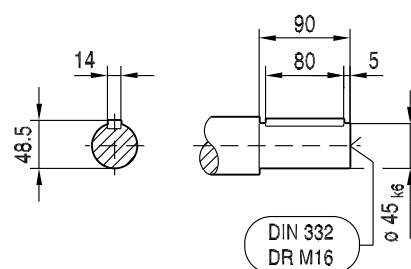
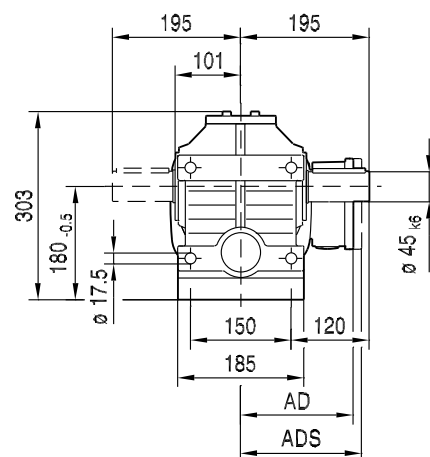
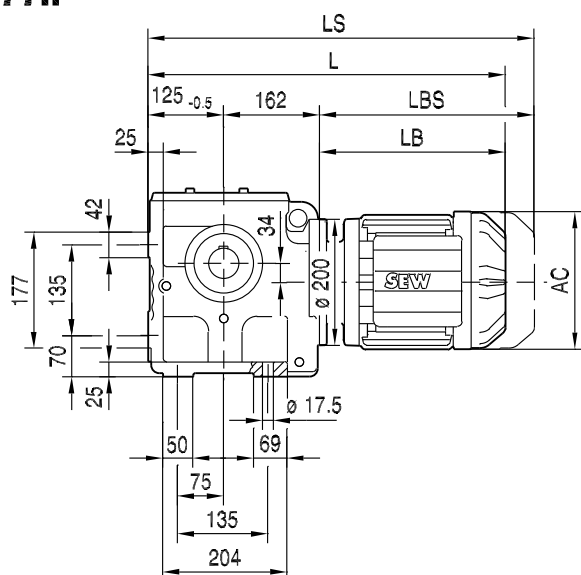


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(→ 142)	DR63..	DR71S	DR71M	DRN80M	DRN90S	DRN90L	DRN100LS	DRN100L	DRN112M	DRN132S
AC	132	139	139	156	179	179	197	197	221	221
AD	105	119	119	128	140	140	157	157	170	170
ADS	105	129	129	139	150	150	158	158	172	172
L	427	438	463	517	519	551	547	597	628	682
LS	482	506	531	598	612	644	641	691	740	794
LB	185	196	221	275	277	309	305	355	386	440
LBS	240	264	289	356	370	402	399	449	498	552

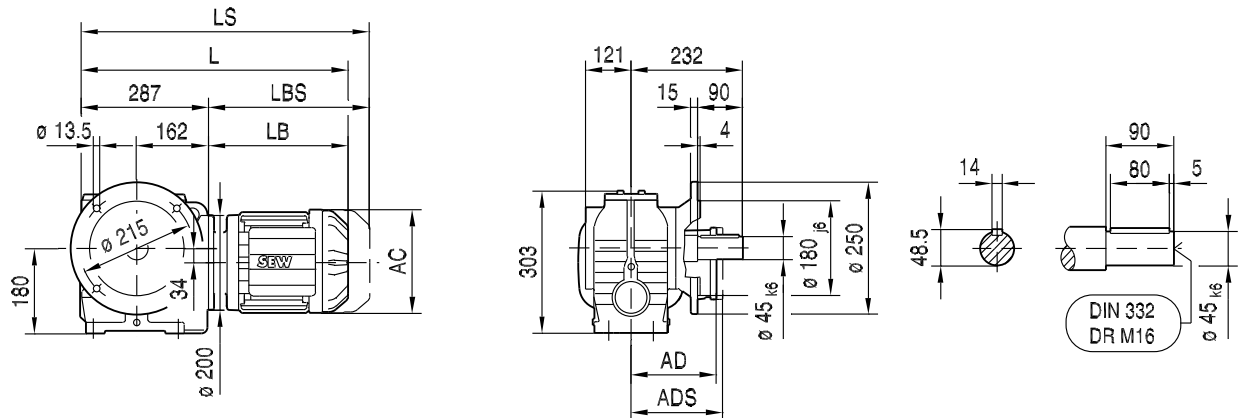
02 027 00 14

S77..

(→ 142)	DR71M	DRN80M	DRN90S	DRN90L	DRN100LS	DRN100L	DRN112M	DRN132S	DRN132M	DRN132L
AC	139	156	179	179	197	197	221	221	261	261
AD	119	128	140	140	157	157	170	170	228	228
ADS	129	139	150	150	158	158	172	172	228	228
L	501	555	557	589	585	635	666	716	734	760
LS	569	636	650	682	679	729	778	828	872	897
LB	214	268	270	302	298	348	379	429	447	473
LBS	282	349	363	395	392	442	491	541	585	610

02 028 00 14

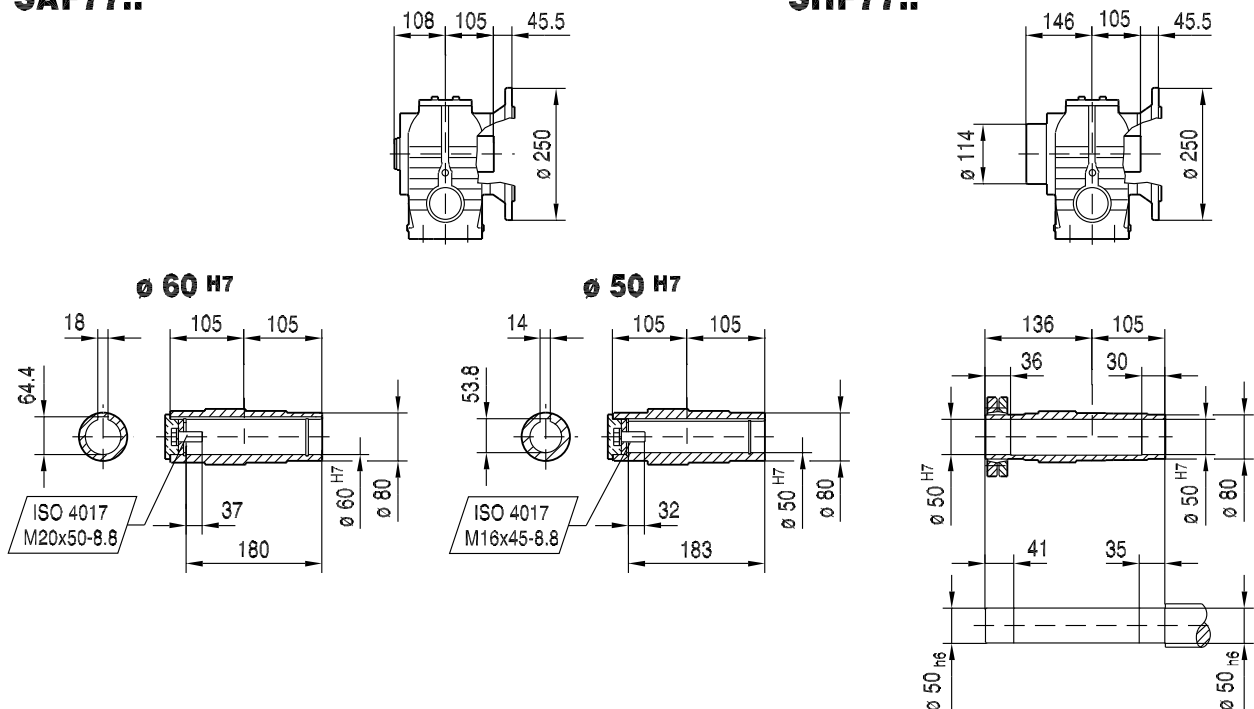
SF77..



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SAF77..

SHF77..

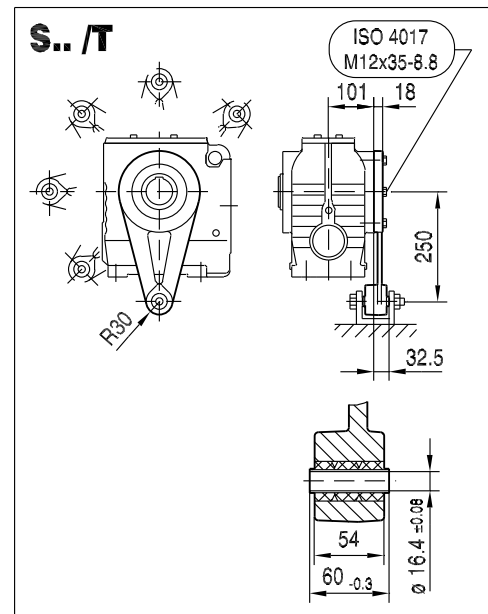
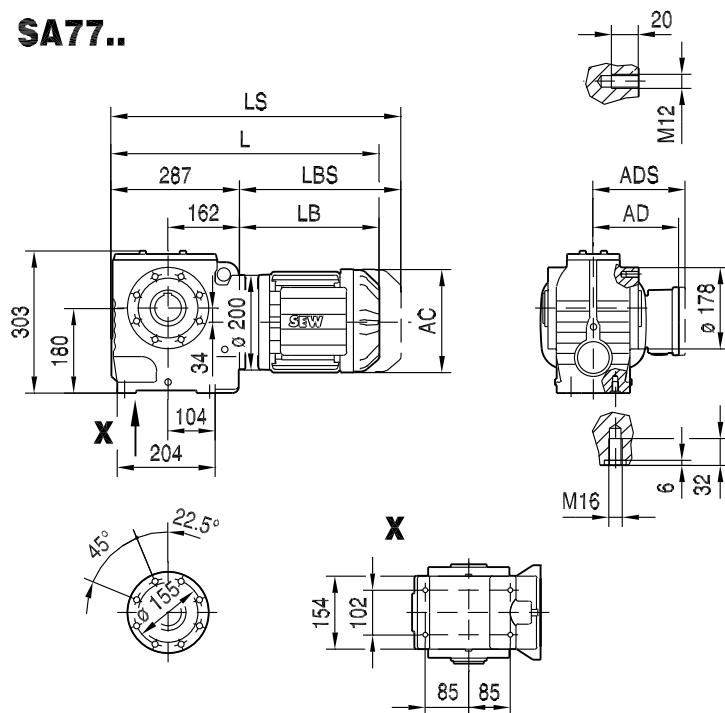


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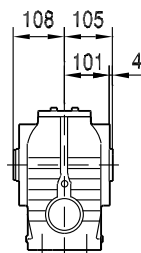
(→ 142)	DR71M	DRN80M	DRN90S	DRN90L	DRN100LS	DRN100L	DRN112M	DRN132S	DRN132M	DRN132L
AC	139	156	179	179	197	197	221	221	261	261
AD	119	128	140	140	157	157	170	170	228	228
ADS	129	139	150	150	158	158	172	172	228	228
L	501	555	557	589	585	635	666	716	734	760
LS	569	636	650	682	679	729	778	828	872	897
LB	214	268	270	302	298	348	379	429	447	473
LBS	282	349	363	395	392	442	491	541	585	610

02 029 00 14

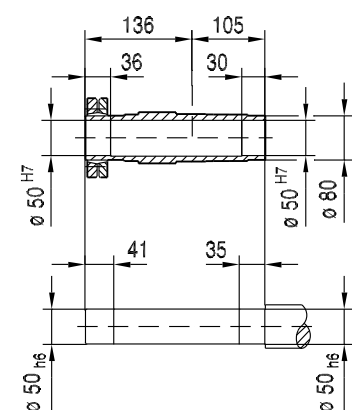
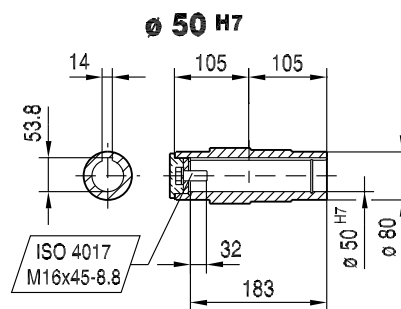
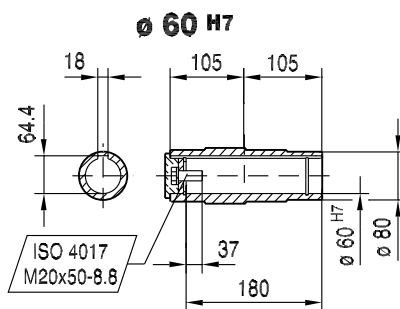
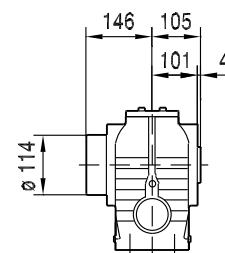
SA77..



SA77..

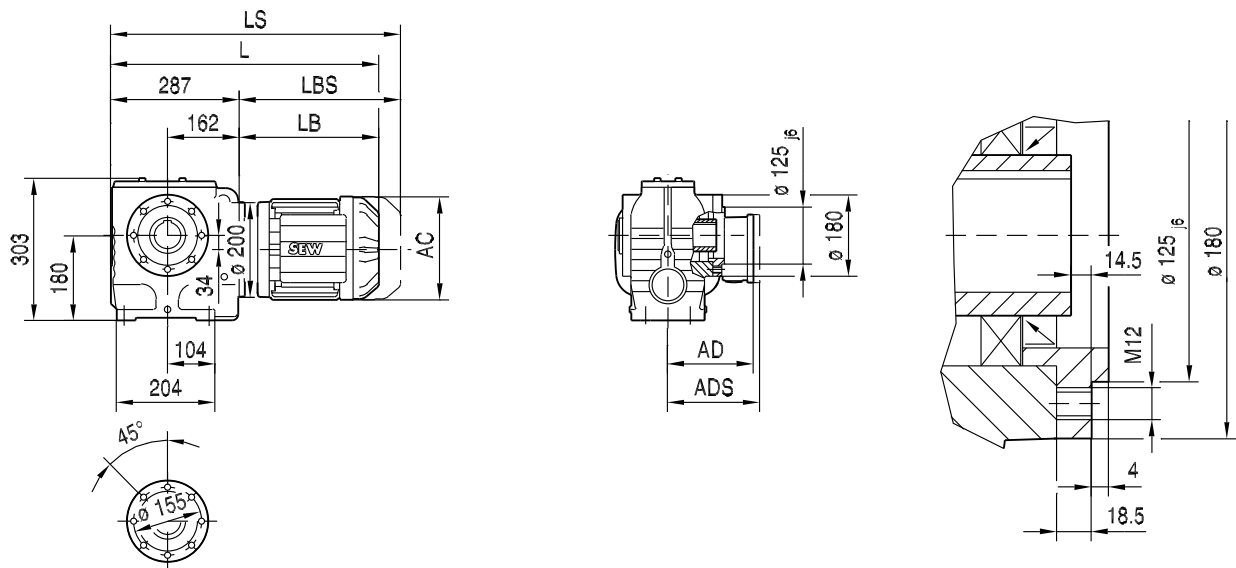


SH77..



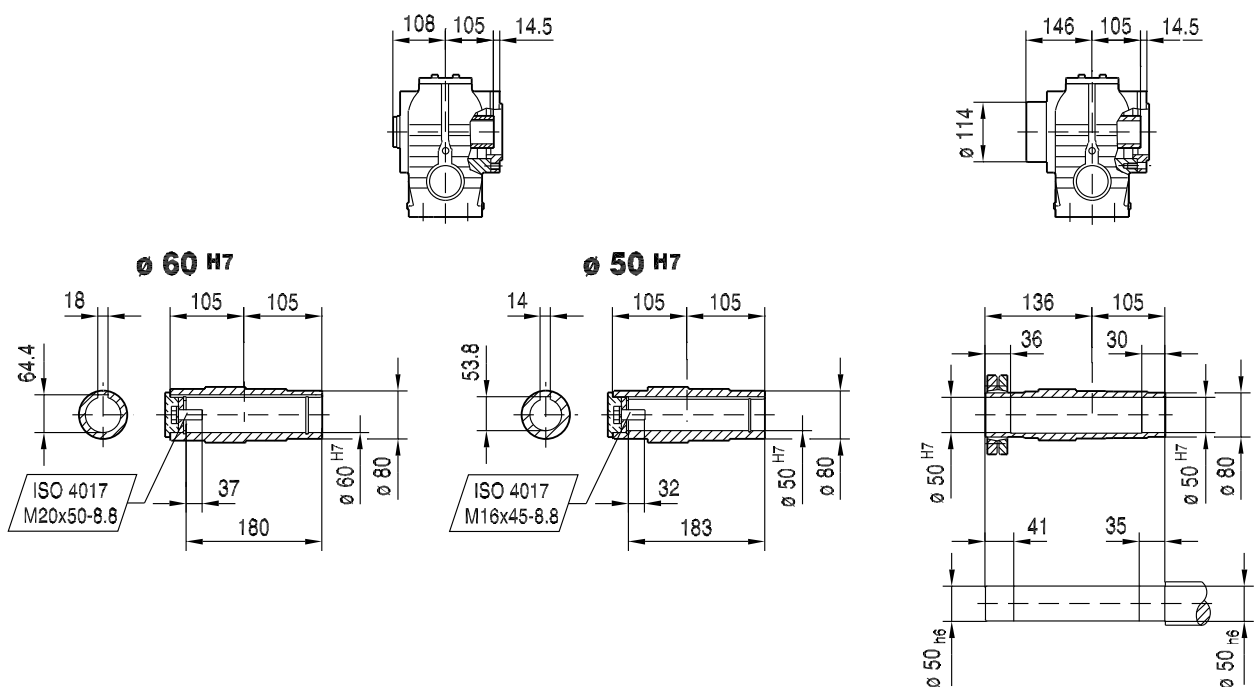
(→ 142)	DR71M	DRN80M	DRN90S	DRN90L	DRN100LS	DRN100L	DRN112M	DRN132S	DRN132M	DRN132L
AC	139	156	179	179	197	197	221	221	261	261
AD	119	128	140	140	157	157	170	170	228	228
ADS	129	139	150	150	158	158	172	172	228	228
L	501	555	557	589	585	635	666	716	734	760
LS	569	636	650	682	679	729	778	828	872	897
LB	214	268	270	302	298	348	379	429	447	473
LBS	282	349	363	395	392	442	491	541	585	610

02 030 00 14

SAZ77..

SAZ77..

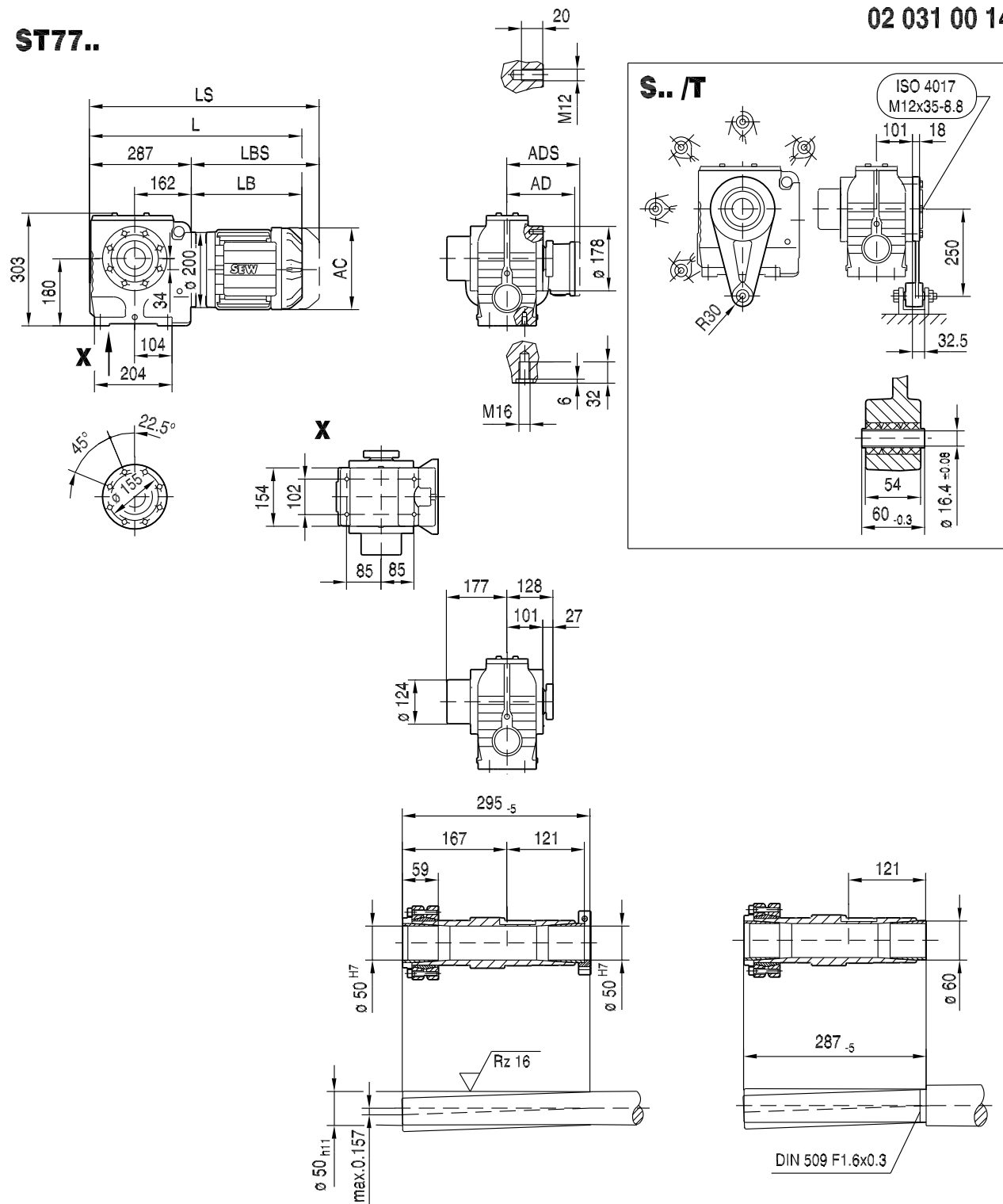
SHZ77..



