

Technical data

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Bevel gearboxes GKR□□

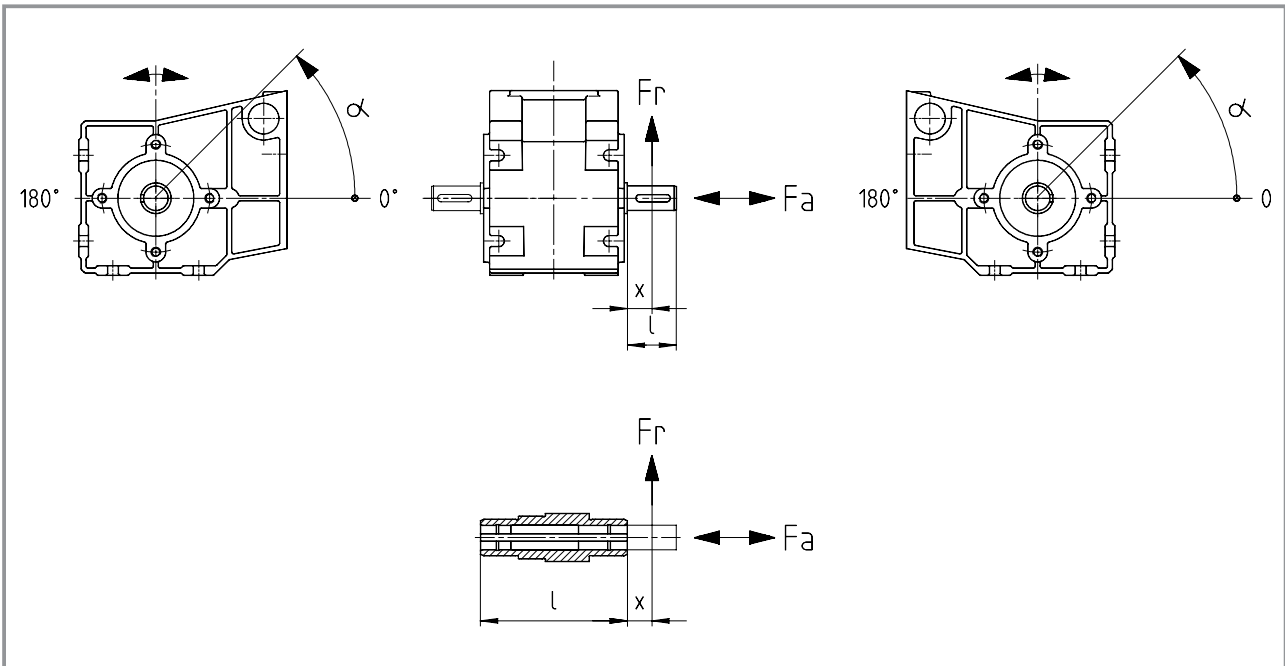
Permissible radial force

$$F_{rperm} = \min(f_w \cdot f_\alpha \cdot F_{rTab}; f_w \cdot F_{rmax})$$

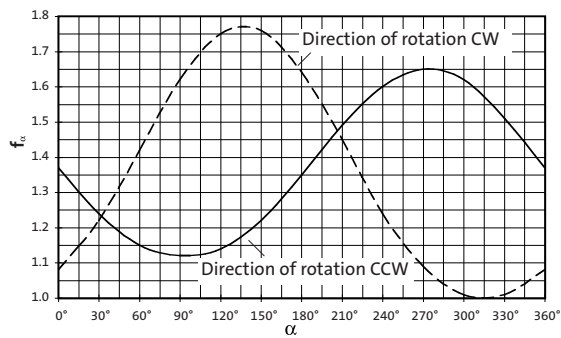
Permissible axial force

$$F_{aperm} = F_{aTab} \quad \text{at } F_r = 0$$

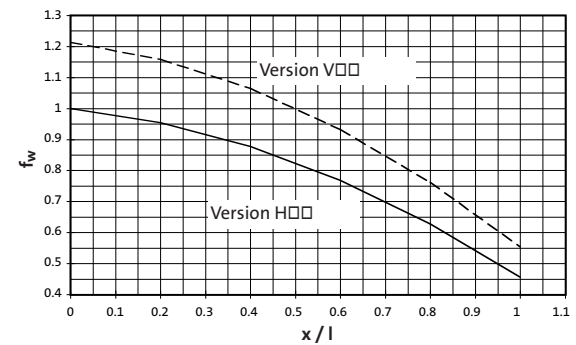
Contact Lenze if F_r and $F_a \neq 0$



f_α Effective direction factor at output shaft



f_w Additional load factor at output shaft



Technical data - Bevel gearboxes

Permissible radial and axial forces - Output



H□□	Hollow shaft Application of force F_r : At hollow shaft end face ($x = 0$) F_{aTab} only valid for $F_r = 0$					
	GKR04		GKR05		GKR06	
n_2 [rpm]	F_{rTab} [N]	F_{aTab} [N]	F_{rTab} [N]	F_{aTab} [N]	F_{rTab} [N]	F_{aTab} [N]
400	2550	1275	3800	1900	5000	2500
250	3000	1500	4500	2200	5200	2600
160	3300	1650	5100	2500	5500	2750
100	3600	1800	6200	3100	7000	3500
63	3600	1800	7400	3700	9000	4500
40	3600	1800	7800	3900	10000	5000
25	3600	1800	7800	3900	10000	5000
≤ 16	3600	1800	7800	3900	10000	5000
F_{rmax}	3600	–	7800	–	10000	–

V□□	Solid shaft Application of force F_r : Centre of shaft journal ($x = l/2$) F_{aTab} only valid for $F_r = 0$					
	GKR04		GKR05		GKR06	
n_2 [rpm]	F_{rTab} [N]	F_{aTab} [N]	F_{rTab} [N]	F_{aTab} [N]	F_{rTab} [N]	F_{aTab} [N]
400	2100	1275	3000	1900	4000	2500
250	2500	1500	3600	2200	4200	2600
160	2700	1650	4500	2500	4500	2750
100	3000	1800	5000	3100	5600	3500
63	3000	1800	6000	3700	7300	4500
40	3000	1800	6500	3900	8600	5000
25	3000	1800	6500	3900	9000	5000
≤ 16	3000	1800	6500	3900	9000	5000
F_{rmax}	3000	–	6500	–	9000	–

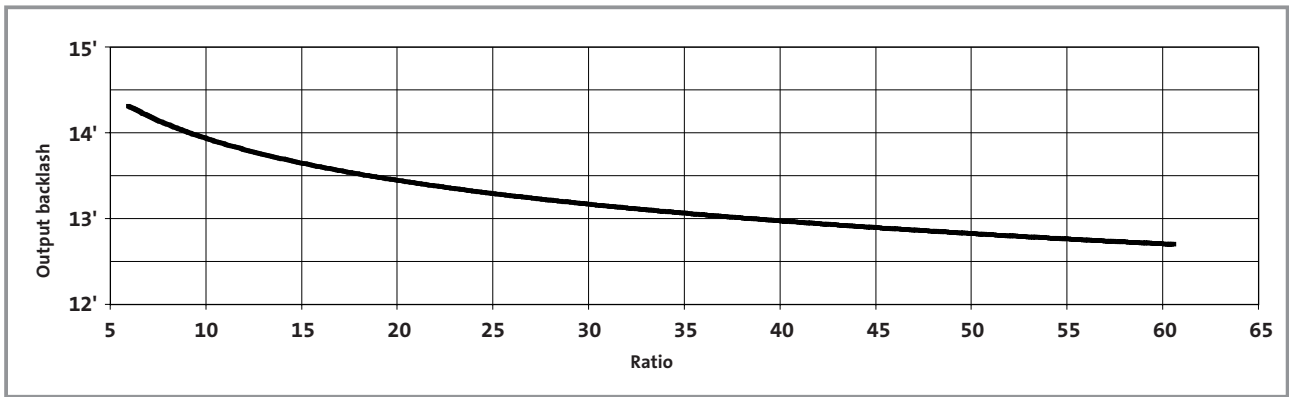
VAK	Solid shaft Application of force F_r : Centre of shaft journal ($x = l/2$) F_{aTab} only valid for $F_r = 0$					
	GKR04		GKR05		GKR06	
n_2 [rpm]	F_{rTab} [N]	F_{aTab} [N]	F_{rTab} [N]	F_{aTab} [N]	F_{rTab} [N]	F_{aTab} [N]
400	2100	1275	5200	1900	5500	2500
250	2500	1500	6000	2200	6200	2600
160	2700	1650	6500	2500	7000	2750
100	3000	1800	6500	3100	9000	3500
63	3000	1800	6500	3700	9000	4500
40	3000	1800	6500	3900	9000	5000
25	3000	1800	6500	3900	9000	5000
≤ 16	3000	1800	6500	3900	9000	5000
F_{rmax}	3000	–	6500	–	9000	–

Neither radial nor axial forces are permitted on hollow shafts with shrink discs (S□□).