(→ 142)	DR71M	DRN80M	DRN90S	DRN90L	DRN100LS	DRN100L	DRN112M	DRN132S	DRN132M	DRN132L
AC	139	156	179	179	197	197	221	221	261	261
AD	119	128	140	140	157	157	170	170	228	228
ADS	129	139	150	150	158	158	172	172	228	228
L	501	555	557	589	585	635	666	716	734	760
LS	569	636	650	682	679	729	778	828	872	897
LB	214	268	270	302	298	348	379	429	447	473
LBS	282	349	363	395	392	442	491	541	585	610

ST77..

02 031 00 14

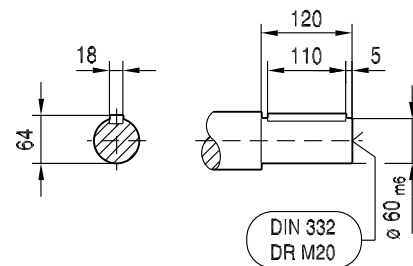
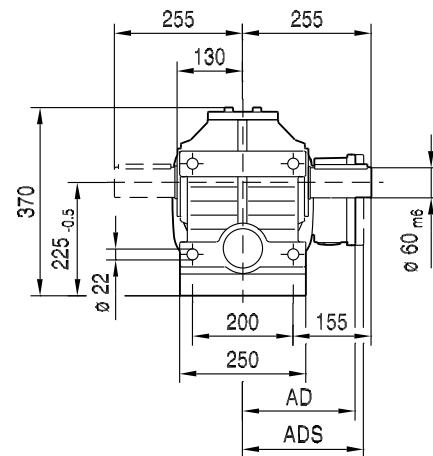
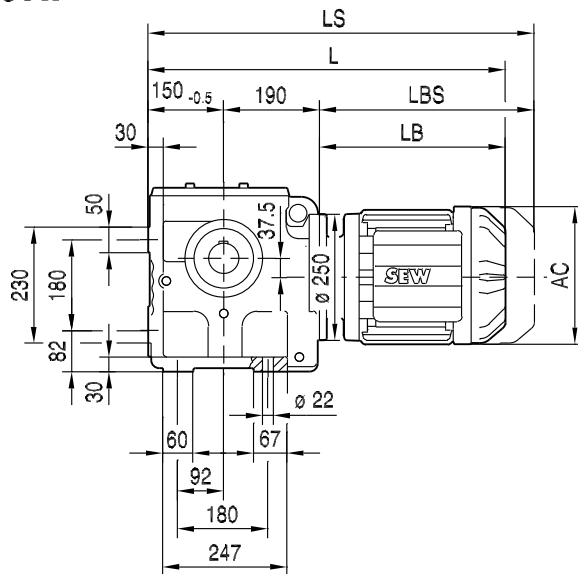


(→ 142)	DR71M	DRN80M	DRN90S	DRN90L	DRN100LS	DRN100L	DRN112M	DRN132S	DRN132M	DRN132L
AC	139	156	179	179	197	197	221	221	261	261
AD	119	128	140	140	157	157	170	170	228	228
ADS	129	139	150	150	158	158	172	172	228	228
L	501	555	557	589	585	635	666	716	734	760
LS	569	636	650	682	679	729	778	828	872	897
LB	214	268	270	302	298	348	379	429	447	473
LBS	282	349	363	395	392	442	491	541	585	610

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02 032 00 14

S87..



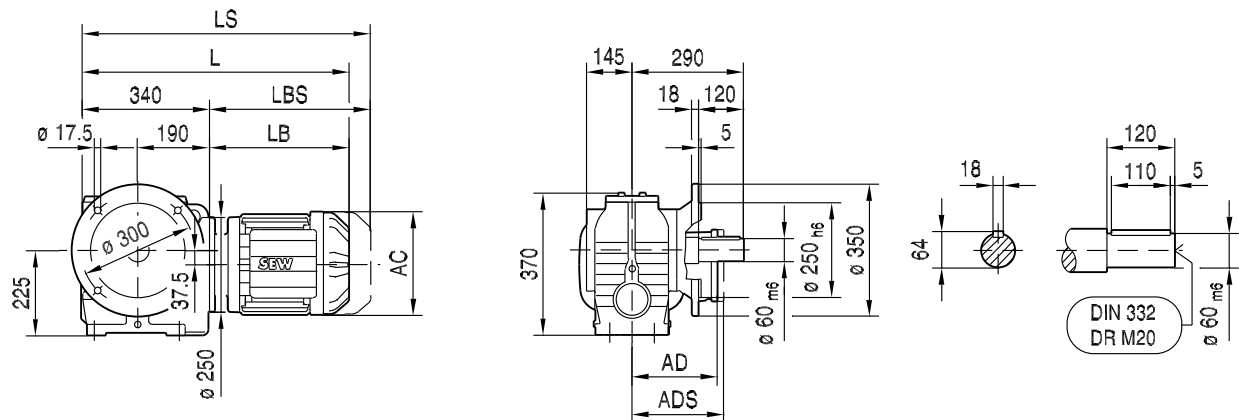
11

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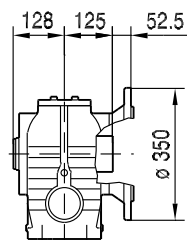
(→ 142)	DRN90S	DRN90L	DRN100LS	DRN100L	DRN112M	DRN132S	DRN132M	DRN132L	DRN160M	DRN160L
AC	179	179	197	197	221	221	261	261	314	314
AD	140	140	157	157	170	170	228	228	253	253
ADS	150	150	158	158	172	172	228	228	253	253
L	605	637	633	683	714	764	782	808	874	874
LS	698	730	727	777	826	876	920	945	1063	1063
LB	265	297	293	343	374	424	442	468	534	534
LBS	358	390	387	437	486	536	580	605	723	723

02 033 00 14

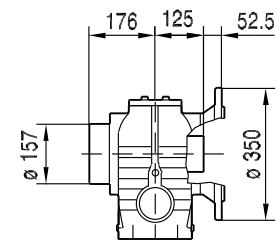
SF87..



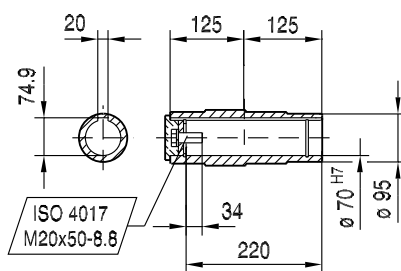
SAF87..



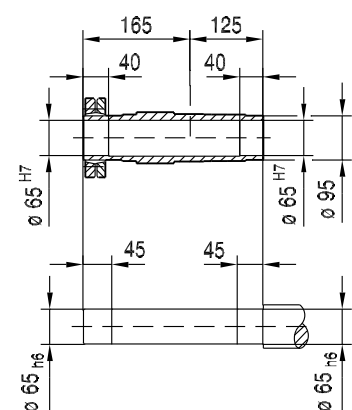
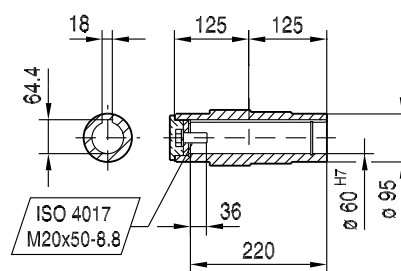
SHF87..



ø 70 H7



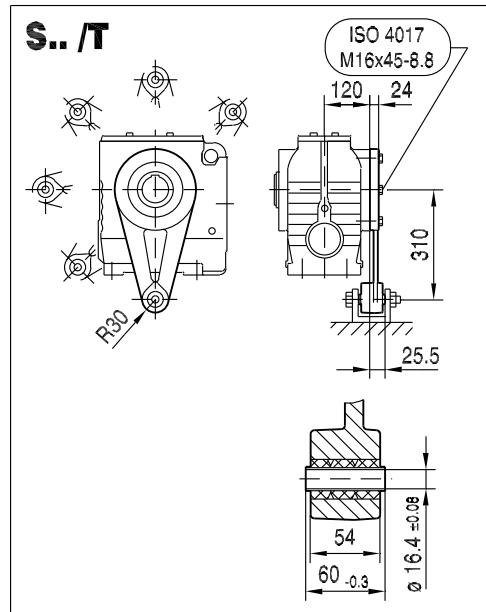
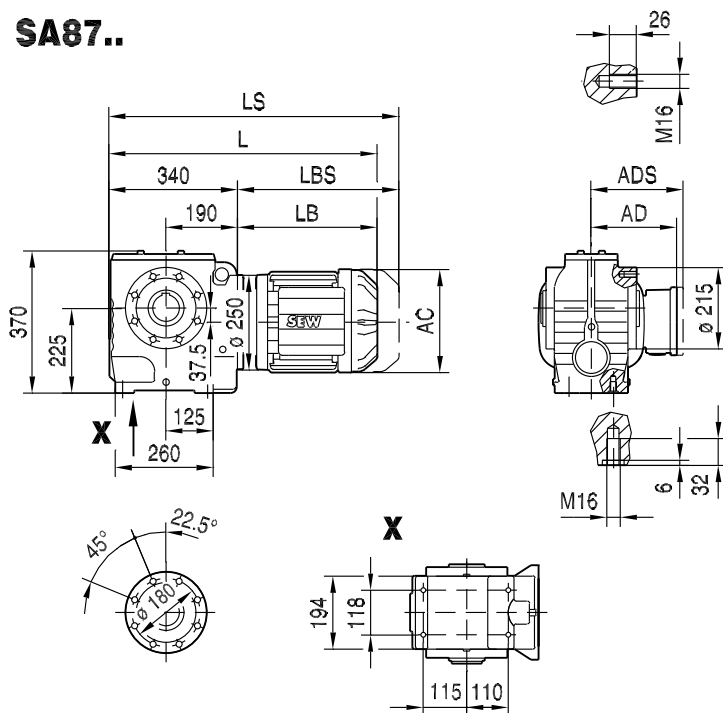
ø 60 H7



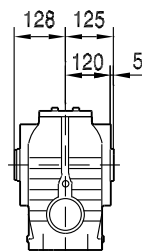
(→ 142)	DRN90S	DRN90L	DRN100LS	DRN100L	DRN112M	DRN132S	DRN132M	DRN132L	DRN160M	DRN160L
AC	179	179	197	197	221	221	261	261	314	314
AD	140	140	157	157	170	170	228	228	253	253
ADS	150	150	158	158	172	172	228	228	253	253
L	605	637	633	683	714	764	782	808	874	874
LS	698	730	727	777	826	876	920	945	1063	1063
LB	265	297	293	343	374	424	442	468	534	534
LBS	358	390	387	437	486	536	580	605	723	723

02 034 00 14

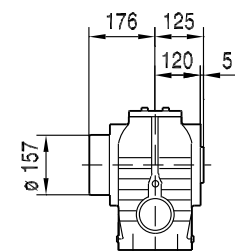
SA87..



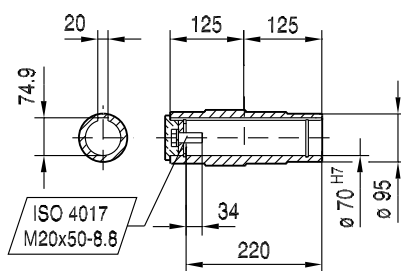
SA87..



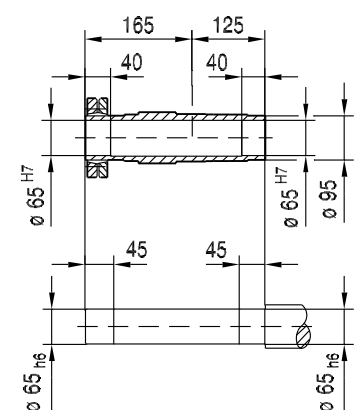
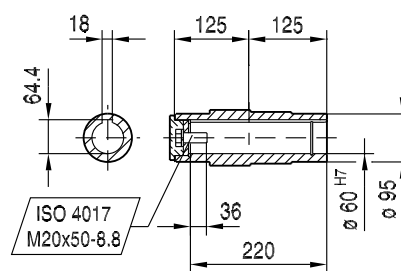
SH87..



ø 70 H7



ø 60 H7

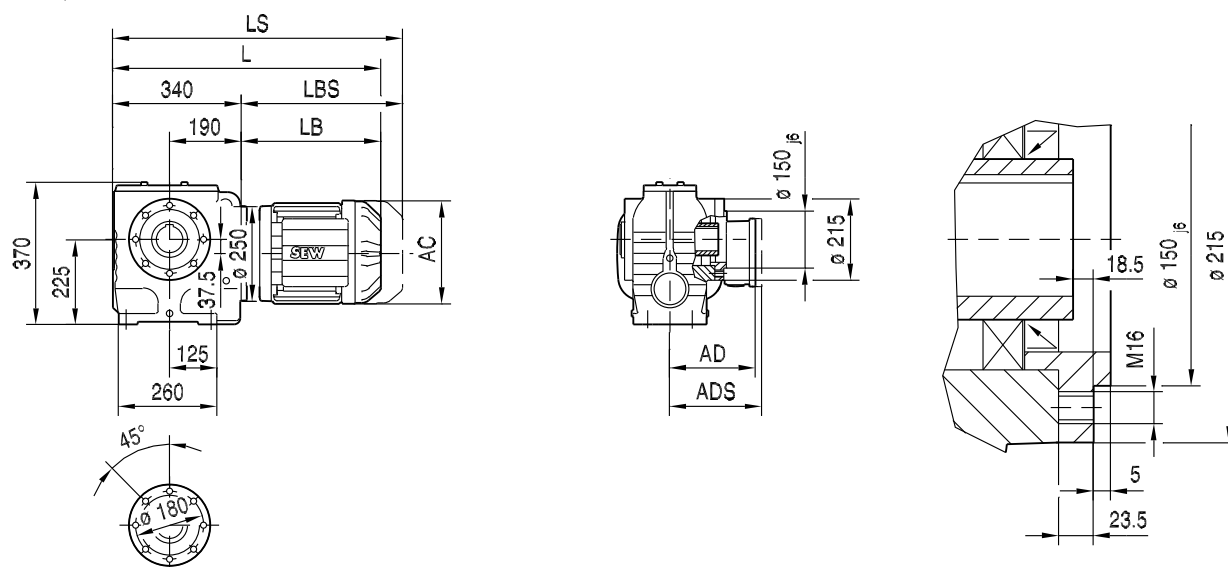


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(→ 142)	DRN90S	DRN90L	DRN100LS	DRN100L	DRN112M	DRN132S	DRN132M	DRN132L	DRN160M	DRN160L
AC	179	179	197	197	221	221	261	261	314	314
AD	140	140	157	157	170	170	228	228	253	253
ADS	150	150	158	158	172	172	228	228	253	253
L	605	637	633	683	714	764	782	808	874	874
LS	698	730	727	777	826	876	920	945	1063	1063
LB	265	297	293	343	374	424	442	468	534	534
LBS	358	390	387	437	486	536	580	605	723	723

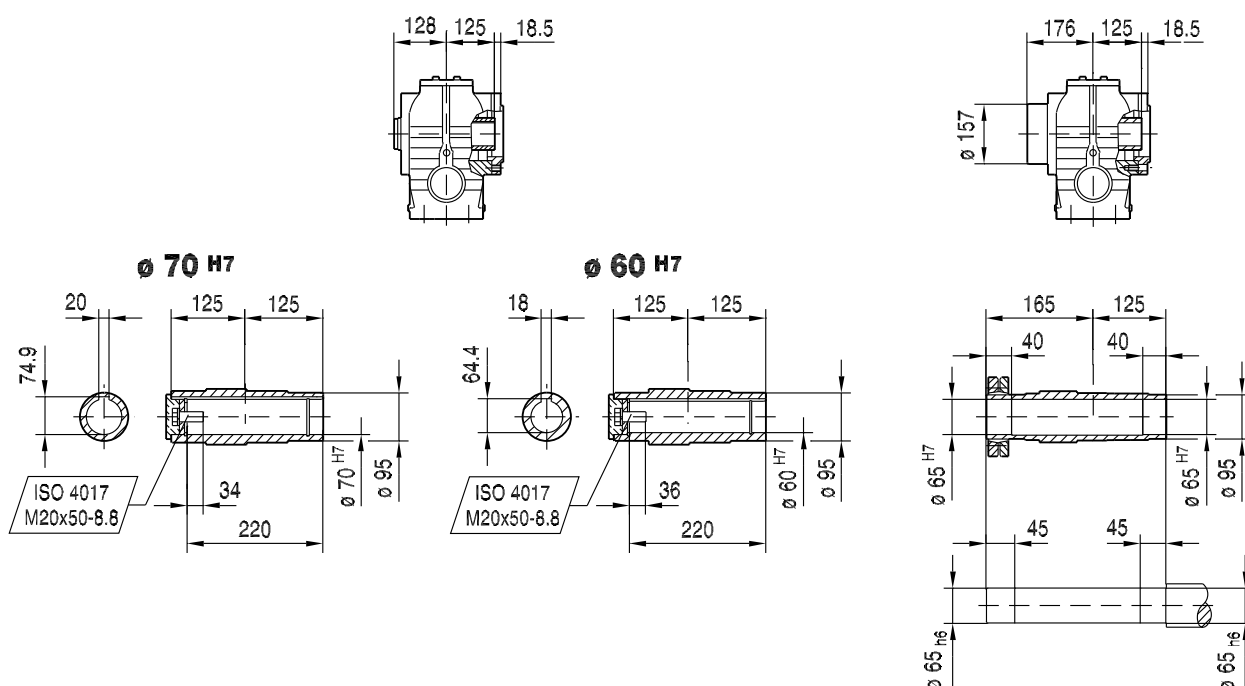
02 035 00 14

SAZ87..



SAZ87..

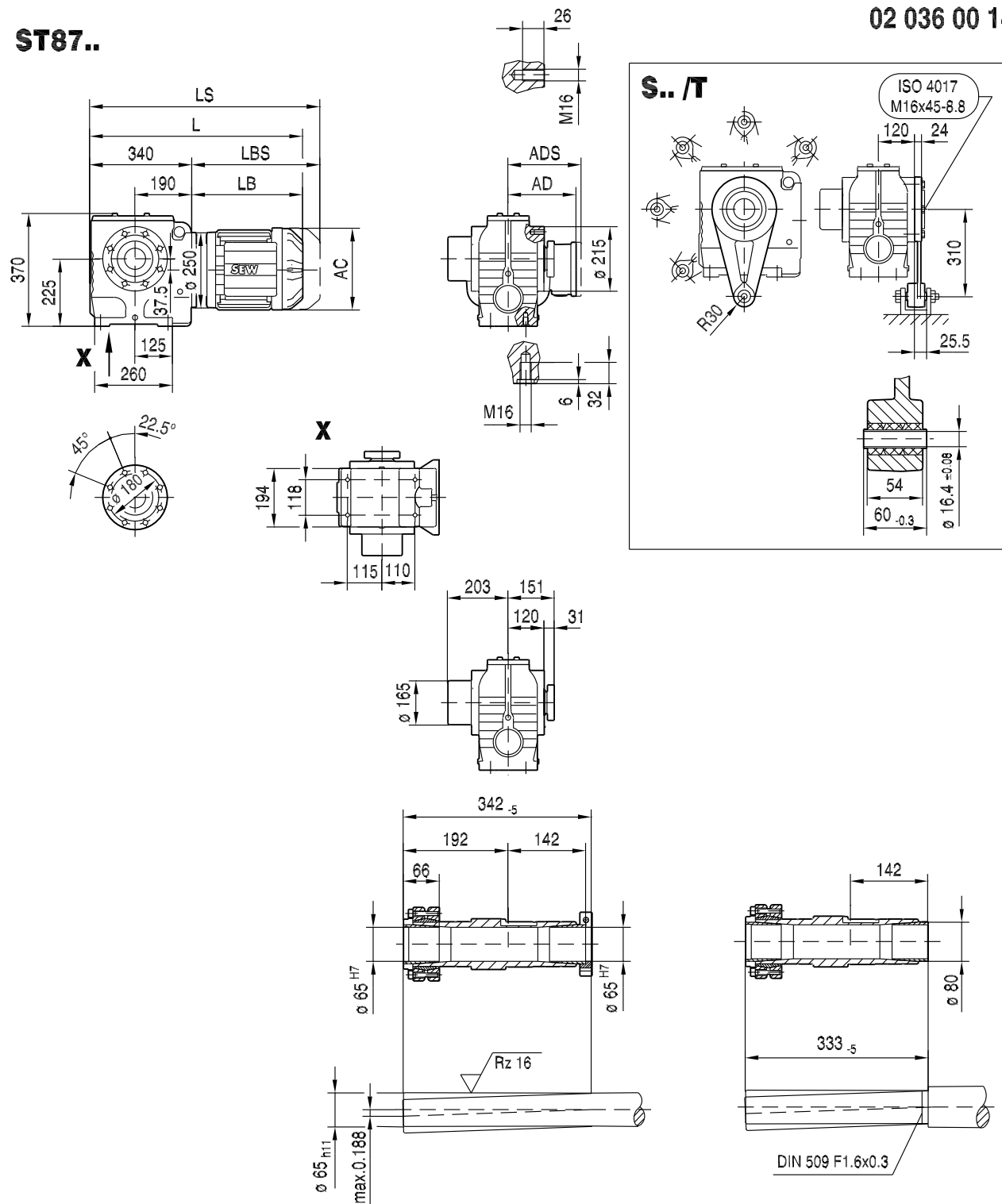
SHZ87..



(→ 142)	DRN90S	DRN90L	DRN100LS	DRN100L	DRN112M	DRN132S	DRN132M	DRN132L	DRN160M	DRN160L
AC	179	179	197	197	221	221	261	261	314	314
AD	140	140	157	157	170	170	228	228	253	253
ADS	150	150	158	158	172	172	228	228	253	253
L	605	637	633	683	714	764	782	808	874	874
LS	698	730	727	777	826	876	920	945	1063	1063
LB	265	297	293	343	374	424	442	468	534	534
LBS	358	390	387	437	486	536	580	605	723	723

ST87..

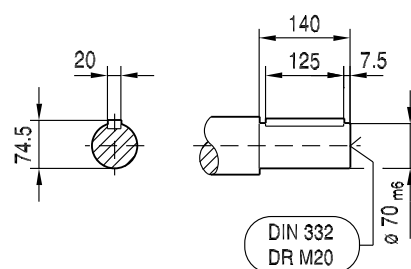
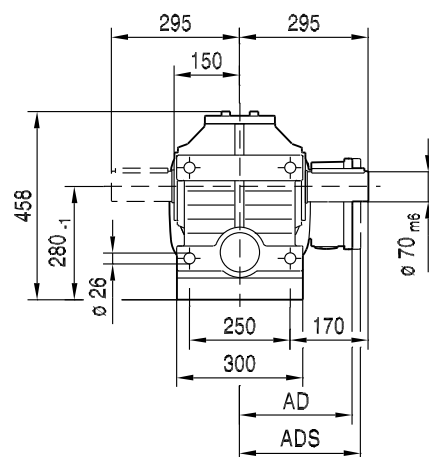
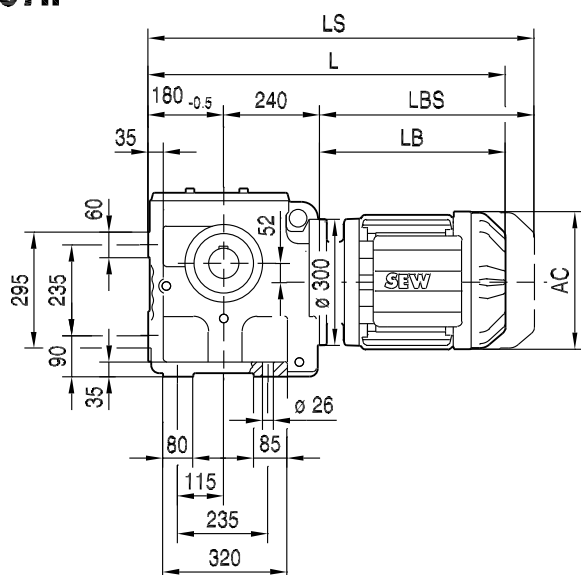
02 036 00 14



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(→ 142)	DRN90S	DRN90L	DRN100LS	DRN100L	DRN112M	DRN132S	DRN132M	DRN132L	DRN160M	DRN160L
AC	179	179	197	197	221	221	261	261	314	314
AD	140	140	157	157	170	170	228	228	253	253
ADS	150	150	158	158	172	172	228	228	253	253
L	605	637	633	683	714	764	782	808	874	874
LS	698	730	727	777	826	876	920	945	1063	1063
LB	265	297	293	343	374	424	442	468	534	534
LBS	358	390	387	437	486	536	580	605	723	723

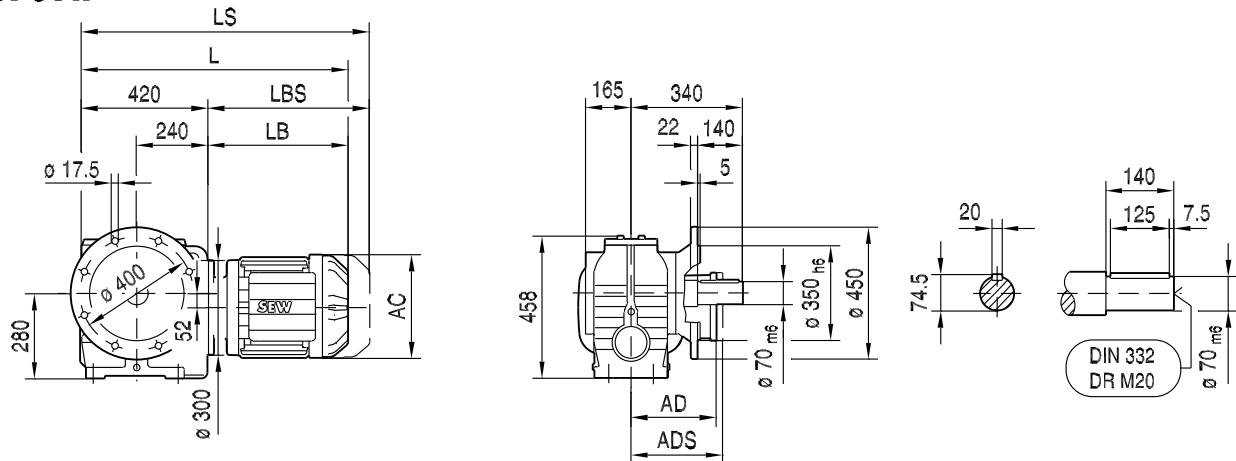
02 037 00 14

S97..

(→ 142)	DRN90L	DRN100LS	DRN100L	DRN112M	DRN132S	DRN132M	DRN132L	DRN160M	DRN160L	DRN180..
AC	179	197	197	221	221	261	261	314	314	357
AD	140	157	157	170	170	228	228	253	253	268
ADS	150	158	158	172	172	228	228	253	253	268
L	712	708	758	789	839	857	883	949	949	972
LS	805	802	852	901	951	995	1020	1138	1138	1161
LB	292	288	338	369	419	437	463	529	529	552
LBS	385	382	432	481	531	575	600	718	718	741

SF97..

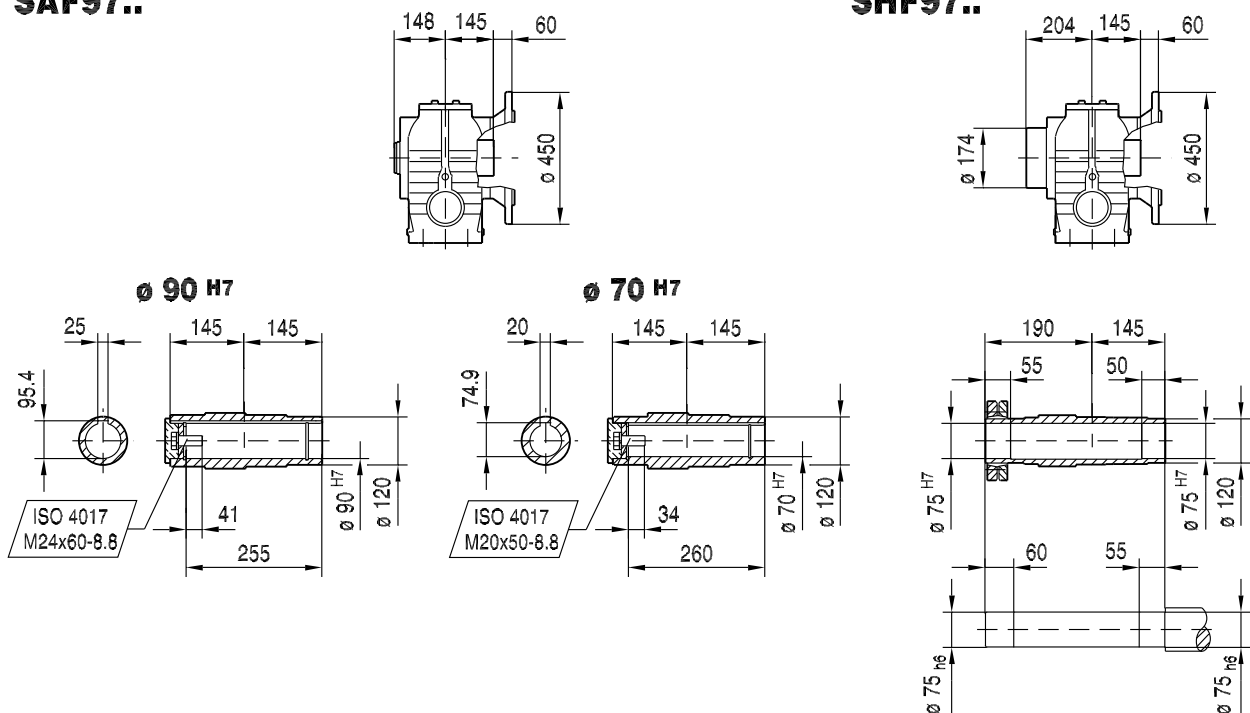
02 038 00 14



11

SAF97..

SHF97..

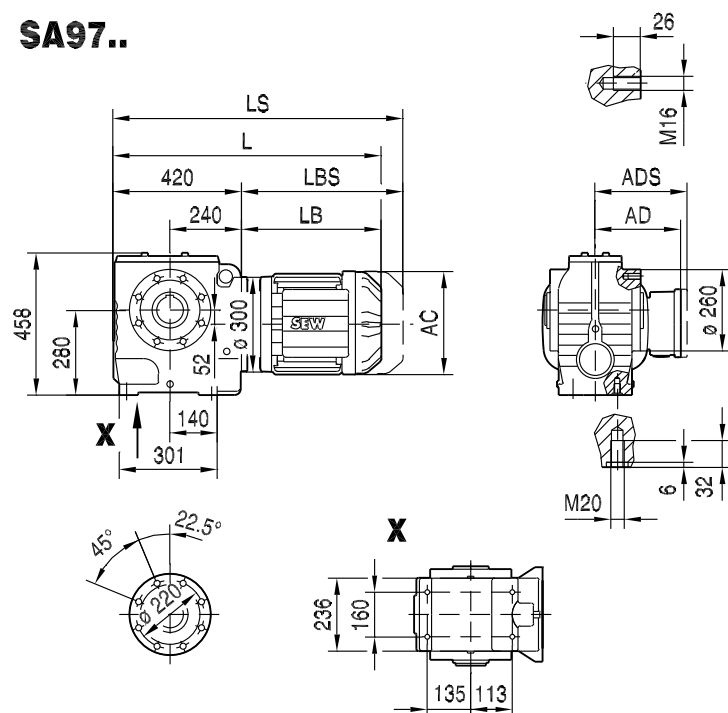


(→ 142)	DRN90L	DRN100LS	DRN100L	DRN112M	DRN132S	DRN132M	DRN132L	DRN160M	DRN160L	DRN180..
AC	179	197	197	221	221	261	261	314	314	357
AD	140	157	157	170	170	228	228	253	253	268
ADS	150	158	158	172	172	228	228	253	253	268
L	712	708	758	789	839	857	883	949	949	972
LS	805	802	852	901	951	995	1020	1138	1138	1161
LB	292	288	338	369	419	437	463	529	529	552
LBS	385	382	432	481	531	575	600	718	718	741

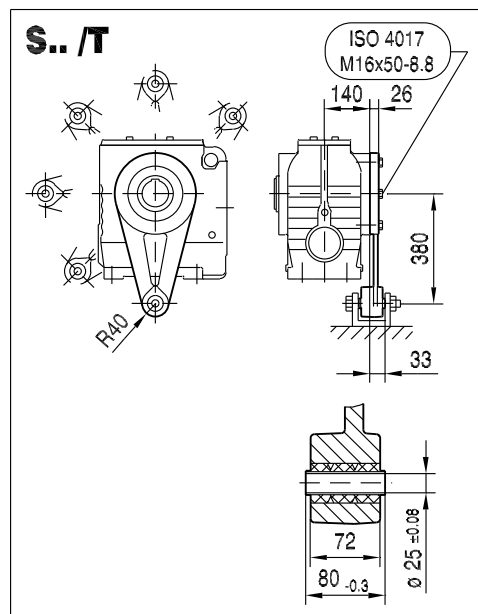
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02 039 00 14

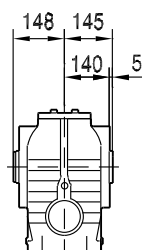
SA97..



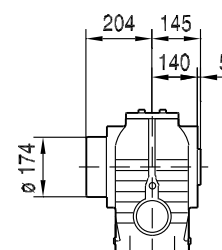
S../T



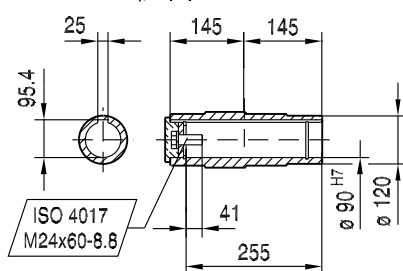
SA97..



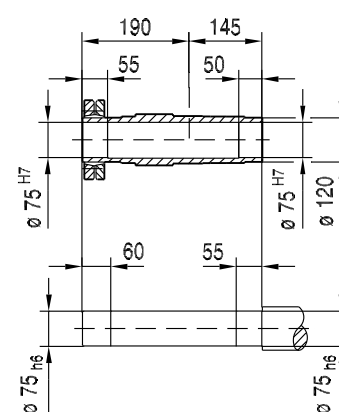
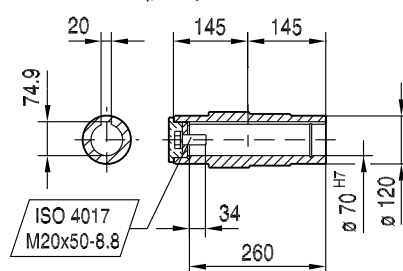
SH97..



ø 90 H7



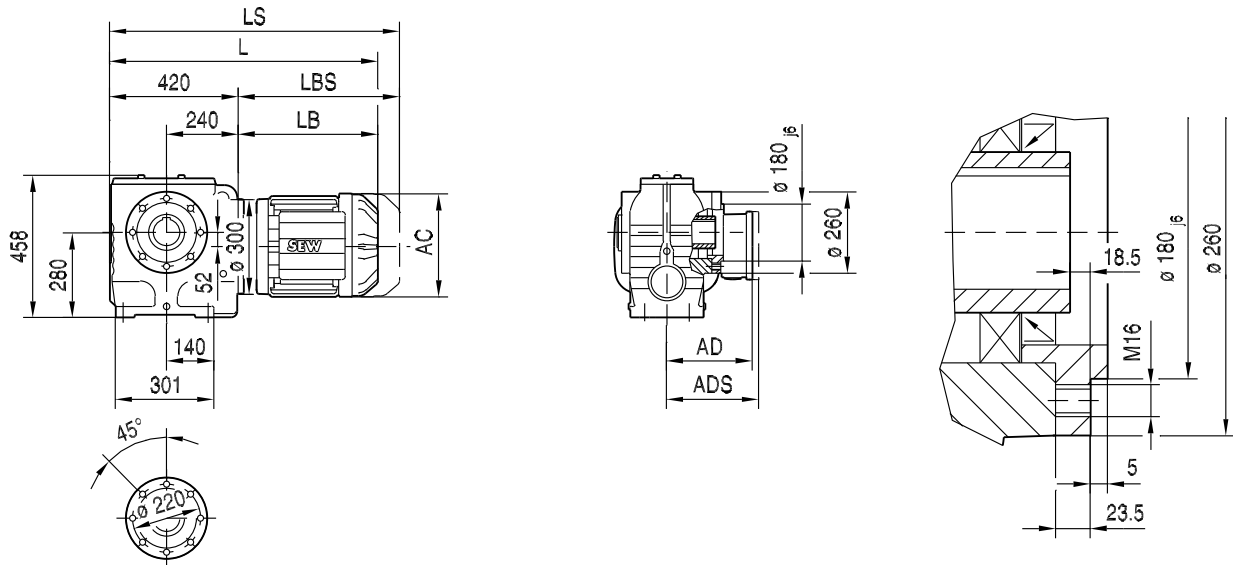
ø 70 H7



(→ 142)	DRN90L	DRN100LS	DRN100L	DRN112M	DRN132S	DRN132M	DRN132L	DRN160M	DRN160L	DRN180..
AC	179	197	197	221	221	261	261	314	314	357
AD	140	157	157	170	170	228	228	253	253	268
ADS	150	158	158	172	172	228	228	253	253	268
L	712	708	758	789	839	857	883	949	949	972
LS	805	802	852	901	951	995	1020	1138	1138	1161
LB	292	288	338	369	419	437	463	529	529	552
LBS	385	382	432	481	531	575	600	718	718	741

02 040 00 14

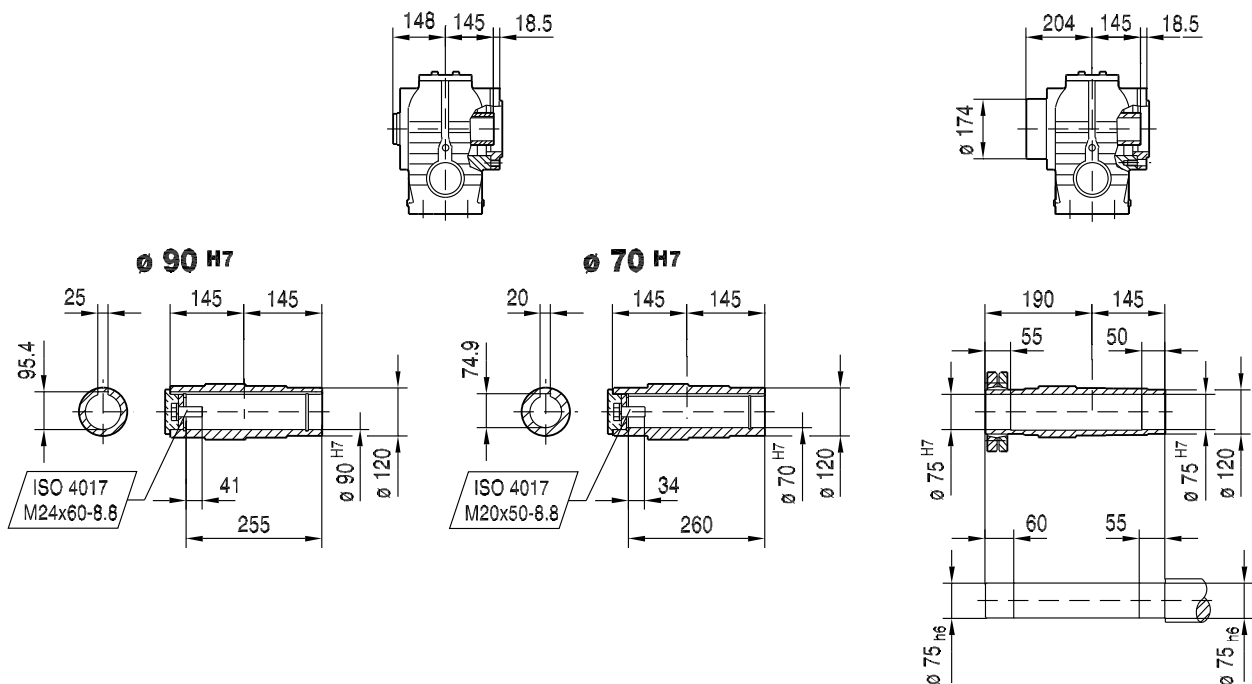
SAZ97..



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SAZ97..

SHZ97..