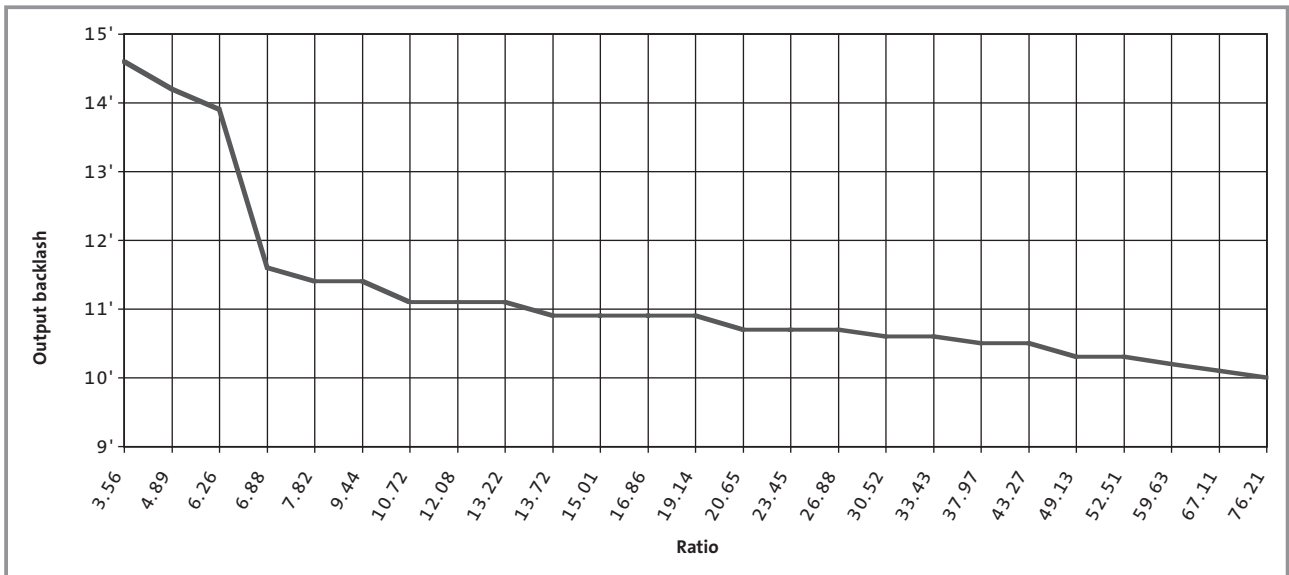
Technical data - Bevel gearboxes

Output backlash in angular minutes

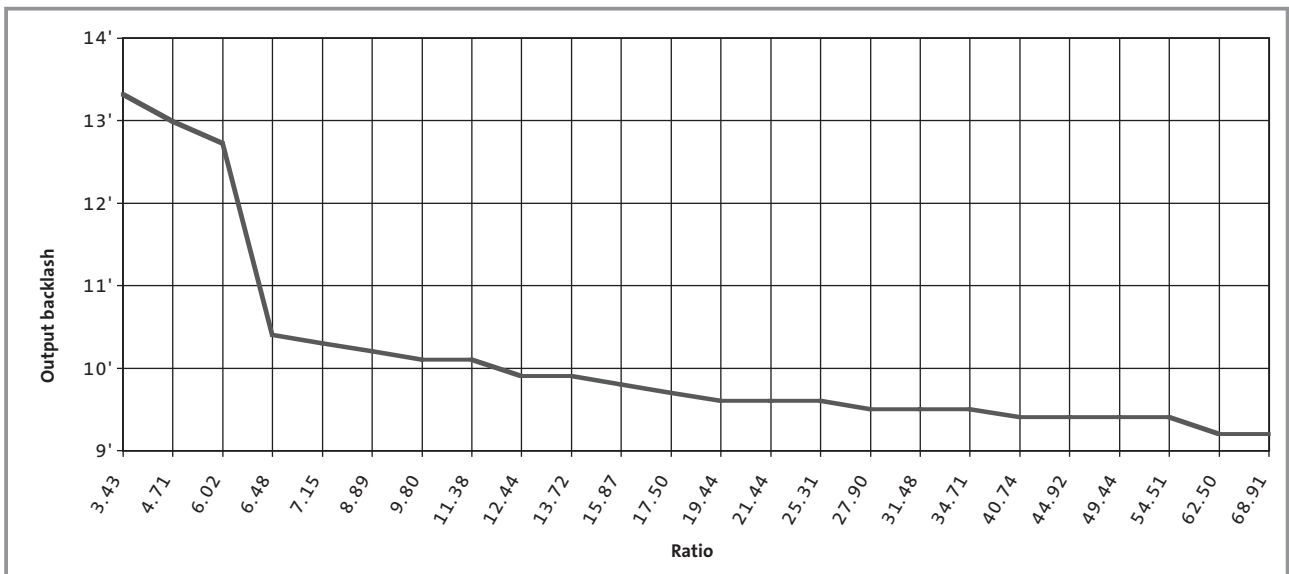
GKR 04-2



GKR 05-2



GKR 06-2



5



Calculation formula: $i_{exact} = \frac{\text{Numerator}}{\text{Denominator}}$

Actual ratio	Numerator	Denominator
GKR 04		
5.185	1400	270
5.963	1610	270
7.111	1600	225
8.178	1840	225
9.101	1720	189
10.466	1978	189
11.449	2576	225
12.698	2400	189
14.603	2760	189
15.556	2520	162
17.889	2898	162
19.556	2640	135
22.489	3036	135
25.185	2720	108
28.963	3128	108
31.919	3160	99
36.707	3634	99
40.000	3240	81
46.000	3726	81
52.698	3320	63
60.603	3818	63

Technical data - Bevel gearboxes

Ratios

Calculation formula: $i_{exact} = \frac{\text{Numerator}}{\text{Denominator}}$

Actual ratio	Numerator	Denominator
GKR 05		
3.565	1925	540
4.889	2200	450
6.257	2365	378
6.883	2065	300
7.817	2345	300
9.440	2360	250
10.720	2680	250
12.081	2537	210
13.216	3304	250
13.719	2881	210
15.008	3752	250
16.857	3540	210
19.143	4020	210
20.650	3717	180
23.450	4221	180
26.878	4838	180
30.522	5494	180
33.433	4012	120
37.967	4556	120