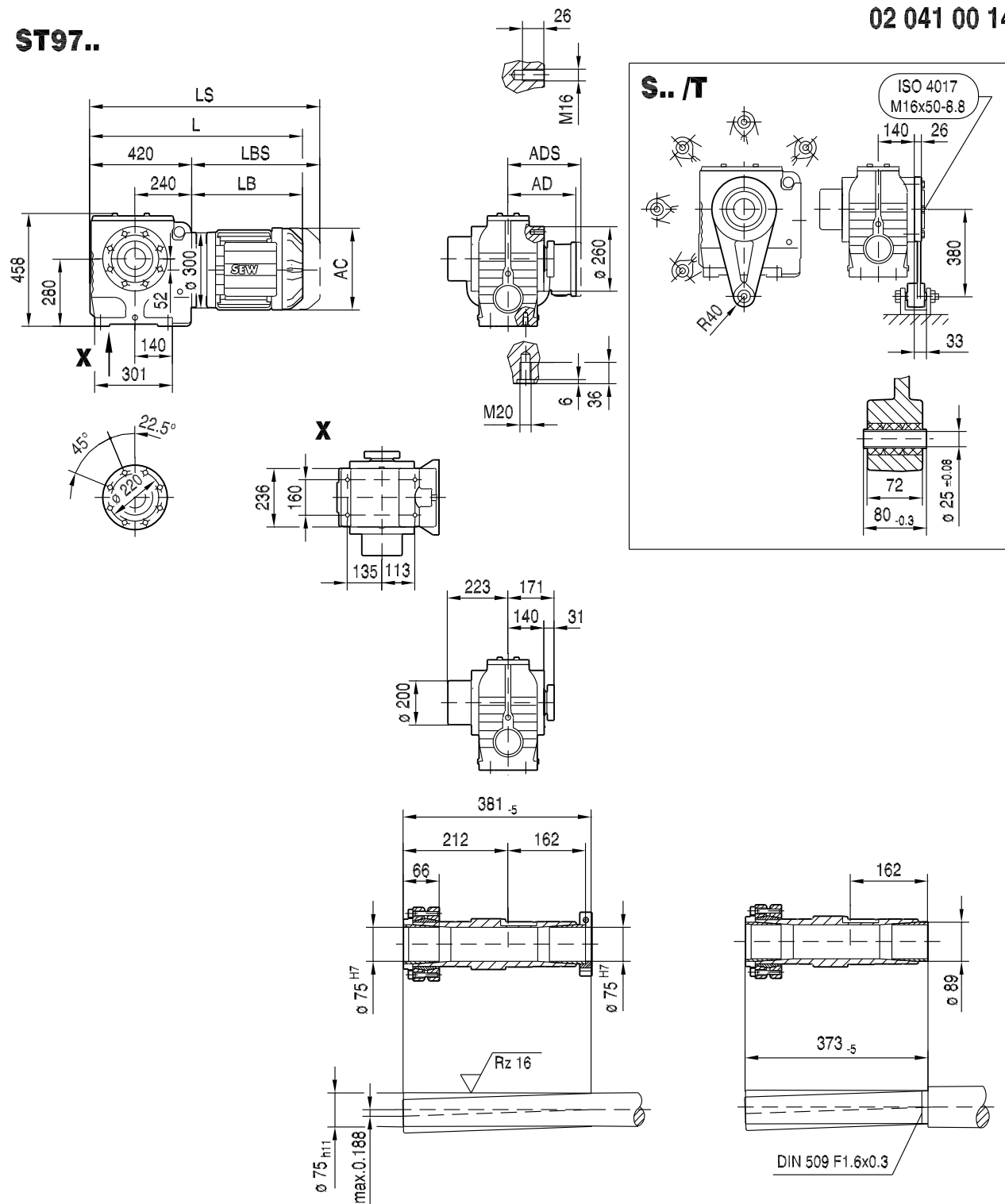


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(→ 142)	DRN90L	DRN100LS	DRN100L	DRN112M	DRN132S	DRN132M	DRN132L	DRN160M	DRN160L	DRN180..
AC	179	197	197	221	221	261	261	314	314	357
AD	140	157	157	170	170	228	228	253	253	268
ADS	150	158	158	172	172	228	228	253	253	268
L	712	708	758	789	839	857	883	949	949	972
LS	805	802	852	901	951	995	1020	1138	1138	1161
LB	292	288	338	369	419	437	463	529	529	552
LBS	385	382	432	481	531	575	600	718	718	741

ST97..

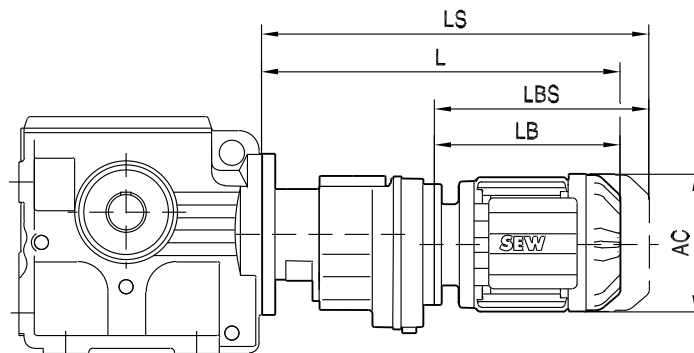
02 041 00 14



(→ 142)	DRN90L	DRN100LS	DRN100L	DRN112M	DRN132S	DRN132M	DRN132L	DRN160M	DRN160L	DRN180..
AC	179	197	197	221	221	261	261	314	314	357
AD	140	157	157	170	170	228	228	253	253	268
ADS	150	158	158	172	172	228	228	253	253	268
L	712	708	758	789	839	857	883	949	949	972
LS	805	802	852	901	951	995	1020	1138	1138	1161
LB	292	288	338	369	419	437	463	529	529	552
LBS	385	382	432	481	531	575	600	718	718	741

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02 080 00 06



(→ 142)		AC	L	LS	LB	LBS
S..37R17	DR63..	132	324	379	149	204
S..47R17	DR63..	132	324	379	149	204
	DR71S	139	335	403	160	228
S..57R17	DR63..	132	324	379	149	204
	DR71S	139	335	403	160	228
	DR71M	139	360	428	185	253
S..67R37	DR63..	132	356	411	191	246
	DR71S	139	367	434	202	269
	DR71M	139	392	459	227	294
	DRN80M	156	446	527	281	362
	DRN90S	179	448	541	283	376
S..77R37	DR63..	132	348	403	191	246
	DR71S	139	359	426	202	269
	DR71M	139	384	451	227	294
	DRN80M	156	438	519	281	362
	DRN90S	179	440	533	283	376
	DRN90L	179	472	565	315	408
S..87R57	DR63..	132	412	467	185	240
	DR71S	139	423	491	196	264
	DR71M	139	448	516	221	289
	DRN80M	156	502	583	275	356
	DRN90S	179	504	597	277	370
	DRN90L	179	536	629	309	402
S..97R57	DRN100LS	197	533	626	305	398
	DR63..	132	407	462	185	240
	DR71S	139	418	486	196	264
	DR71M	139	443	511	221	289
	DRN80M	156	497	578	275	356
	DRN90S	179	499	592	277	370
	DRN90L	179	531	624	309	402
	DRN100L	197	578	671	355	448
	DRN100LS	197	528	621	305	398
	DRN112M	221	608	720	386	498

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11.6 Technical data S. SF. SA. SAF 37

3400 - 2800 rpm

i_{tot}	i_{worm}	$n_e = 3400 \text{ rpm}$				$n_e = 3200 \text{ rpm}$				$n_e = 2800 \text{ rpm}$			
		n_a rpm	M_{amax} Nm	P_e kW	η %	n_a rpm	M_{amax} Nm	P_e kW	η %	n_a rpm	M_{amax} Nm	P_e kW	η %
157.43	38/1	22	78	0.31	57	20	80	0.30	57	18	82	0.27	57
144.40		24	76	0.33	58	22	78	0.31	58	19	80	0.28	57
122.94		28	74	0.37	58	26	75	0.35	58	23	78	0.32	58
106.00		32	71	0.41	59	30	72	0.39	59	26	76	0.36	59
98.80		34	70	0.43	59	32	72	0.41	59	28	75	0.38	59
86.36		39	68	0.47	60	37	69	0.45	60	32	72	0.41	60
80.96		42	66	0.49	60	40	68	0.47	60	35	72	0.43	60
71.44		48	55	0.47	58	45	64	0.50	60	39	70	0.47	61
63.33		54	37	0.41	51	51	51	0.47	57	44	67	0.51	61
53.83		63	29	0.39	49	59	32	0.40	50	52	53	0.49	59
55.93	27/2	61	70	0.58	77	57	71	0.56	76	50	72	0.50	76
51.30		66	68	0.61	77	62	70	0.60	77	55	72	0.54	76
43.68		78	66	0.70	77	73	67	0.67	77	64	70	0.61	77
37.66		90	64	0.78	78	85	65	0.74	78	74	68	0.68	78
35.10		97	62	0.81	78	91	64	0.78	78	80	66	0.71	78
30.68		111	61	0.90	78	104	62	0.87	78	91	64	0.78	78
28.76		118	58	0.92	78	111	61	0.91	78	97	64	0.83	78
25.38		134	47	0.86	77	126	53	0.90	78	110	62	0.91	79
22.50		151	31	0.69	71	142	43	0.84	76	124	57	0.94	79
19.13		178	24	0.65	69	167	27	0.67	70	146	44	0.87	77
19.89	24/5	171	42	0.88	86	161	43	0.85	86	141	44	0.76	86
18.24		186	41	0.93	86	175	42	0.90	86	154	44	0.83	86
15.53		219	39	1.0	86	206	40	1.0	86	180	42	0.92	86
13.39		254	37	1.1	86	239	39	1.1	86	209	41	1.0	86
12.48		272	37	1.2 *	86	256	38	1.2 *	86	224	40	1.1	86
10.91		312	35	1.3 *	86	293	36	1.3 *	86	257	39	1.2 *	87
10.23		332	35	1.4 *	87	313	36	1.4 *	87	274	38	1.3 *	87
9.02		377	31	1.4 *	86	355	34	1.5 *	87	310	36	1.3 *	87
8.00		425	20	1.1	82	400	29	1.4 *	86	350	35	1.5 *	87
6.80		500	16	1.0	81	471	18	1.1	82	412	29	1.4 *	86
6.33	19/5	537	24	1.5 *	87	506	27	1.6 *	88	442	32	1.7 *	88
5.38		632	20	1.5 *	87	595	22	1.6 *	87	520	26	1.6 *	88
4.86		700	18	1.5 *	87	658	19	1.5 *	87	576	24	1.6 *	88
3.97		856	14	1.5 *	86	806	15	1.5 *	87	705	19	1.6 *	88

* $P_{emax} = 1.1 \text{ kW}$

2200 - 1400 rpm

i _{tot}	i _{worm}	n _e = 2200 rpm				n _e = 1700 rpm				n _e = 1400 rpm			
		n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %
157.43	38/1	14	87	0.23	56	11	91	0.19	54	8.9	92	0.16	53
144.40		15	86	0.24	56	12	90	0.20	55	9.7	92	0.17	54
122.94		18	83	0.27	57	14	87	0.22	56	11	91	0.20	55
106.00		21	81	0.30	58	16	86	0.25	57	13	88	0.22	56
98.80		22	80	0.32	58	17	85	0.27	57	14	87	0.23	56
86.36		25	78	0.35	59	20	82	0.29	58	16	86	0.25	57
80.96		27	77	0.37	60	21	82	0.31	59	17	85	0.27	58
71.44		31	75	0.40	60	24	80	0.33	60	20	84	0.29	59
63.33		35	73	0.44	61	27	79	0.37	60	22	82	0.32	60
53.83		41	69	0.48	62	32	76	0.41	61	26	80	0.36	61
55.93	27/2	39	77	0.42	75	30	81	0.35	74	25	81	0.29	73
51.30		43	76	0.45	76	33	80	0.37	75	27	81	0.31	74
43.68		50	74	0.51	76	39	78	0.42	76	32	81	0.36	75
37.66		58	72	0.57	77	45	76	0.47	76	37	79	0.41	76
35.10		63	71	0.60	77	48	75	0.50	77	40	78	0.43	76
30.68		72	70	0.67	78	55	73	0.55	77	46	76	0.47	76
28.76		76	68	0.70	78	59	73	0.58	77	49	75	0.50	77
25.38		87	67	0.77	79	67	71	0.64	78	55	74	0.55	77
22.50		98	66	0.85	79	76	70	0.70	79	62	73	0.61	78
19.13		115	63	0.95	80	89	68	0.80	79	73	71	0.69	79
19.89	24/5	111	48	0.65	85	85	50	0.53	85	70	52	0.46	84
18.24		121	47	0.70	85	93	49	0.56	85	77	52	0.50	84
15.53		142	45	0.78	86	109	48	0.64	85	90	50	0.56	85
13.39		164	44	0.88	86	127	47	0.73	86	105	49	0.63	85
12.48		176	43	0.92	86	136	46	0.76	86	112	48	0.66	86
10.91		202	42	1.0	87	156	45	0.85	86	128	48	0.75	86
10.23		215	41	1.1	87	166	45	0.90	87	137	47	0.78	86
9.02		244	40	1.2 *	87	188	43	0.98	87	155	46	0.86	87
8.00		275	39	1.3 *	87	213	43	1.1	87	175	45	0.95	87
6.80		324	37	1.4 *	88	250	41	1.2 *	88	206	43	1.1	87
6.33	19/5	348	35	1.4 *	88	269	35	1.1	88	221	35	0.93	87
5.38		409	34	1.6 *	88	316	34	1.3 *	88	260	34	1.1	88
4.86		453	32	1.7 *	89	350	33	1.4 *	88	288	33	1.1	88
3.97		554	26	1.7 *	88	428	32	1.6 *	89	353	32	1.3 *	88

* P_{emax} = 1.1 kW

1100 - 700 rpm

i _{tot}	i _{worm}	n _e = 1100 rpm				n _e = 900 rpm				n _e = 700 rpm			
		n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %
157.43	38/1	7.0	92	0.13	52	5.7	92	0.11	50	4.4	92	0.09	49
144.40		7.6	92	0.14	52	6.2	92	0.12	51	4.8	92	0.09	50
122.94		8.9	92	0.16	54	7.3	92	0.14	52	5.7	92	0.11	51
106.00		10	92	0.18	55	8.5	92	0.15	53	6.6	92	0.12	52
98.80		11	92	0.19	55	9.1	92	0.16	54	7.1	92	0.13	52
86.36		13	90	0.21	56	10	92	0.18	55	8.1	92	0.15	53
80.96		14	89	0.22	57	11	92	0.19	55	8.6	92	0.16	54
71.44		15	87	0.24	57	13	91	0.21	56	9.8	92	0.17	55
63.33		17	86	0.27	58	14	89	0.23	57	11	92	0.19	56
53.83		20	84	0.30	60	17	87	0.26	58	13	91	0.22	57
55.93	27/2	20	87	0.25	72	16	91	0.21	71	13	92	0.17	70
51.30		21	87	0.27	73	18	90	0.23	72	14	92	0.19	71
43.68		25	84	0.30	74	21	87	0.26	73	16	92	0.22	71
37.66		29	82	0.34	75	24	86	0.29	74	19	89	0.24	72
35.10		31	82	0.36	75	26	84	0.31	74	20	88	0.25	73
30.68		36	80	0.40	76	29	82	0.34	75	23	87	0.28	74
28.76		38	79	0.42	76	31	82	0.36	75	24	86	0.30	74
25.38		43	78	0.46	77	35	81	0.40	76	28	84	0.33	75
22.50		49	77	0.51	77	40	79	0.43	76	31	82	0.36	75
19.13		58	75	0.58	78	47	78	0.50	77	37	81	0.41	76
19.89	24/5	55	55	0.38	83	45	58	0.33	83	35	60	0.27	82
18.24		60	54	0.41	84	49	56	0.35	83	38	60	0.29	82
15.53		71	53	0.47	84	58	55	0.40	84	45	58	0.33	83
13.39		82	52	0.53	85	67	54	0.45	84	52	56	0.37	83
12.48		88	51	0.55	85	72	53	0.47	84	56	55	0.39	84
10.91		101	50	0.62	86	82	52	0.53	85	64	54	0.43	84
10.23		108	49	0.64	86	88	51	0.55	85	68	54	0.46	84
9.02		122	48	0.71	86	100	50	0.61	86	78	53	0.51	85
8.00		138	47	0.78	87	113	49	0.67	86	88	52	0.56	85
6.80		162	46	0.90	87	132	48	0.77	87	103	51	0.64	86
6.33	19/5	174	45	0.94	87	142	45	0.77	87	111	45	0.61	86
5.38		204	43	1.1	88	167	43	0.86	87	130	43	0.68	87
4.86		226	42	1.1	88	185	42	0.93	88	144	42	0.73	87
3.97		277	40	1.3 *	88	227	40	1.1	88	176	40	0.84	88

* P_{emax} = 1.1 kW

500 - 10 rpm

i_{tot}	i_{worm}	$n_e = 500 \text{ rpm}$				$n_e = 250 \text{ rpm}$				$n_e = 10 \text{ rpm}$			
		n_a rpm	M_{amax} Nm	P_e kW	η %	n_a rpm	M_{amax} Nm	P_e kW	η %	n_a rpm	M_{amax} Nm	P_e kW	η %
157.43	38/1	3.2	92	0.06	47	1.6	92	0.033	46	0.06	92	< 0.05	26
144.40		3.5	92	0.07	48	1.7	92	0.036	46	0.07	92	< 0.05	27
122.94		4.1	92	0.08	49	2.0	92	0.042	46	0.08	92	< 0.05	29
106.00		4.7	92	0.09	50	2.4	92	0.049	47	0.09	92	< 0.05	30
98.80		5.1	92	0.10	50	2.5	92	0.05	47	0.10	92	< 0.05	31
86.36		5.8	92	0.11	51	2.9	92	0.06	47	0.12	92	< 0.05	32
80.96		6.2	92	0.12	51	3.1	92	0.06	47	0.12	92	< 0.05	33
71.44		7.0	92	0.13	52	3.5	92	0.07	48	0.14	92	< 0.05	35
63.33		7.9	92	0.14	53	3.9	92	0.08	49	0.16	92	< 0.05	37
53.83		9.3	92	0.16	55	4.6	92	0.09	50	0.19	92	< 0.05	39
55.93	27/2	8.9	92	0.13	69	4.5	92	0.06	67	0.18	92	< 0.05	48
51.30		9.7	92	0.14	69	4.9	92	0.07	67	0.19	92	< 0.05	49
43.68		11	92	0.16	70	5.7	92	0.08	67	0.23	92	< 0.05	51
37.66		13	92	0.18	71	6.6	92	0.10	67	0.27	92	< 0.05	53
35.10		14	92	0.19	71	7.1	92	0.10	68	0.28	92	< 0.05	54
30.68		16	92	0.22	72	8.1	92	0.11	68	0.33	92	< 0.05	56
28.76		17	91	0.23	72	8.7	92	0.12	69	0.35	92	< 0.05	57
25.38		20	89	0.25	73	9.9	92	0.14	69	0.39	92	< 0.05	59
22.50		22	87	0.28	74	11	92	0.15	70	0.44	92	< 0.05	61
19.13		26	85	0.31	75	13	92	0.18	71	0.52	92	< 0.05	62
19.89	24/5	25	68	0.22	81	13	72	0.12	79	0.50	72	< 0.05	65
18.24		27	66	0.23	81	14	72	0.13	79	0.55	72	< 0.05	66
15.53		32	63	0.26	82	16	72	0.15	79	0.64	72	< 0.05	68
13.39		37	61	0.29	82	19	72	0.18	80	0.75	72	< 0.05	71
12.48		40	59	0.30	82	20	72	0.19	80	0.80	72	< 0.05	72
10.91		46	58	0.34	83	23	71	0.21	81	0.92	71	< 0.05	73
10.23		49	57	0.35	83	24	70	0.22	81	0.98	70	< 0.05	73
9.02		55	56	0.39	84	28	66	0.24	81	1.1	66	< 0.05	74
8.00		63	55	0.43	84	31	63	0.25	82	1.2	63	< 0.05	74
6.80		74	54	0.49	85	37	61	0.29	82	1.5	61	< 0.05	75
6.33	19/5	79	45	0.44	85	39	45	0.23	83	1.6	45	< 0.05	80
5.38		93	43	0.49	86	46	43	0.25	83	1.9	43	< 0.05	80
4.86		103	42	0.53	86	51	42	0.27	84	2.1	42	< 0.05	80
3.97		126	40	0.61	87	63	40	0.31	84	2.5	40	< 0.05	80

11.7 Technical data S. SF. SA. SAF 47

3400 - 2800 rpm

i_{tot}	i_{worm}	$n_e = 3400 \text{ rpm}$				$n_e = 3200 \text{ rpm}$				$n_e = 2800 \text{ rpm}$			
		n_a rpm	M_{amax} Nm	P_e kW	η %	n_a rpm	M_{amax} Nm	P_e kW	η %	n_a rpm	M_{amax} Nm	P_e kW	η %
201.00	42/1	17	150	0.44	60	16	150	0.42	60	14	150	0.37	59
184.80		18	150	0.48	60	17	150	0.45	60	15	150	0.40	59
158.12		22	150	0.55	61	20	150	0.52	61	18	150	0.46	60
137.05		25	150	0.63	62	23	150	0.59	62	20	150	0.52	61
128.10		27	150	0.67	63	25	150	0.63	62	22	150	0.56	62
110.73		31	138	0.70	63	29	148	0.71	63	25	150	0.63	63
94.08		36	113	0.69	62	34	123	0.70	63	30	146	0.72	63
84.00		40	95	0.66	61	38	107	0.69	62	33	130	0.71	63
71.75		47	58	0.55	53	45	82	0.64	60	39	107	0.70	63
67.20		51	53	0.54	52	48	68	0.60	57	42	99	0.69	62
56.61	29/2	60	40	0.51	49	57	46	0.53	51	49	75	0.65	60
69.39		49	140	0.91	79	46	140	0.86	78	40	140	0.76	78
63.80		53	140	0.99	79	50	140	0.93	79	44	140	0.82	78
54.59		62	140	1.1	80	59	140	1.1	79	51	140	0.95	79
47.32		72	139	1.3	80	68	140	1.2	80	59	140	1.1	80
44.22		77	129	1.3	80	72	139	1.3	80	63	140	1.2	80
38.23		89	112	1.3	80	84	120	1.3	80	73	139	1.3	80
32.48		105	91	1.3	79	99	100	1.3	80	86	117	1.3	80
29.00		117	76	1.2	78	110	86	1.3	79	97	104	1.3	80
24.77		137	47	0.94	72	129	66	1.2	77	113	87	1.3	80
23.20	27/5	147	42	0.90	71	138	54	1.0	75	121	79	1.3	79
19.54		174	32	0.84	69	164	37	0.89	71	143	59	1.1	77
20.33		167	100	2.0 *	88	157	100	1.9 *	88	138	100	1.6 *	88
17.62		193	97	2.2 *	88	182	100	2.2 *	88	159	100	1.9 *	88
16.47		206	90	2.2 *	88	194	97	2.2 *	88	170	100	2.0 *	88
14.24		239	78	2.2 *	88	225	83	2.2 *	88	197	97	2.3 *	88
12.10		281	63	2.1 *	88	264	69	2.2 *	88	231	82	2.2 *	88
10.80		315	53	2.0 *	87	296	60	2.1 *	88	259	72	2.2 *	88
9.23		368	32	1.5	83	347	45	1.9 *	86	303	60	2.2 *	88
8.64		394	29	1.5	82	370	37	1.7 *	85	324	55	2.1 *	88
7.28	20/5	467	22	1.3	81	440	25	1.4	82	385	41	1.9 *	86
6.83		498	34	2.0 *	87	469	37	2.1 *	88	410	45	2.2 *	88
6.4		531	31	2.0 *	87	500	34	2.0 *	87	438	42	2.2 *	88
5.39		631	24	1.8 *	86	594	27	1.9 *	87	519	34	2.1 *	88
4.76		714	20	1.8 *	85	672	23	1.9 *	86	588	29	2.0 *	87
4		850	16	1.7 *	85	800	18	1.8 *	85	700	23	1.9 *	87

* $P_{emax} = 1.5 \text{ kW}$

2200 - 1400 rpm

i _{tot}	i _{worm}	n _e = 2200 rpm				n _e = 1700 rpm				n _e = 1400 rpm			
		n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %
201.00	42/1	11	167	0.33	58	8.5	170	0.27	56	7.0	170	0.23	55
184.80		12	167	0.36	58	9.2	168	0.29	57	7.6	170	0.24	56
158.12		14	167	0.41	60	11	168	0.33	58	8.9	170	0.28	57
137.05		16	165	0.46	60	12	167	0.37	59	10	168	0.31	58
128.10		17	165	0.49	61	13	167	0.39	59	11	168	0.33	58
110.73		20	165	0.55	62	15	167	0.44	61	13	168	0.38	59
94.08		23	165	0.64	63	18	167	0.51	62	15	168	0.43	60
84.00		26	162	0.70	64	20	167	0.57	62	17	167	0.48	61
71.75		31	145	0.73	64	24	167	0.65	63	20	167	0.55	62
67.20		33	137	0.73	64	25	164	0.68	64	21	167	0.58	63
56.61		39	115	0.73	64	30	152	0.74	65	25	165	0.67	64
69.39	29/2	32	155	0.67	77	24	155	0.52	76	20	155	0.44	75
63.80		34	155	0.72	77	27	155	0.57	76	22	155	0.47	75
54.59		40	155	0.84	78	31	155	0.66	77	26	155	0.55	76
47.32		46	155	0.96	79	36	155	0.75	78	30	155	0.63	77
44.22		50	155	1.0	79	38	155	0.80	78	32	155	0.67	77
38.23		58	154	1.2	80	44	155	0.92	79	37	155	0.76	78
32.48		68	146	1.3	80	52	155	1.1	80	43	155	0.89	79
29.00		76	137	1.3	81	59	154	1.2	80	48	155	0.99	79
24.77		89	117	1.3	81	69	145	1.3	81	57	155	1.1	80
23.20		95	111	1.4	81	73	142	1.3	81	60	152	1.2	80
19.54		113	92	1.3	81	87	123	1.4	81	72	144	1.3	81
20.33	27/5	108	109	1.4	87	84	110	1.1	87	69	110	0.92	86
17.62		125	108	1.6 *	88	96	109	1.3	87	79	110	1.1	86
16.47		134	108	1.7 *	88	103	109	1.4	87	85	110	1.1	87
14.24		154	108	2.0 *	88	119	109	1.6 *	88	98	110	1.3	87
12.10		182	105	2.3 *	89	140	109	1.8 *	88	116	109	1.5	88
10.80		204	95	2.3 *	89	157	108	2.0 *	88	130	109	1.7 *	88
9.23		238	82	2.3 *	89	184	105	2.3 *	89	152	109	2.0 *	88
8.64		255	77	2.3 *	89	197	100	2.3 *	89	162	109	2.1 *	88
7.28		302	64	2.3 *	89	234	86	2.4 *	89	192	103	2.3 *	89
6.83	20/5	322	62	2.4 *	89	249	78	2.3 *	89	205	78	1.9 *	89
6.4		344	58	2.3 *	89	266	76	2.4 *	89	219	76	2.0 *	89
5.39		408	48	2.3 *	89	315	65	2.4 *	89	260	74	2.3 *	89
4.76		462	42	2.3 *	89	357	58	2.4 *	89	294	72	2.5 *	90
4		550	34	2.2 *	88	425	48	2.4 *	89	350	61	2.5 *	90

* P_{emax} = 1.5 kW

1100 - 700 rpm

i _{tot}	i _{worm}	n _e = 1100 rpm				n _e = 900 rpm				n _e = 700 rpm			
		n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %
201.00	42/1	5.5	176	0.19	53	4.5	180	0.16	52	3.5	185	0.13	51
184.80		6.0	174	0.20	54	4.9	178	0.17	53	3.8	183	0.14	51
158.12		7.0	172	0.23	55	5.7	176	0.20	54	4.4	180	0.16	52
137.05		8.0	171	0.26	56	6.6	172	0.22	55	5.1	178	0.18	53
128.10		8.6	171	0.27	57	7.0	172	0.23	55	5.5	176	0.19	54
110.73		9.9	169	0.30	58	8.1	171	0.26	56	6.3	174	0.21	55
94.08		12	169	0.35	59	9.6	171	0.30	57	7.4	172	0.24	56
84.00		13	169	0.39	60	11	169	0.32	58	8.3	171	0.26	57
71.75		15	169	0.45	61	13	169	0.37	60	9.8	171	0.30	58
67.20		16	169	0.47	61	13	169	0.40	60	10	171	0.32	58
56.61		19	169	0.55	63	16	169	0.46	61	12	171	0.37	60
69.39	29/2	16	173	0.39	74	13	176	0.33	73	10	180	0.27	71
63.80		17	173	0.42	74	14	175	0.35	73	11	180	0.29	72
54.59		20	171	0.48	75	16	173	0.40	74	13	176	0.33	73
47.32		23	171	0.55	76	19	173	0.46	75	15	175	0.37	73
44.22		25	171	0.58	76	20	171	0.49	75	16	175	0.39	74
38.23		29	169	0.66	77	24	171	0.56	76	18	173	0.44	75
32.48		34	169	0.77	78	28	171	0.65	77	22	171	0.51	75
29.00		38	170	0.86	78	31	171	0.72	77	24	171	0.57	76
24.77		44	169	0.99	79	36	170	0.83	78	28	171	0.66	77
23.20		47	164	1.0	79	39	170	0.88	79	30	171	0.70	77
19.54		56	154	1.1	80	46	165	1.0	79	36	170	0.81	78
20.33	27/5	54	112	0.75	85	44	114	0.63	84	34	116	0.50	83
17.62		62	112	0.86	86	51	113	0.71	85	40	115	0.57	84
16.47		67	112	0.91	86	55	113	0.76	85	43	114	0.60	84
14.24		77	111	1.0	86	63	112	0.86	86	49	113	0.69	85
12.10		91	111	1.2	87	74	111	1.0	86	58	113	0.80	85
10.80		102	111	1.4	87	83	111	1.1	87	65	112	0.88	86
9.23		119	110	1.6 *	88	98	111	1.3	87	76	112	1.0	86
8.64		127	109	1.7 *	88	104	111	1.4	87	81	112	1.1	87
7.28		151	109	2.0 *	88	124	111	1.6 *	88	96	111	1.3	87
6.83	20/5	161	95	1.8 *	89	132	95	1.5	88	102	95	1.2	88
6.4		172	93	1.9 *	89	141	93	1.6 *	88	109	93	1.2	88
5.39		204	89	2.1 *	89	167	89	1.8 *	89	130	89	1.4	88
4.76		231	87	2.4 *	89	189	87	1.9 *	89	147	87	1.5	89
4		275	78	2.5 *	90	225	84	2.2 *	89	175	84	1.7 *	89

* P_{emax} = 1.5 kW

500 - 10 rpm

i _{tot}	i _{worm}	n _e = 500 rpm				n _e = 250 rpm				n _e = 10 rpm			
		n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %
201.00	42/1	2.5	185	0.10	49	1.2	185	0.05	48	0.05	185	< 0.05	32
184.80		2.7	185	0.11	49	1.4	185	0.05	48	0.05	185	< 0.05	32
158.12		3.2	185	0.12	50	1.6	185	0.06	48	0.06	185	< 0.05	35
137.05		3.6	185	0.14	51	1.8	185	0.07	48	0.07	185	< 0.05	37
128.10		3.9	183	0.15	51	2.0	185	0.08	48	0.08	185	< 0.05	38
110.73		4.5	181	0.16	52	2.3	185	0.09	49	0.09	185	< 0.05	40
94.08		5.3	178	0.19	54	2.7	185	0.10	49	0.11	185	< 0.05	42
84.00		6.0	176	0.20	54	3.0	185	0.12	50	0.12	185	< 0.05	43
71.75		7.0	174	0.23	56	3.5	185	0.13	51	0.14	185	< 0.05	44
67.20		7.4	172	0.24	56	3.7	185	0.14	51	0.15	185	< 0.05	44
56.61		8.8	172	0.28	57	4.4	181	0.16	53	0.18	181	< 0.05	45
69.39	29/2	7.2	185	0.20	70	3.6	185	0.10	68	0.14	185	< 0.05	56
63.80		7.8	185	0.22	70	3.9	185	0.11	68	0.16	185	< 0.05	57
54.59		9.2	185	0.25	71	4.6	185	0.13	68	0.18	185	< 0.05	60
47.32		11	181	0.28	72	5.3	185	0.15	68	0.21	185	< 0.05	61
44.22		11	180	0.30	72	5.7	185	0.16	69	0.23	185	< 0.05	62
38.23		13	178	0.33	73	6.5	185	0.18	69	0.26	185	< 0.05	63
32.48		15	174	0.38	74	7.7	185	0.21	70	0.31	185	< 0.05	64
29.00		17	174	0.42	74	8.6	185	0.24	71	0.34	185	< 0.05	65
24.77		20	172	0.48	75	10	183	0.27	71	0.40	183	< 0.05	66
23.20		22	172	0.51	76	11	181	0.28	72	0.43	181	< 0.05	66
19.54		26	172	0.60	77	13	178	0.33	73	0.51	178	< 0.05	67
20.33	27/5	25	124	0.39	82	12	157	0.25	80	0.49	157	< 0.05	75
17.62		28	120	0.43	83	14	149	0.28	80	0.57	149	< 0.05	76
16.47		30	118	0.45	83	15	145	0.29	81	0.61	145	< 0.05	76
14.24		35	116	0.51	84	18	138	0.31	81	0.70	138	< 0.05	77
12.10		41	115	0.59	84	21	131	0.35	82	0.83	131	< 0.05	77
10.80		46	114	0.65	85	23	127	0.37	82	0.93	127	< 0.05	77
9.23		54	113	0.75	85	27	121	0.41	83	1.1	121	< 0.05	78
8.64		58	113	0.80	86	29	120	0.44	83	1.2	120	< 0.05	78
7.28		69	112	0.93	86	34	117	0.50	84	1.4	117	< 0.05	78
6.83	20/5	73	95	0.84	87	7	95	0.43	84	1.5	95	< 0.05	81
6.4		78	93	0.88	87	39	93	0.45	85	1.6	93	< 0.05	81
5.39		93	89	0.99	87	46	89	0.51	85	1.9	89	< 0.05	81
4.76		105	87	1.1	88	53	87	0.56	86	2.1	87	< 0.05	81
4		125	84	1.2	88	63	84	0.64	86	2.5	84	< 0.05	81

11.8 Technical data S. SF. SA. SAF 57

3400 - 2800 rpm

i _{tot}	i _{worm}	n _e = 3400 rpm				n _e = 3200 rpm				n _e = 2800 rpm			
		n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %
201.00	42/1	17	270	0.75	64	16	270	0.71	63	14	270	0.63	62
184.80		18	270	0.81	64	17	270	0.77	64	15	270	0.68	63
158.12		22	270	0.93	65	20	270	0.88	65	18	270	0.78	64
137.05		25	255	1.0	66	23	270	1.0	66	20	270	0.89	65
128.10		27	245	1.0	66	25	255	1.0	66	22	270	0.94	65
110.73		31	215	1.0	67	29	230	1.0	67	25	255	1.0	66
94.08		36	184	1.0	67	34	196	1.0	67	30	225	1.1	67
84.00		40	165	1.0	67	38	175	1.0	67	33	200	1.0	67
71.75		47	139	1.0	67	45	149	1.0	67	39	174	1.1	67
67.20		51	128	1.0	66	48	139	1.0	67	42	164	1.1	67
56.61	29/2	60	103	1.0	65	57	114	1.0	66	49	138	1.1	67
69.39		49	220	1.4	81	46	220	1.3	80	40	220	1.2	80
63.80		53	220	1.5	81	50	220	1.4	81	44	220	1.3	80
54.59		62	220	1.8	81	59	220	1.7	81	51	220	1.5	81
47.32		72	210	1.9	82	68	220	1.9	82	59	220	1.7	81
44.22		77	197	1.9	82	72	205	1.9	82	63	220	1.8	81
38.23		89	174	2.0	82	84	184	2.0	82	73	205	1.9	82
32.48		105	148	2.0	82	99	157	2.0	82	86	180	2.0	82
29.00		117	131	2.0	82	110	141	2.0	82	97	162	2.0	82
24.77		137	111	1.9	82	129	120	2.0	82	113	139	2.0	82
23.20	27/5	147	102	1.9	82	138	111	2.0	82	121	131	2.0	82
19.54		174	81	1.8	81	164	90	1.9	82	143	109	2.0	82
20.33		167	160	3.2 *	89	157	160	3.0	89	138	160	2.6	88
17.62		193	140	3.2 *	89	182	149	3.2 *	89	159	160	3.0	89
16.47		206	132	3.2 *	89	194	140	3.2 *	89	170	158	3.2 *	89
14.24		239	116	3.2 *	89	225	123	3.2 *	89	197	139	3.2 *	89
12.10		281	99	3.3 *	89	264	105	3.3 *	89	231	121	3.3 *	89
10.80		315	88	3.3 *	89	296	94	3.3 *	89	259	108	3.3 *	89
9.23		368	73	3.2 *	89	347	79	3.2 *	89	303	93	3.3 *	89
8.64		394	68	3.2 *	89	370	74	3.2 *	89	324	87	3.3 *	89
7.28	20/5	467	54	3.0	88	440	60	3.1 *	89	385	72	3.2 *	89
6.8		498	54	3.2 *	89	469	58	3.2 *	89	410	69	3.3 *	90
6.4		531	50	3.1 *	89	500	54	3.2 *	89	438	64	3.3 *	89
5.4		631	41	3.1 *	89	594	44	3.1 *	89	519	53	3.2 *	89
4.8		714	35	3.0	88	672	38	3.0	89	588	46	3.2 *	89
4		850	28	2.8	88	800	31	2.9	88	700	38	3.1 *	89

* P_{emax} = 3.0 kW

2200 - 1400 rpm

i _{tot}	i _{worm}	n _e = 2200 rpm				n _e = 1700 rpm				n _e = 1400 rpm			
		n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %
201.00	42/1	11	295	0.55	61	8.5	295	0.44	59	7.0	295	0.37	58
184.80		12	295	0.60	62	9.2	295	0.48	60	7.6	295	0.40	58
158.12		14	295	0.69	63	11	295	0.55	61	8.9	295	0.46	60
137.05		16	295	0.78	64	12	295	0.62	62	10	295	0.52	61
128.10		17	295	0.83	64	13	295	0.66	62	11	295	0.55	61
110.73		20	290	0.93	65	15	295	0.75	63	13	295	0.63	62
94.08		23	275	1.0	66	18	300	0.88	65	15	295	0.73	63
84.00		26	250	1.0	67	20	285	0.93	65	17	295	0.80	64
71.75		31	220	1.1	67	24	275	1.0	66	20	290	0.91	65
67.20		33	210	1.1	67	25	260	1.0	67	21	285	0.95	65
56.61	29/2	39	179	1.1	68	30	225	1.1	67	25	265	1.0	67
69.39		32	245	1.0	79	24	245	0.81	77	20	245	0.68	76
63.80		34	245	1.1	79	27	245	0.88	78	22	245	0.73	77
54.59		40	245	1.3	80	31	245	1.0	79	26	245	0.85	78
47.32		46	245	1.5	81	36	245	1.2	79	30	245	0.97	79
44.22		50	245	1.6	81	38	245	1.2	80	32	245	1.0	79
38.23		58	245	1.8	81	44	245	1.4	80	37	245	1.2	80
32.48		68	225	1.9	82	52	245	1.7	81	43	245	1.4	80
29.00		76	200	1.9	82	59	245	1.8	81	48	245	1.5	81
24.77		89	177	2.0	82	69	220	1.9	82	57	245	1.8	81
23.20	27/5	95	167	2.0	83	73	210	2.0	82	60	245	1.9	82
19.54		113	143	2.0	83	87	183	2.0	83	72	215	2.0	82
20.33		108	168	2.2	88	84	168	1.7	87	69	168	1.4	87
17.62		125	168	2.5	88	96	168	1.9	88	79	168	1.6	87
16.47		134	169	2.7	88	103	168	2.1	88	85	168	1.7	87
14.24		154	169	3.1 *	89	119	169	2.4	88	98	169	2.0	88
12.10		182	150	3.2 *	89	140	169	2.8	89	116	169	2.3	88
10.80		204	136	3.2 *	89	157	169	3.1 *	89	130	169	2.6	88
9.23		238	119	3.3 *	89	184	149	3.2 *	89	152	169	3.0	89
8.64		255	112	3.3 *	89	197	141	3.3 *	89	162	166	3.2 *	89
7.28	20/5	302	96	3.4 *	90	234	122	3.3 *	90	192	146	3.3 *	89
6.8		322	91	3.4 *	90	249	100	2.9	90	205	100	2.4	89
6.4		344	85	3.4 *	90	266	98	3.0	90	219	98	2.5	89
5.4		408	72	3.4 *	90	315	95	3.5 *	90	260	95	2.9	90
4.8		462	63	3.4 *	90	357	84	3.5 *	90	294	93	3.2 *	90
4		550	53	3.4 *	90	425	71	3.5 *	90	350	88	3.6 *	90

* P_{emax} = 3.0 kW

1100 - 700 rpm

i _{tot}	i _{worm}	n _e = 1100 rpm				n _e = 900 rpm				n _e = 700 rpm			
		n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %
201.00	42/1	5.5	295	0.30	56	4.5	300	0.26	55	3.5	310	0.21	53
184.80		6.0	295	0.32	57	4.9	300	0.28	55	3.8	305	0.23	54
158.12		7.0	295	0.37	58	5.7	295	0.31	56	4.4	300	0.25	55
137.05		8.0	295	0.42	59	6.6	295	0.35	57	5.1	300	0.29	56
128.10		8.6	295	0.45	59	7.0	295	0.37	58	5.5	295	0.30	56
110.73		9.9	295	0.51	61	8.1	295	0.43	59	6.3	295	0.34	57
94.08		12	295	0.59	62	9.6	295	0.49	60	7.4	295	0.39	58
84.00		13	295	0.65	63	11	295	0.54	61	8.3	295	0.43	59
71.75		15	295	0.74	64	13	295	0.62	62	9.8	295	0.50	61
67.20		16	300	0.80	64	13	295	0.66	63	10	295	0.53	61
56.61		19	290	0.91	65	16	300	0.78	64	12	295	0.61	62
69.39	29/2	16	270	0.60	75	13	270	0.49	74	10	270	0.39	73
63.80		17	270	0.64	76	14	270	0.53	75	11	270	0.42	73
54.59		20	270	0.74	77	16	270	0.62	75	13	270	0.49	74
47.32		23	270	0.85	77	19	270	0.70	76	15	270	0.56	75
44.22		25	270	0.91	78	20	270	0.75	77	16	270	0.59	75
38.23		29	270	1.0	79	24	270	0.86	77	18	270	0.68	76
32.48		34	270	1.2	79	28	270	1.0	78	22	270	0.79	77
29.00		38	270	1.3	80	31	270	1.1	79	24	270	0.88	78
24.77		44	270	1.6	81	36	270	1.3	80	28	270	1.0	78
23.20		47	270	1.7	81	39	270	1.4	80	30	270	1.1	79
19.54		56	250	1.8	81	46	270	1.6	81	36	270	1.3	80
20.33	27/5	54	168	1.1	86	44	170	0.93	85	34	172	0.74	84
17.62		62	169	1.3	86	51	169	1.1	86	40	170	0.83	85
16.47		67	168	1.4	87	55	168	1.1	86	43	170	0.89	85
14.24		77	168	1.6	87	63	168	1.3	86	49	170	1.0	86
12.10		91	169	1.8	88	74	169	1.5	87	58	169	1.2	86
10.80		102	169	2.1	88	83	169	1.7	87	65	169	1.3	87
9.23		119	170	2.4	88	98	168	2.0	88	76	168	1.5	87
8.64		127	170	2.6	88	104	169	2.1	88	81	168	1.6	87
7.28		151	170	3.0	89	124	170	2.5	88	96	170	1.9	88
6.8	20/5	161	120	2.3	89	132	120	1.9	89	102	120	1.5	88
6.4		172	117	2.4	89	141	117	1.9	89	109	117	1.5	88
5.4		204	111	2.6	90	167	111	2.2	89	130	111	1.7	89
4.8		231	108	2.9	90	189	108	2.4	90	147	108	1.9	89
4		275	103	3.3 *	90	225	103	2.7	90	175	103	2.1	89

* P_{emax} = 3.0 kW

500 - 10 rpm

i _{tot}	i _{worm}	n _e = 500 rpm				n _e = 250 rpm				n _e = 10 rpm			
		n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %
201.00	42/1	2.5	330	0.17	51	1.2	330	0.09	49	0.05	330	< 0.05	42
184.80		2.7	330	0.18	51	1.4	330	0.10	49	0.05	330	< 0.05	43
158.12		3.2	315	0.20	52	1.6	330	0.11	49	0.06	330	< 0.05	44
137.05		3.6	310	0.22	53	1.8	330	0.13	50	0.07	330	< 0.05	45
128.10		3.9	305	0.23	54	2.0	330	0.14	50	0.08	330	< 0.05	46
110.73		4.5	300	0.26	55	2.3	330	0.15	51	0.09	330	< 0.05	46
94.08		5.3	300	0.30	56	2.7	330	0.18	51	0.11	330	< 0.05	47
84.00		6.0	295	0.32	57	3.0	325	0.19	52	0.12	325	< 0.05	47
71.75		7.0	295	0.37	58	3.5	310	0.21	53	0.14	310	< 0.05	48
67.20		7.4	295	0.39	58	3.7	310	0.23	54	0.15	310	< 0.05	48
56.61	29/2	8.8	295	0.46	60	4.4	300	0.25	55	0.18	300	< 0.05	48
69.39		7.2	300	0.32	71	3.6	300	0.17	68	0.14	300	< 0.05	63
63.80		7.8	300	0.34	71	3.9	300	0.18	68	0.16	300	< 0.05	64
54.59		9.2	300	0.40	72	4.6	300	0.21	69	0.18	300	< 0.05	65
47.32		11	300	0.45	73	5.3	300	0.24	70	0.21	300	< 0.05	66
44.22		11	300	0.48	74	5.7	300	0.25	70	0.23	300	< 0.05	66
38.23		13	295	0.54	74	6.5	300	0.29	71	0.26	300	< 0.05	67
32.48		15	295	0.63	75	7.7	300	0.34	71	0.31	300	< 0.05	67
29.00		17	295	0.70	76	8.6	300	0.38	72	0.34	300	< 0.05	67
24.77		20	295	0.81	77	10	300	0.43	73	0.40	300	< 0.05	68
23.20	27/5	22	295	0.86	77	11	300	0.46	73	0.43	300	< 0.05	68
19.54		26	295	1.0	78	13	295	0.53	74	0.51	295	< 0.05	68
20.33		25	181	0.56	83	12	215	0.35	80	0.49	215	< 0.05	77
17.62		28	175	0.62	83	14	210	0.39	81	0.57	210	< 0.05	77
16.47		30	174	0.66	84	15	205	0.40	81	0.61	205	< 0.05	78
14.24		35	172	0.75	84	18	198	0.45	81	0.70	198	< 0.05	78
12.10		41	170	0.87	85	21	188	0.49	82	0.83	188	< 0.05	78
10.80		46	170	0.97	85	23	184	0.54	83	0.93	184	< 0.05	78
9.23		54	170	1.1	86	27	177	0.60	83	1.1	177	< 0.05	79
8.64		58	170	1.2	86	29	175	0.64	83	1.2	175	< 0.05	79
7.28	20/5	69	170	1.4	87	34	172	0.73	84	1.4	172	< 0.05	79
6.8		73	120	1.1	87	37	120	0.54	85	1.5	120	< 0.05	81
6.4		78	117	1.1	87	39	117	0.56	85	1.6	117	< 0.05	81
5.4		93	111	1.2	88	46	111	0.63	86	1.9	111	< 0.05	81
4.8		105	108	1.3	88	53	108	0.69	86	2.1	108	< 0.05	81
4		125	103	1.5	89	63	103	0.78	87	2.5	103	< 0.05	81

11.9 Technical data S. SF. SA. SAF 67

3400 - 2800 rpm

i_{tot}	i_{worm}	$n_e = 3400 \text{ rpm}$				$n_e = 3200 \text{ rpm}$				$n_e = 2800 \text{ rpm}$			
		n_a rpm	M_{amax} Nm	P_e kW	η %	n_a rpm	M_{amax} Nm	P_e kW	η %	n_a rpm	M_{amax} Nm	P_e kW	η %
217.41	42/1	16	465	1.2	66	15	465	1.1	66	13	465	0.96	65
190.11		18	465	1.3	67	17	465	1.2	67	15	465	1.1	66
180.60		19	465	1.4	67	18	465	1.3	67	16	465	1.1	66
158.45		21	465	1.5	68	20	465	1.5	68	18	465	1.3	67
134.40		25	465	1.8	69	24	465	1.7	68	21	465	1.5	68
121.33		28	455	1.9	69	26	465	1.9	69	23	465	1.6	68
106.75		32	405	2.0	69	30	430	2.0	69	26	465	1.9	69
100.80		34	380	1.9	69	32	410	2.0	69	28	465	2.0	69
85.83		40	320	1.9	69	37	345	1.9	69	33	400	2.0	70
78.00		44	285	1.9	69	41	310	1.9	69	36	365	2.0	70
67.57	29/2	50	235	1.8	67	47	260	1.9	68	41	315	2.0	69
58.80		58	184	1.7	65	54	215	1.8	67	48	270	1.9	69
75.06		45	435	2.5	82	43	435	2.4	82	37	435	2.1	81
65.63		52	435	2.9	82	49	435	2.7	82	43	435	2.4	82
62.35		55	435	3.0	83	51	435	2.8	82	45	435	2.5	82
54.70		62	435	3.4	83	59	435	3.2	83	51	435	2.8	83
46.40		73	395	3.6	83	69	415	3.6	83	60	435	3.3	83
41.89		81	355	3.6	83	76	380	3.6	83	67	430	3.6	83
36.85		92	310	3.6	83	87	335	3.6	84	76	380	3.6	84
34.80		98	295	3.6	83	92	315	3.6	84	80	365	3.7	84
29.63	27/5	115	250	3.6	83	108	270	3.7	83	94	310	3.7	84
26.93		126	220	3.5	83	119	240	3.6	83	104	280	3.6	84
23.33		146	182	3.4	82	137	200	3.5	83	120	245	3.7	84
20.30		167	141	3.1	81	158	164	3.3	82	138	205	3.6	83
24.44		139	315	5.1	90	131	315	4.8	90	115	315	4.2	89
23.22		146	315	5.4	90	138	315	5.1	90	121	315	4.4	90
20.37		167	315	6.1 *	90	157	315	5.8 *	90	137	315	5.0	90
17.28		197	270	6.2 *	90	185	290	6.2 *	90	162	315	5.9 *	90
15.60		218	245	6.2 *	90	205	260	6.2 *	90	179	295	6.1 *	90
13.73		248	215	6.2 *	90	233	230	6.2 *	90	204	265	6.3 *	90
12.96		262	200	6.1 *	90	247	215	6.1 *	90	216	250	6.3 *	90
11.03		308	169	6.1 *	90	290	183	6.2 *	90	254	215	6.3 *	90
10.03		339	151	6.0 *	90	319	164	6.1 *	90	279	194	6.3 *	90
8.69		391	124	5.7 *	89	368	137	5.9 *	90	322	166	6.2 *	90
7.56		450	95	5.1	88	423	112	5.6 *	89	370	141	6.1 *	90

* $P_{emax} = 5.5 \text{ kW}$

2200 - 1400 rpm

i _{tot}	i _{worm}	n _e = 2200 rpm				n _e = 1700 rpm				n _e = 1400 rpm			
		n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %
217.41	42/1	10	520	0.86	64	7.8	520	0.69	62	6.4	520	0.58	61
190.11		12	520	0.97	65	8.9	520	0.77	63	7.4	520	0.65	62
180.60		12	520	1.0	65	9.4	520	0.81	63	7.8	520	0.68	62
158.45		14	520	1.1	66	11	520	0.91	64	8.8	520	0.76	63
134.40		16	520	1.3	67	13	520	1.1	65	10	520	0.88	64
121.33		18	520	1.5	68	14	520	1.2	66	12	520	0.97	65
106.75		21	520	1.6	68	16	520	1.3	67	13	520	1.1	66
100.80		22	510	1.7	69	17	520	1.4	67	14	520	1.1	66
85.83		26	490	1.9	69	20	520	1.6	68	16	520	1.3	67
78.00		28	465	2.0	70	22	510	1.7	69	18	520	1.4	68
67.57	29/2	33	410	2.0	70	25	495	1.9	69	21	520	1.6	69
58.80		37	360	2.0	70	29	460	2.0	70	24	500	1.8	69
75.06		29	480	1.8	81	23	480	1.4	79	19	480	1.2	79
65.63		34	480	2.1	81	26	480	1.6	80	21	480	1.4	79
62.35		35	480	2.2	81	27	480	1.7	80	22	480	1.4	79
54.70		40	480	2.5	82	31	480	1.9	81	26	480	1.6	80
46.40		47	480	2.9	82	37	480	2.3	82	30	480	1.9	81
41.89		53	480	3.2	83	41	480	2.5	82	33	480	2.1	81
36.85		60	475	3.6	83	46	480	2.8	82	38	480	2.3	82
34.80		63	450	3.6	83	49	480	3.0	83	40	480	2.5	82
29.63	27/5	74	395	3.7	84	57	480	3.5	83	47	480	2.9	83
26.93		82	360	3.7	84	63	455	3.6	83	52	480	3.2	83
23.33		94	320	3.8	84	73	405	3.7	84	60	480	3.6	83
20.30		108	280	3.8	84	84	360	3.8	84	69	425	3.7	84
24.44		90	340	3.6	89	70	340	2.8	88	57	340	2.3	88
23.22		95	340	3.8	89	73	340	2.9	89	60	340	2.4	88
20.37		108	340	4.3	89	83	340	3.3	89	69	340	2.8	88
17.28		127	340	5.0	90	98	340	3.9	89	81	340	3.2	89
15.60		141	340	5.6 *	90	109	340	4.3	89	90	340	3.6	89
13.73		160	330	6.1 *	90	124	340	4.9	90	102	340	4.1	89
12.96		170	315	6.2 *	90	131	340	5.2	90	108	340	4.3	89
11.03		199	275	6.3 *	90	154	340	6.1 *	90	127	340	5.0	90
10.03		219	250	6.3 *	91	169	315	6.2 *	90	140	340	5.5	90
8.69		253	220	6.4 *	91	196	280	6.3 *	91	161	335	6.3 *	90
7.56		291	192	6.5 *	91	225	250	6.5 *	91	185	295	6.3 *	91

* P_{emax} = 5.5 kW

1100 - 700 rpm

i_{tot}	i_{worm}	$n_e = 1100 \text{ rpm}$				$n_e = 900 \text{ rpm}$				$n_e = 700 \text{ rpm}$			
		n_a rpm	M_{amax} Nm	P_e kW	η %	n_a rpm	M_{amax} Nm	P_e kW	η %	n_a rpm	M_{amax} Nm	P_e kW	η %
217.41	42/1	5.1	555	0.50	59	4.1	560	0.42	58	3.2	570	0.34	56
190.11		5.8	555	0.56	60	4.7	560	0.47	59	3.7	565	0.38	57
180.60		6.1	555	0.59	61	5.0	555	0.49	59	3.9	565	0.40	57
158.45		6.9	550	0.65	62	5.7	555	0.55	60	4.4	560	0.44	58
134.40		8.2	550	0.75	63	6.7	550	0.63	61	5.2	555	0.51	60
121.33		9.1	550	0.82	63	7.4	550	0.69	62	5.8	555	0.56	60
106.75		10	550	0.92	64	8.4	550	0.77	63	6.6	555	0.62	61
100.80		11	550	0.97	65	8.9	550	0.81	63	6.9	555	0.66	62
85.83		13	550	1.1	66	10	550	0.94	64	8.2	550	0.75	63
78.00		14	550	1.2	66	12	550	1.0	65	9.0	550	0.82	63
67.57	29/2	16	550	1.4	67	13	550	1.2	66	10	550	0.93	64
58.80		19	530	1.5	68	15	550	1.3	67	12	550	1.0	65
75.06		15	525	1.0	77	12	525	0.86	76	9.3	525	0.68	75
65.63		17	525	1.2	78	14	525	0.98	77	11	525	0.77	76
62.35		18	525	1.2	78	14	525	1.0	77	11	525	0.81	76
54.70		20	525	1.4	79	16	525	1.2	78	13	525	0.92	77
46.40		24	525	1.6	80	19	525	1.4	79	15	525	1.1	78
41.89		26	525	1.8	80	21	525	1.5	79	17	525	1.2	78
36.85		30	525	2.0	81	24	525	1.7	80	19	525	1.3	79
34.80		32	525	2.1	81	26	525	1.8	80	20	525	1.4	79
29.63	27/5	37	525	2.5	82	30	525	2.1	81	24	525	1.6	80
26.93		41	525	2.7	82	33	525	2.3	81	26	525	1.8	80
23.33		47	525	3.1	83	39	525	2.6	82	30	525	2.0	81
20.30		54	520	3.5	83	44	525	3.0	82	34	525	2.3	81
24.44		45	355	1.9	87	37	360	1.6	87	29	365	1.3	86
23.22		47	355	2.0	87	39	360	1.7	87	30	365	1.3	86
20.37		54	355	2.3	88	44	355	1.9	87	34	365	1.5	86
17.28		64	355	2.7	88	52	355	2.2	88	41	360	1.8	87
15.60		71	350	2.9	88	58	355	2.4	88	45	355	1.9	87
13.73		80	350	3.3	89	66	355	2.8	88	51	355	2.2	88
12.96		85	350	3.5	89	69	350	2.9	88	54	355	2.3	88
11.03		100	350	4.1	89	82	350	3.4	89	63	355	2.7	88
10.03		110	345	4.4	90	90	350	3.7	89	70	355	2.9	88
8.69		127	345	5.1	90	104	350	4.2	89	81	350	3.3	89
7.56		146	345	5.8 *	90	119	345	4.8	90	93	350	3.8	89

* $P_{emax} = 5.5 \text{ kW}$

500 - 10 rpm

i_{tot}	i_{worm}	$n_e = 500 \text{ rpm}$				$n_e = 250 \text{ rpm}$				$n_e = 10 \text{ rpm}$			
		n_a rpm	M_{amax} Nm	P_e kW	η %	n_a rpm	M_{amax} Nm	P_e kW	η %	n_a rpm	M_{amax} Nm	P_e kW	η %
217.41	42/1	2.3	570	0.25	54	1.1	570	0.13	51	0.05	570	< 0.05	47
190.11		2.6	570	0.29	55	1.3	570	0.15	51	0.05	570	< 0.05	48
180.60		2.8	570	0.30	55	1.4	570	0.16	51	0.06	570	< 0.05	48
158.45		3.2	570	0.34	56	1.6	570	0.18	52	0.06	570	< 0.05	49
134.40		3.7	565	0.38	57	1.9	570	0.21	53	0.07	570	< 0.05	50
121.33		4.1	560	0.42	58	2.1	570	0.23	53	0.08	570	< 0.05	50
106.75		4.7	560	0.47	59	2.3	570	0.26	54	0.09	570	< 0.05	50
100.80		5.0	560	0.49	59	2.5	570	0.27	55	0.10	570	< 0.05	50
85.83		5.8	555	0.56	60	2.9	570	0.31	56	0.12	570	< 0.05	51
78.00		6.4	555	0.61	61	3.2	570	0.34	56	0.13	570	< 0.05	51
67.57		7.4	555	0.69	62	3.7	565	0.38	57	0.15	565	< 0.05	51
58.80		8.5	550	0.78	63	4.3	560	0.43	58	0.17	560	< 0.05	51
75.06	29/2	6.7	570	0.54	73	3.3	570	0.28	70	0.13	570	< 0.05	68
65.63		7.6	570	0.61	74	3.8	570	0.32	71	0.15	570	< 0.05	68
62.35		8.0	570	0.64	74	4.0	570	0.34	71	0.16	570	< 0.05	69
54.70		9.1	570	0.73	75	4.6	570	0.38	71	0.18	570	< 0.05	69
46.40		11	570	0.85	76	5.4	570	0.44	72	0.22	570	< 0.05	69
41.89		12	570	0.93	76	6.0	570	0.49	73	0.24	570	< 0.05	69
36.85		14	570	1.1	77	6.8	570	0.55	73	0.27	570	< 0.05	69
34.80		14	570	1.1	77	7.2	570	0.58	74	0.29	570	< 0.05	69
29.63		17	565	1.3	78	8.4	570	0.68	75	0.34	570	< 0.05	70
26.93		19	565	1.4	79	9.3	570	0.74	75	0.37	570	< 0.05	70
23.33		21	565	1.6	79	11	570	0.84	76	0.43	570	< 0.05	70
20.30		25	565	1.8	80	12	570	0.96	77	0.49	570	< 0.05	70
24.44	27/5	20	365	0.93	85	10	355	0.46	82	0.41	355	0.019	80
23.22		22	365	0.97	85	11	355	0.49	82	0.43	355	< 0.05	80
20.37		25	380	1.1	85	12	365	0.57	83	0.49	365	< 0.05	80
17.28		29	365	1.3	86	14	435	0.79	83	0.58	435	< 0.05	81
15.60		32	365	1.4	86	16	430	0.86	84	0.64	430	< 0.05	81
13.73		36	365	1.6	87	18	415	0.94	84	0.73	415	< 0.05	81
12.96		39	360	1.7	87	19	410	0.98	84	0.77	410	< 0.05	81
11.03		45	355	1.9	87	23	390	1.1	85	0.91	390	< 0.05	81
10.03		50	355	2.1	88	25	380	1.2	85	1.0	380	< 0.05	81
8.69		58	355	2.4	88	29	370	1.3	86	1.2	370	0.06	81
7.56		66	355	2.8	88	33	365	1.5	86	1.3	365	0.06	81

11.10 Technical data S. SF. SA. SAF 77

3400 - 2800 rpm

i _{tot}	i _{worm}	n _e = 3400 rpm				n _e = 3200 rpm				n _e = 2800 rpm			
		n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %
256.47	40/1	13	1160	2.3	71	12	1160	2.1	71	11	1160	1.9	70
225.26		15	1130	2.5	72	14	1150	2.4	71	12	1160	2.1	71
214.00		16	1110	2.6	72	15	1140	2.5	71	13	1160	2.2	71
189.09		18	1080	2.8	72	17	1100	2.7	72	15	1140	2.5	71
161.60		21	1040	3.1	73	20	1050	3.0	73	17	1090	2.7	72
148.15		23	1010	3.3	73	22	1030	3.2	73	19	1070	2.9	73
130.00		26	970	3.6	74	25	990	3.5	74	22	1030	3.2	73
123.20		28	950	3.7	74	26	970	3.6	74	23	1010	3.3	73
107.83		32	900	4.0	74	30	920	3.9	74	26	970	3.6	74
97.14		35	860	4.2	75	33	880	4.1	74	29	930	3.8	74
85.22		40	770	4.3	75	38	820	4.3	75	33	880	4.1	75
75.20		45	675	4.3	74	43	725	4.3	75	37	830	4.3	75
66.67		51	585	4.2	74	48	635	4.3	75	42	745	4.4	75
56.92		60	485	4.1	73	56	530	4.2	74	49	635	4.4	75
75.09	40/3	45	1020	5.6	86	43	1020	5.3	86	37	1020	4.6	86
71.33		48	1020	5.9	87	45	1020	5.5	86	39	1020	4.9	86
63.03		54	1020	6.6	87	51	1020	6.2	87	44	1020	5.5	86
53.87		63	980	7.4	87	59	1000	7.1	87	52	1020	6.4	87
49.38		69	950	7.8	87	65	970	7.5	87	57	1010	6.9	87
43.33		78	910	8.5	88	74	930	8.2	88	65	970	7.5	87
41.07		83	900	8.9	88	78	910	8.5	88	68	950	7.8	87
35.94		95	800	9.0	88	89	850	9.0	88	78	910	8.5	88
32.38		105	725	9.1	88	99	770	9.1	88	86	880	9.1	88
28.41		120	635	9.1	88	113	680	9.1	88	99	780	9.1	88
25.07		136	560	9.1	88	128	600	9.1	88	112	695	9.2	88
22.22		153	485	8.9	88	144	525	9.0	88	126	615	9.2	88
18.97		179	395	8.5	87	169	440	8.9	88	148	520	9.1	88
22.89	34/6	149	590	10.0 *	91	140	590	9.5 *	91	122	590	8.3	91
20.99		162	590	10.9 *	92	152	590	10.3 *	92	133	590	9.0	91
18.42		185	590	12.4 *	92	174	590	11.7 *	92	152	590	10.3 *	92
17.45		195	590	13.1 *	92	183	590	12.4 *	92	160	590	10.8 *	92
15.28		223	530	13.5 *	92	209	560	13.4 *	92	183	590	12.3 *	92
13.76		247	480	13.5 *	92	233	505	13.4 *	92	203	585	13.6 *	92
12.07		282	415	13.3 *	92	265	445	13.4 *	92	232	515	13.6 *	92
10.65		319	365	13.3 *	92	300	390	13.4 *	92	263	455	13.6 *	92
9.44		360	315	13.0 *	92	339	345	13.3 *	92	297	405	13.7 *	92
8.06		422	260	12.6 *	91	397	285	12.9 *	92	347	340	13.5 *	92

* P_{emax} = 9.2 kW

2200 - 1400 rpm

i _{tot}	i _{worm}	n _e = 2200 rpm				n _e = 1700 rpm				n _e = 1400 rpm			
		n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %
256.47	40/1	8.6	1260	1.6	69	6.6	1270	1.3	67	5.5	1270	1.1	66
225.26		9.8	1230	1.8	69	7.5	1270	1.5	68	6.2	1270	1.2	67
214.00		10	1220	1.9	70	7.9	1270	1.6	68	6.5	1270	1.3	67
189.09		12	1200	2.1	70	9.0	1240	1.7	69	7.4	1270	1.5	68
161.60		14	1160	2.3	71	11	1220	1.9	70	8.7	1260	1.7	69
148.15		15	1140	2.5	72	11	1200	2.1	70	9.4	1240	1.8	69
130.00		17	1100	2.7	72	13	1170	2.3	71	11	1210	1.9	70
123.20		18	1080	2.8	73	14	1150	2.3	71	11	1200	2.0	70
107.83		20	1040	3.0	73	16	1110	2.5	72	13	1170	2.2	71
97.14		23	1010	3.3	74	18	1090	2.8	73	14	1140	2.4	72
85.22		26	970	3.5	74	20	1050	3.0	73	16	1100	2.6	72
75.20		29	920	3.8	74	23	1010	3.2	74	19	1070	2.9	73
66.67		33	880	4.1	75	25	970	3.5	74	21	1040	3.1	73
56.92		39	830	4.5	75	30	920	3.9	75	25	990	3.4	74
75.09	40/3	29	1100	4.0	85	23	1100	3.1	84	19	1100	2.6	83
71.33		31	1100	4.2	85	24	1100	3.2	85	20	1100	2.7	84
63.03		35	1100	4.7	86	27	1100	3.7	85	22	1100	3.0	84
53.87		41	1100	5.5	86	32	1100	4.3	86	26	1100	3.5	85
49.38		45	1080	5.8	87	34	1100	4.6	86	28	1100	3.8	85
43.33		51	1050	6.4	87	39	1100	5.2	86	32	1100	4.3	86
41.07		54	1030	6.6	87	41	1100	5.5	86	34	1100	4.6	86
35.94		61	980	7.2	87	47	1060	6.1	87	39	1100	5.2	86
32.38		68	960	7.8	88	53	1040	6.6	87	43	1090	5.7	87
28.41		77	920	8.5	88	60	990	7.1	87	49	1050	6.2	87
25.07		88	870	9.1	88	68	960	7.8	88	56	1020	6.8	87
22.22		99	790	9.3 *	88	77	920	8.4	88	63	980	7.4	87
18.97		116	680	9.4 *	88	90	860	9.2	88	74	930	8.2	88
22.89	34/6	96	710	7.9	91	74	705	6.1	90	61	705	5.0	90
20.99		105	710	8.6	91	81	705	6.6	91	67	705	5.5	90
18.42		119	720	9.9 *	91	92	710	7.6	91	76	705	6.2	90
17.45		126	720	10.4 *	91	97	710	8.0	91	80	710	6.6	91
15.28		144	720	11.9 *	92	111	720	9.2	91	92	710	7.5	91
13.76		160	725	13.2 *	92	124	720	10.2 *	91	102	710	8.3	91
12.07		182	650	13.5 *	92	141	725	11.7 *	92	116	720	9.6 *	91
10.65		207	580	13.6 *	92	160	725	13.2 *	92	131	720	10.8 *	92
9.44		233	520	13.8 *	92	180	655	13.4 *	92	148	725	12.3 *	92
8.06		273	445	13.8 *	92	211	575	13.8 *	92	174	680	13.5 *	92

* P_{emax} = 9.2 kW

1100 - 700 rpm

i _{tot}	i _{worm}	n _e = 1100 rpm				n _e = 900 rpm				n _e = 700 rpm			
		n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %
256.47	40/1	4.3	1270	0.89	64	3.5	1270	0.75	63	2.7	1270	0.60	61
225.26		4.9	1270	1.0	65	4.0	1270	0.84	63	3.1	1270	0.67	62
214.00		5.1	1270	1.0	65	4.2	1270	0.88	64	3.3	1270	0.70	62
189.09		5.8	1270	1.2	66	4.8	1270	0.98	65	3.7	1270	0.78	63
161.60		6.8	1270	1.3	67	5.6	1270	1.1	66	4.3	1270	0.90	64
148.15		7.4	1270	1.5	68	6.1	1270	1.2	66	4.7	1270	0.97	65
130.00		8.5	1260	1.6	69	6.9	1270	1.4	67	5.4	1270	1.1	66
123.20		8.9	1250	1.7	69	7.3	1270	1.4	68	5.7	1270	1.1	66
107.83		10	1220	1.9	70	8.3	1260	1.6	69	6.5	1270	1.3	67
97.14		11	1200	2.0	70	9.3	1250	1.8	69	7.2	1270	1.4	68
85.22		13	1170	2.2	71	11	1220	1.9	70	8.2	1270	1.6	69
75.20		15	1140	2.4	72	12	1190	2.1	71	9.3	1250	1.8	69
66.67		16	1110	2.6	72	13	1160	2.3	71	10	1220	1.9	70
56.92		19	1060	2.9	73	16	1120	2.6	72	12	1190	2.2	71
75.09	40/3	15	1120	2.1	83	12	1130	1.7	82	9.3	1170	1.4	81
71.33		15	1120	2.2	83	13	1130	1.8	82	9.8	1120	1.4	81
63.03		17	1120	2.5	83	14	1120	2.0	82	11	1130	1.6	81
53.87		20	1120	2.9	84	17	1120	2.4	83	13	1120	1.9	82
49.38		22	1120	3.1	84	18	1120	2.6	83	14	1120	2.0	82
43.33		25	1130	3.5	85	21	1120	2.9	84	16	1120	2.3	83
41.07		27	1130	3.7	85	22	1120	3.1	84	17	1120	2.4	83
35.94		31	1150	4.3	85	25	1130	3.5	85	19	1120	2.7	84
32.38		34	1130	4.7	86	28	1130	3.9	85	22	1120	3.0	84
28.41		39	1110	5.2	86	32	1150	4.5	86	25	1130	3.4	85
25.07		44	1080	5.7	87	36	1120	4.9	86	28	1130	3.9	85
22.22		50	1050	6.3	87	41	1100	5.4	86	32	1150	4.4	86
18.97		58	1010	7.0	87	47	1060	6.1	87	37	1120	5.0	86
22.89	34/6	48	695	3.9	89	39	695	3.2	89	31	705	2.6	88
20.99		52	705	4.3	90	43	695	3.5	89	33	705	2.8	88
18.42		60	700	4.9	90	49	700	4.0	89	38	700	3.1	89
17.45		63	700	5.1	90	52	700	4.2	90	40	700	3.3	89
15.28		72	710	5.9	90	59	700	4.8	90	46	700	3.8	89
13.76		80	710	6.6	91	65	700	5.3	90	51	700	4.2	90
12.07		91	710	7.5	91	75	710	6.1	90	58	700	4.7	90
10.65		103	715	8.5	91	85	710	6.9	91	66	710	5.4	90
9.44		117	720	9.6 *	91	95	715	7.8	91	74	710	6.1	90
8.06		136	725	11.3 *	92	112	720	9.2	91	87	710	7.1	91

* P_{emax} = 9.2 kW

500 - 10 rpm

i_{tot}	i_{worm}	$n_e = 500 \text{ rpm}$				$n_e = 250 \text{ rpm}$				$n_e = 10 \text{ rpm}$			
		n_a rpm	M_{amax} Nm	P_e kW	η %	n_a rpm	M_{amax} Nm	P_e kW	η %	n_a rpm	M_{amax} Nm	P_e kW	η %
256.47	40/1	1.9	1270	0.44	59	0.97	1270	0.23	56	0.04	1270	< 0.05	54
225.26		2.2	1270	0.49	60	1.1	1270	0.26	56	0.04	1270	< 0.05	55
214.00		2.3	1270	0.52	60	1.2	1270	0.28	56	0.05	1270	< 0.05	55
189.09		2.6	1270	0.58	61	1.3	1270	0.31	57	0.05	1270	< 0.05	55
161.60		3.1	1270	0.67	62	1.5	1270	0.36	58	0.06	1270	< 0.05	55
148.15		3.4	1270	0.72	62	1.7	1270	0.39	58	0.07	1270	< 0.05	55
130.00		3.8	1270	0.81	63	1.9	1270	0.43	59	0.08	1270	< 0.05	55
123.20		4.1	1270	0.85	64	2.0	1270	0.46	59	0.08	1270	< 0.05	55
107.83		4.6	1270	0.95	65	2.3	1270	0.51	60	0.09	1270	< 0.05	56
97.14		5.1	1270	1.0	65	2.6	1270	0.56	61	0.10	1270	< 0.05	56
85.22		5.9	1270	1.2	66	2.9	1270	0.63	62	0.12	1270	< 0.05	56
75.20		6.6	1270	1.3	67	3.3	1270	0.71	62	0.13	1270	< 0.05	56
66.67		7.5	1270	1.5	68	3.7	1270	0.79	63	0.15	1270	< 0.05	56
56.92		8.8	1260	1.7	69	4.4	1270	0.91	64	0.18	1270	< 0.05	56
75.09	40/3	6.7	1160	1.0	79	3.3	1120	0.51	76	0.13	1120	< 0.05	75
71.33		7.0	1110	1.0	79	3.5	1060	0.51	77	0.14	1060	< 0.05	75
63.03		7.9	1230	1.3	80	4.0	1200	0.65	77	0.16	1200	< 0.05	76
53.87		9.3	1180	1.4	81	4.6	1240	0.77	78	0.19	1240	< 0.05	76
49.38		10	1160	1.5	81	5.1	1240	0.84	78	0.20	1240	< 0.05	76
43.33		12	1120	1.7	82	5.8	1240	0.95	79	0.23	1240	< 0.05	76
41.07		12	1120	1.7	82	6.1	1240	1.0	79	0.24	1240	< 0.05	76
35.94		14	1120	2.0	82	7.0	1240	1.1	79	0.28	1240	< 0.05	76
32.38		15	1120	2.2	83	7.7	1240	1.3	80	0.31	1240	0.05	76
28.41		18	1120	2.5	83	8.8	1190	1.4	80	0.35	1190	0.06	76
25.07		20	1120	2.8	84	10	1170	1.5	81	0.40	1170	0.06	76
22.22		23	1130	3.2	84	11	1130	1.6	81	0.45	1130	0.07	76
18.97		26	1130	3.7	85	13	1120	1.9	82	0.53	1120	0.08	76
22.89	34/6	22	690	1.8	87	11	675	0.91	85	0.44	675	< 0.05	83
20.99		24	725	2.1	87	12	740	1.1	85	0.48	740	< 0.05	83
18.42		27	705	2.3	88	14	830	1.4	86	0.54	830	0.06	83
17.45		29	705	2.4	88	14	810	1.4	86	0.57	810	0.06	83
15.28		33	705	2.7	88	16	785	1.6	86	0.65	785	0.06	83
13.76		36	695	3.0	89	18	770	1.7	87	0.73	770	0.07	83
12.07		41	695	3.4	89	21	750	1.9	87	0.83	750	0.08	83
10.65		47	695	3.8	89	23	725	2.0	87	0.94	725	0.09	83
9.44		53	705	4.4	90	26	705	2.2	88	1.1	705	0.09	83
8.06		62	705	5.1	90	31	705	2.6	88	1.2	705	0.11	83

11.11 Technical data S. SF. SA. SAF 87

3400 - 2800 rpm

i _{tot}	i _{worm}	n _e = 3400 rpm				n _e = 3200 rpm				n _e = 2800 rpm			
		n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %
288.00	40/1	12	2030	3.4	74	11	2070	3.3	73	9.7	2070	2.9	73
258.18		13	1990	3.7	74	12	2010	3.5	74	11	2070	3.2	73
222.40		15	1910	4.1	75	14	1950	4.0	74	13	2010	3.6	74
202.96		17	1850	4.3	75	16	1890	4.2	75	14	1970	3.8	74
180.00		19	1800	4.7	75	18	1830	4.5	75	16	1910	4.2	75
151.30		22	1690	5.3	75	21	1730	5.1	75	19	1800	4.6	75
139.05		24	1630	5.5	76	23	1680	5.4	76	20	1760	4.9	75
123.48		28	1570	6.0	76	26	1600	5.7	76	23	1690	5.3	76
110.40		31	1430	6.1	76	29	1540	6.2	76	25	1620	5.7	76
99.26		34	1260	6.0	75	32	1380	6.2	76	28	1550	6.0	76
86.15		39	1030	5.8	74	37	1150	6.0	75	33	1390	6.2	76
77.14		44	830	5.3	72	41	970	5.7	74	36	1220	6.1	76
64.00	38/3	53	500	4.3	65	50	620	4.7	68	44	960	5.9	75
91.20		37	1470	6.6	88	35	1470	6.2	87	31	1470	5.4	87
81.76		42	1470	7.3	88	39	1470	6.9	88	34	1470	6.0	87
70.43		48	1470	8.4	88	45	1470	7.9	88	40	1470	7.0	88
64.27		53	1470	9.2	88	50	1470	8.7	88	44	1470	7.6	88
57.00		60	1470	10.4	88	56	1470	9.8	88	49	1470	8.6	88
47.91		71	1470	12.3	89	67	1470	11.6	89	58	1470	10.2	88
44.03		77	1470	13.4	89	73	1470	12.6	89	64	1470	11.0	89
39.10		87	1300	13.3	89	82	1400	13.5	89	72	1470	12.4	89
34.96		97	1140	13.1	89	92	1240	13.4	89	80	1440	13.6	89
31.43		108	1000	12.8	88	102	1090	13.1	89	89	1290	13.5	89
27.28		125	810	12.1	88	117	910	12.7	88	103	1110	13.4	89
24.43	34/6	139	660	112-13 2S	87	131	775	12.1	88	115	960	13.0	89
20.27		168	395	8.4	82	158	490	9.6	84	138	755	12.4	88
25.50		133	990	15.0	92	125	990	14.1	92	110	990	12.4	92
21.43		159	990	17.8 *	92	149	990	16.8 *	92	131	990	14.7	92
19.70		173	990	19 *	92	162	990	18.3 *	92	142	990	16.0 *	92
17.49		194	870	19 *	92	183	930	19 *	92	160	990	18.0 *	92
15.64		217	760	19 *	92	205	830	19 *	92	179	960	19 *	92
14.06		242	660	18.2 *	92	228	725	19 *	92	199	860	19 *	92
12.21		278	540	17.2 *	91	262	605	18.1 *	92	229	730	19 *	92
10.93		311	440	15.8 *	90	293	510	17.1 *	91	256	645	19 *	92
9.07		375	255	11.5	87	353	325	13.5	89	309	500	17.7 *	92
7.88		431	200	10.5	86	406	230	11.3	87	355	375	15.5 *	90

* P_{emax} = 15 kW

2200 - 1400 rpm

i _{tot}	i _{worm}	n _e = 2200 rpm				n _e = 1700 rpm				n _e = 1400 rpm			
		n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %
288.00	40/1	7.6	2210	2.5	71	5.9	2280	2.0	70	4.9	2280	1.7	69
258.18		8.5	2170	2.7	72	6.6	2260	2.2	71	5.4	2280	1.9	69
222.40		9.9	2130	3.0	73	7.6	2210	2.5	71	6.3	2280	2.1	70
202.96		11	2080	3.2	73	8.4	2190	2.7	72	6.9	2260	2.3	71
180.00		12	2020	3.5	74	9.4	2130	2.9	73	7.8	2210	2.5	72
151.30		15	1940	4.0	75	11	2060	3.3	74	9.3	2150	2.9	73
139.05		16	1880	4.2	75	12	2020	3.5	74	10	2100	3.0	73
123.48		18	1820	4.5	75	14	1960	3.8	74	11	2060	3.3	74
110.40		20	1770	4.9	76	15	1900	4.1	75	13	2000	3.6	74
99.26		22	1700	5.2	76	17	1840	4.4	75	14	1960	3.9	75
86.15		26	1620	5.7	76	20	1770	4.8	76	16	1880	4.3	75
77.14		29	1540	6.0	76	22	1700	5.2	76	18	1820	4.6	76
64.00	38/3	34	1360	6.4	77	27	1580	5.7	77	22	1700	5.1	76
91.20		24	1540	4.5	87	19	1520	3.5	86	15	1510	2.9	85
81.76		27	1600	5.2	87	21	1600	4.0	86	17	1600	3.4	86
70.43		31	1600	6.0	87	24	1600	4.7	87	20	1600	3.9	86
64.27		34	1600	6.6	88	26	1600	5.1	87	22	1600	4.2	86
57.00		39	1600	7.4	88	30	1600	5.7	87	25	1600	4.8	87
47.91		46	1600	8.7	88	35	1600	6.8	88	29	1600	5.6	87
44.03		50	1600	9.5	88	39	1600	7.4	88	32	1600	6.1	87
39.10		56	1600	10.6	89	43	1600	8.3	88	36	1600	6.8	88
34.96		63	1600	11.9	89	49	1600	9.2	88	40	1600	7.6	88
31.43		70	1600	13.2	89	54	1600	10.2	89	45	1600	8.5	88
27.28		81	1450	13.7	89	62	1600	11.7	89	51	1600	9.7	89
24.43	34/6	90	1310	13.8	89	70	1600	13.1	89	57	1600	10.8	89
20.27		109	1080	13.8	89	84	1420	14.0	89	69	1600	13.0	89
25.50		86	1240	12.2	92	67	1240	9.5	91	55	1240	7.8	91
21.43		103	1240	14.5	92	79	1240	11.2	92	65	1240	9.3	91
19.70		112	1240	15.7 *	92	86	1240	12.2	92	71	1240	10.1	91
17.49		126	1240	17.7 *	92	97	1240	13.7	92	80	1240	11.3	92
15.64		141	1230	20 *	92	109	1240	15.3 *	92	90	1240	12.7	92
14.06		156	1110	20 *	92	121	1240	17.0 *	92	100	1240	14.1	92
12.21		180	970	20 *	93	139	1240	20 *	92	115	1240	16.1 *	92
10.93		201	870	20 *	93	156	1130	20 *	93	128	1240	18.0 *	92
9.07		243	720	20 *	92	187	950	20 *	93	154	1140	20 *	93
7.88		279	605	19 *	92	216	830	20 *	93	178	1010	20 *	93

* P_{emax} = 15 kW

1100 - 700 rpm

i _{tot}	i _{worm}	n _e = 1100 rpm				n _e = 900 rpm				n _e = 700 rpm			
		n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %
288.00	40/1	3.8	2400	1.4	67	3.1	2450	1.2	66	2.4	2480	0.98	64
258.18		4.3	2380	1.6	68	3.5	2430	1.3	67	2.7	2470	1.1	65
222.40		4.9	2350	1.8	69	4.0	2400	1.5	68	3.1	2450	1.2	66
202.96		5.4	2330	1.9	70	4.4	2380	1.6	68	3.4	2430	1.3	67
180.00		6.1	2280	2.1	70	5.0	2350	1.8	69	3.9	2400	1.4	68
151.30		7.3	2240	2.4	71	5.9	2310	2.0	70	4.6	2350	1.7	69
139.05		7.9	2190	2.5	72	6.5	2260	2.2	71	5.0	2330	1.8	69
123.48		8.9	2150	2.8	73	7.3	2240	2.4	71	5.7	2310	2.0	70
110.40		10	2110	3.0	73	8.2	2190	2.6	72	6.3	2280	2.1	71
99.26		11	2070	3.3	74	9.1	2150	2.8	73	7.1	2240	2.3	71
86.15		13	2000	3.6	74	10	2090	3.1	73	8.1	2190	2.6	72
77.14		14	1940	3.9	75	12	2040	3.4	74	9.1	2150	2.8	73
64.00		17	1840	4.4	76	14	1960	3.9	75	11	2070	3.2	74
91.20	38/3	12	1490	2.2	84	9.9	1480	1.8	83	7.7	1460	1.4	82
81.76		13	1760	2.9	85	11	1760	2.4	84	8.6	1760	1.9	83
70.43		16	1760	3.4	85	13	1760	2.8	85	9.9	1760	2.2	83
64.27		17	1760	3.7	86	14	1760	3.0	85	11	1760	2.4	84
57.00		19	1760	4.1	86	16	1760	3.4	85	12	1760	2.7	84
47.91		23	1760	4.9	87	19	1760	4.0	86	15	1760	3.2	85
44.03		25	1760	5.3	87	20	1760	4.4	86	16	1760	3.4	85
39.10		28	1760	6.0	87	23	1760	4.9	87	18	1760	3.9	86
34.96		31	1760	6.6	88	26	1760	5.5	87	20	1760	4.3	86
31.43		35	1760	7.4	88	29	1760	6.1	87	22	1760	4.7	87
27.28		40	1760	8.4	88	33	1760	6.9	88	26	1760	5.4	87
24.43		45	1760	9.4	88	37	1760	7.7	88	29	1760	6.0	87
20.27		54	1760	11.3	89	44	1760	9.3	88	35	1760	7.2	88
25.50	34/6	43	1340	6.7	90	35	1340	5.5	90	27	1340	4.3	89
21.43		51	1340	7.9	91	42	1340	6.5	90	33	1340	5.1	90
19.70		56	1340	8.6	91	46	1340	7.1	91	36	1340	5.5	90
17.49		63	1340	9.7	91	51	1340	7.9	91	40	1340	6.2	90
15.64		70	1340	10.8	92	58	1340	8.9	91	45	1340	6.9	91
14.06		78	1340	12.0	92	64	1340	9.8	91	50	1340	7.7	91
12.21		90	1340	13.8	92	74	1340	11.3	92	57	1340	8.8	91
10.93		101	1340	15.3 *	92	82	1340	12.6	92	64	1340	9.8	91
9.07		121	1340	18.4 *	92	99	1340	15.1 *	92	77	1340	11.8	92
7.88		140	1260	20 *	93	114	1340	17.4 *	92	89	1340	13.6	92

* P_{emax} = 15 kW

500 - 10 rpm

i _{tot}	i _{worm}	n _e = 500 rpm				n _e = 250 rpm				n _e = 10 rpm			
		n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %
288.00	40/1	1.7	2500	0.73	62	0.87	2500	0.38	59	0.03	2500	< 0.05	58
258.18		1.9	2500	0.80	63	0.97	2500	0.43	59	0.04	2500	< 0.05	58
222.40		2.2	2500	0.92	64	1.1	2500	0.49	60	0.04	2500	< 0.05	59
202.96		2.5	2480	0.99	64	1.2	2500	0.53	61	0.05	2500	< 0.05	59
180.00		2.8	2480	1.1	65	1.4	2500	0.60	61	0.06	2500	< 0.05	59
151.30		3.3	2430	1.3	67	1.7	2500	0.70	62	0.07	2500	< 0.05	59
139.05		3.6	2430	1.4	67	1.8	2500	0.75	63	0.07	2500	< 0.05	59
123.48		4.0	2400	1.5	68	2.0	2500	0.84	63	0.08	2500	< 0.05	59
110.40		4.5	2380	1.6	69	2.3	2500	0.93	64	0.09	2500	< 0.05	59
99.26		5.0	2330	1.8	69	2.5	2470	1.0	65	0.10	2470	< 0.05	59
86.15		5.8	2310	2.0	70	2.9	2450	1.1	66	0.12	2450	0.05	59
77.14		6.5	2260	2.2	71	3.2	2430	1.2	66	0.13	2430	0.06	59
64.00	38/3	7.8	2220	2.5	72	3.9	2400	1.5	68	0.16	2400	0.07	59
91.20		5.5	1450	1.0	81	2.7	1390	0.51	79	0.11	1390	< 0.05	78
81.76		6.1	1960	1.5	82	3.1	1880	0.76	79	0.12	1880	< 0.05	78
70.43		7.1	1980	1.8	82	3.5	1980	0.92	80	0.14	1980	< 0.05	79
64.27		7.8	1980	2.0	83	3.9	1980	1.0	80	0.16	1980	< 0.05	79
57.00		8.8	1980	2.2	83	4.4	1980	1.1	80	0.18	1980	< 0.05	79
47.91		10	1980	2.6	84	5.2	1980	1.3	81	0.21	1980	0.06	79
44.03		11	1980	2.8	84	5.7	1980	1.4	81	0.23	1980	0.06	79
39.10		13	1980	3.1	85	6.4	1980	1.6	82	0.26	1980	0.07	79
34.96		14	1980	3.5	85	7.2	1980	1.8	82	0.29	1980	0.08	79
31.43		16	1980	3.9	85	8.0	1980	2.0	83	0.32	1980	0.08	79
27.28		18	1980	4.4	86	9.2	1980	2.3	83	0.37	1980	0.10	79
24.43	34/6	20	1980	4.9	86	10	1980	2.5	84	0.41	1980	0.11	79
20.27		25	1980	5.9	87	12	1980	3.0	85	0.49	1980	0.13	79
25.50		20	1430	3.3	88	9.8	1390	1.6	87	0.39	1390	0.07	85
21.43		23	1420	3.9	89	12	1510	2.1	87	0.47	1510	0.09	85
19.70		25	1410	4.2	89	13	1570	2.4	87	0.51	1570	0.10	85
17.49		29	1390	4.6	89	14	1570	2.7	88	0.57	1570	0.11	85
15.64		32	1390	5.2	90	16	1540	2.9	88	0.64	1540	0.12	85
14.06		36	1390	5.7	90	18	1510	3.2	88	0.71	1510	0.13	85
12.21		41	1390	6.6	90	20	1460	3.5	89	0.82	1460	0.15	85
10.93		46	1390	7.3	91	23	1430	3.9	89	0.91	1430	0.16	85
9.07		55	1410	8.9	91	28	1390	4.5	89	1.1	1390	0.19	85
7.88		63	1410	10.3	91	32	1390	5.1	90	1.3	1390	0.22	85

11.12 Technical data S. SF. SA. SAF 97

3400 - 2800 rpm

i_{tot}	i_{worm}	$n_e = 3400 \text{ rpm}$				$n_e = 3200 \text{ rpm}$				$n_e = 2800 \text{ rpm}$			
		n_a rpm	M_{amax} Nm	P_e kW	η %	n_a rpm	M_{amax} Nm	P_e kW	η %	n_a rpm	M_{amax} Nm	P_e kW	η %
286.40	40/1	12	3520	5.8	76	11	3590	5.6	76	9.8	3700	5.0	75
262.22		13	3450	6.2	76	12	3520	5.9	76	11	3630	5.4	75
231.67		15	3310	6.7	76	14	3380	6.4	76	12	3520	5.9	76
196.52		17	3120	7.4	77	16	3210	7.2	76	14	3350	6.6	76
180.95		19	3030	7.8	77	18	3120	7.5	77	15	3250	6.9	76
161.74		21	2910	8.3	77	20	2970	8.0	77	17	3120	7.4	77
145.60		23	2760	8.8	77	22	2850	8.5	77	19	3000	7.9	77
131.85		26	2660	9.4	77	24	2740	9.1	77	21	2880	8.3	77
116.92		29	2320	9.3	76	27	2550	9.5	77	24	2740	8.9	77
105.71		32	1980	8.9	75	30	2210	9.2	76	26	2630	9.5	77
89.60		38	1280	7.3	70	36	1670	8.5	74	31	2210	9.4	77
78.26		43	920	6.4	65	41	1040	6.7	67	36	1770	8.8	75
65.45		52	675	5.9	63	49	775	6.2	64	43	1030	6.8	68
80.85	37/3	42	3150	15.5	89	40	3150	14.6	89	35	3150	12.8	89
71.43		48	3090	17.2	90	45	3150	16.5	89	39	3150	14.5	89
60.59		56	2910	19	90	53	2970	18.3	90	46	3120	16.9	90
55.79		61	2820	20	90	57	2880	19	90	50	3030	17.8	90
49.87		68	2710	22	90	64	2760	21	90	56	2910	19	90
44.89		76	2430	21	90	71	2630	22	90	62	2790	20	90
40.65		84	2170	21	90	79	2350	22	90	69	2680	21	90
36.05		94	1830	20	89	89	2020	21	89	78	2400	22	90
32.60		104	1560	19	89	98	1760	20	89	86	2150	22	90
27.63		123	1010	15.2	86	116	1320	18.2	88	101	1740	21	89
24.13		141	725	12.9	83	133	820	13.6	84	116	1390	19	88
26.39	35/6	129	1750	25 *	93	121	1750	24 *	93	106	1750	21	93
23.59		144	1750	28 *	93	136	1750	27 *	93	119	1750	23 *	93
21.23		160	1750	32 *	93	151	1750	30 *	93	132	1750	26 *	93
19.23		177	1550	31 *	93	166	1680	31 *	93	146	1750	29 *	93
17.05		199	1320	30 *	93	188	1450	31 *	93	164	1730	32 *	93
15.42		220	1110	28 *	92	208	1260	30 *	93	182	1540	31 *	93
13.07		260	725	22	90	245	940	26 *	92	214	1240	30 *	93
11.41		298	515	18.3	88	280	585	19	89	245	1000	28 *	92
9.55		356	375	16.2	87	335	435	17.5	87	293	580	20	89
8.26		412	290	14.7	85	387	335	15.8	86	339	455	18.4	88

* $P_{emax} = 22 \text{ kW}$

2200 - 1400 rpm

i _{tot}	i _{worm}	n _e = 2200 rpm				n _e = 1700 rpm				n _e = 1400 rpm			
		n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %
286.40	40/1	7.7	3920	4.2	74	5.9	4000	3.4	73	4.9	4000	2.9	72
262.22		8.4	3840	4.5	75	6.5	4000	3.7	73	5.3	4000	3.1	72
231.67		9.5	3770	5.0	75	7.3	3960	4.1	74	6.0	4000	3.5	73
196.52		11	3580	5.5	76	8.7	3840	4.7	75	7.1	4000	4.0	74
180.95		12	3510	5.9	76	9.4	3770	4.9	75	7.7	3920	4.3	74
161.74		14	3410	6.4	76	11	3650	5.3	76	8.7	3840	4.7	75
145.60		15	3270	6.8	77	12	3550	5.7	76	9.6	3730	5.0	75
131.85		17	3170	7.2	77	13	3440	6.1	76	11	3650	5.4	76
116.92		19	3020	7.7	77	15	3340	6.6	77	12	3510	5.8	76
105.71		21	2930	8.3	77	16	3210	7.0	77	13	3440	6.2	76
89.60		25	2730	9.1	77	19	3020	7.8	77	16	3240	6.9	77
78.26		28	2540	9.6	78	22	2870	8.4	78	18	3080	7.5	77
65.45	37/3	34	2120	9.7	77	26	2650	9.2	78	21	2900	8.3	78
80.85		27	3300	10.6	89	21	3270	8.2	88	17	3230	6.7	88
71.43		31	3300	12.0	89	24	3300	9.3	88	20	3300	7.7	88
60.59		36	3300	14.1	89	28	3300	10.9	89	23	3300	9.0	88
55.79		39	3270	15.1	89	30	3300	11.8	89	25	3300	9.8	88
49.87		44	3170	16.3	90	34	3300	13.2	89	28	3300	10.9	89
44.89		49	3050	17.5	90	38	3300	14.6	89	31	3300	12.1	89
40.65		54	2950	19	90	42	3230	15.8	90	34	3300	13.3	89
36.05		61	2810	20	90	47	3110	17.1	90	39	3300	15.0	89
32.60		67	2700	21	90	52	2980	18.1	90	43	3200	16.0	90
27.63		80	2390	22	90	62	2810	20	90	51	3010	17.8	90
24.13		91	2060	22	90	70	2670	22	90	58	2870	19	90
26.39	35/6	83	2550	24 *	93	64	2600	19	93	53	2600	15.6	92
23.59		93	2450	26 *	93	72	2600	21	93	59	2600	17.5	93
21.23		104	2380	28 *	93	80	2570	23 *	93	66	2600	19	93
19.23		114	2280	29 *	93	88	2500	25 *	93	73	2600	21	93
17.05		129	2170	31 *	93	100	2400	27 *	93	82	2570	24 *	93
15.42		143	2040	33 *	93	110	2300	28 *	93	91	2470	25 *	93
13.07		168	1720	32 *	93	130	2170	32 *	93	107	2330	28 *	93
11.41		193	1480	32 *	93	149	2000	33 *	93	123	2210	30 *	93
9.55		230	1200	31 *	93	178	1670	33 *	93	147	2040	33 *	94
8.26		266	980	30 *	93	206	1440	33 *	93	169	1770	34 *	94

* P_{emax} = 22 kW

1100 - 700 rpm

i _{tot}	i _{worm}	n _e = 1100 rpm				n _e = 900 rpm				n _e = 700 rpm			
		n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %
286.40	40/1	3.8	4200	2.4	70	3.1	4200	2.0	69	2.4	4200	1.6	68
262.22		4.2	4200	2.6	71	3.4	4200	2.2	70	2.7	4200	1.7	68
231.67		4.7	4200	2.9	72	3.9	4200	2.4	70	3.0	4200	1.9	69
196.52		5.6	4160	3.4	73	4.6	4200	2.8	71	3.6	4200	2.2	70
180.95		6.1	4120	3.6	73	5.0	4200	3.0	72	3.9	4200	2.4	70
161.74		6.8	4030	3.9	74	5.6	4160	3.3	73	4.3	4200	2.7	71
145.60		7.6	3950	4.2	74	6.2	4080	3.6	73	4.8	4200	2.9	72
131.85		8.3	3880	4.5	75	6.8	4030	3.9	74	5.3	4200	3.2	72
116.92		9.4	3760	4.9	75	7.7	3910	4.2	74	6.0	4120	3.5	73
105.71		10	3650	5.3	76	8.5	3840	4.6	75	6.6	4030	3.8	74
89.60		12	3500	5.9	76	10	3690	5.1	76	7.8	3910	4.3	75
78.26		14	3370	6.5	77	12	3580	5.7	76	8.9	3800	4.7	75
65.45		17	3170	7.2	77	14	3400	6.4	77	11	3650	5.4	76
80.85	37/3	14	3230	5.3	87	11	3200	4.3	86	8.7	3170	3.4	85
71.43		15	3600	6.7	87	13	3600	5.5	87	9.8	3600	4.3	86
60.59		18	3600	7.8	88	15	3600	6.4	87	12	3600	5.0	86
55.79		20	3600	8.5	88	16	3600	7.0	87	13	3600	5.5	87
49.87		22	3600	9.4	88	18	3600	7.8	88	14	3600	6.1	87
44.89		25	3600	10.4	88	20	3600	8.6	88	16	3600	6.7	87
40.65		27	3600	11.5	89	22	3600	9.5	88	17	3600	7.4	88
36.05		31	3530	12.7	89	25	3600	10.6	89	19	3600	8.3	88
32.60		34	3420	13.5	89	28	3600	11.7	89	21	3600	9.2	88
27.63		40	3260	15.2	90	33	3460	13.2	89	25	3600	10.8	89
24.13		46	3130	16.6	90	37	3320	14.5	89	29	3560	12.2	89
26.39	35/6	42	2650	12.6	92	34	2620	10.2	92	27	2620	8.0	91
23.59		47	2650	14.0	92	38	2650	11.5	92	30	2620	8.9	91
21.23		52	2650	15.6	92	42	2650	12.8	92	33	2620	9.9	92
19.23		57	2650	17.2	93	47	2650	14.1	92	36	2620	10.9	92
17.05		65	2670	19	93	53	2650	15.9	92	41	2650	12.4	92
15.42		71	2670	21	93	58	2650	17.5	93	45	2650	13.7	92
13.07		84	2540	24 *	93	69	2670	21	93	54	2650	16.1	92
11.41		96	2420	26 *	93	79	2590	23 *	93	61	2650	18.4	93
9.55		115	2280	29 *	93	94	2440	26 *	93	73	2650	22	93
8.26		133	2140	32 *	94	109	2320	28 *	93	85	2540	24 *	93

* P_{emax} = 22 kW

500 - 10 rpm

i _{tot}	i _{worm}	n _e = 500 rpm				n _e = 250 rpm				n _e = 10 rpm			
		n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %	n _a rpm	M _{amax} Nm	P _e kW	η %
286.40	40/1	1.7	4200	1.2	65	0.87	4200	0.62	62	0.03	4200	< 0.05	60
262.22		1.9	4200	1.3	66	0.95	4200	0.68	62	0.04	4200	< 0.05	60
231.67		2.2	4200	1.4	67	1.1	4200	0.76	63	0.04	4200	< 0.05	60
196.52		2.5	4200	1.6	68	1.3	4200	0.88	64	0.05	4200	< 0.05	60
180.95		2.8	4200	1.8	68	1.4	4200	0.95	64	0.06	4200	< 0.05	60
161.74		3.1	4200	2.0	69	1.5	4200	1.1	65	0.06	4200	< 0.05	60
145.60		3.4	4200	2.2	70	1.7	4200	1.2	65	0.07	4200	0.05	60
131.85		3.8	4200	2.4	70	1.9	4200	1.3	66	0.08	4200	0.06	60
116.92		4.3	4200	2.6	71	2.1	4200	1.4	67	0.09	4200	0.06	60
105.71		4.7	4200	2.9	72	2.4	4200	1.5	67	0.09	4200	0.07	60
89.60		5.6	4160	3.3	73	2.8	4200	1.8	69	0.11	4200	0.08	60
78.26		6.4	4080	3.7	74	3.2	4200	2.0	69	0.13	4200	0.09	60
65.45		7.6	3910	4.2	75	3.8	4200	2.4	70	0.15	4200	0.11	60
80.85	37/3	6.2	3110	2.4	84	3.1	3010	1.2	82	0.12	3010	< 0.05	80
71.43		7.0	4200	3.6	85	3.5	4160	1.9	82	0.14	4160	0.08	81
60.59		8.3	4200	4.3	85	4.1	4080	2.1	83	0.17	4080	0.09	81
55.79		9.0	4200	4.6	86	4.5	4200	2.4	83	0.18	4200	0.10	81
49.87		10	4200	5.1	86	5.0	4200	2.6	83	0.20	4200	0.11	81
44.89		11	4160	5.6	86	5.6	4200	2.9	84	0.22	4200	0.12	81
40.65		12	4120	6.1	87	6.2	4200	3.2	84	0.25	4200	0.13	81
36.05		14	4080	6.8	87	6.9	4200	3.6	85	0.28	4200	0.15	81
32.60		15	3990	7.3	87	7.7	4200	4.0	85	0.31	4200	0.17	81
27.63		18	3910	8.4	88	9.0	4200	4.7	86	0.36	4200	0.20	81
24.13		21	3800	9.3	88	10	4200	5.3	86	0.41	4200	0.23	81
26.39	35/6	19	2590	5.7	90	9.5	2540	2.8	89	0.38	2540	0.12	87
23.59		21	2590	6.3	91	11	2540	3.2	89	0.42	2540	0.13	87
21.23		24	2590	7.0	91	12	2570	3.6	89	0.47	2570	0.15	87
19.23		26	2620	7.8	91	13	2570	3.9	89	0.52	2570	0.16	87
17.05		29	2620	8.8	91	15	2570	4.4	90	0.59	2570	0.18	87
15.42		32	2620	9.7	92	16	2570	4.8	90	0.65	2570	0.20	87
13.07		38	2650	11.6	92	19	2590	5.7	90	0.77	2590	0.24	87
11.41		44	2650	13.2	92	22	2590	6.6	91	0.88	2590	0.27	87
9.55		52	2650	15.7	92	26	2620	7.9	91	1.0	2620	0.33	87
8.26		61	2650	18.1	93	30	2620	9.1	91	1.2	2620	0.38	87