43.267	5192	120
49.133	5896	120
52.510	5251	100
59.630	5963	100
67.113	5369	80
76.213	6097	80



Calculation formula: $i_{exact} = \frac{\text{Numerator}}{\text{Denominator}}$

Actual ratio	Numerator	Denominator
GKR 06		
3.431	1750	510
4.706	2000	425
6.022	2150	357
6.481	1750	270
7.146	1715	240
8.889	2000	225
9.800	1960	200
11.376	2150	189
12.444	2800	225
13.720	2744	200
15.873	3000	189
17.500	2940	168
19.444	3150	162
21.438	3087	144
25.309	4100	162
27.903	4018	144
31.481	3400	108
34.708	3332	96
40.741	4400	108
44.917	4312	96
49.444	4450	90
54.513	4361	80
62.500	4500	72
68.906	4410	64

Bevel gearboxes GKR□□-2

Gearbox size	naturally ventilated									
	GKR□□-2S HAR/HBR with motor frame size (synchronous)					GKR□□-2A HAR/HBR with motor frame size (asynchronous)				
	056 C23	056 C33	071 C03	071 C13	071 C33	056 C22	071 C22	080 C22	090 C22	090 C22
04	10	11	14	16	18	11	16			
05	15	16	18	20	20	16	20	26		
06	23	24	26	28	30	24	28	34		42

Additional weights

At the drive end

C23	056 C33	Synchronous			056 C22	Asynchronous		
		C03	071 C13	C33		071 C22	080 C22	090 C22
forced ventilated								
–	–	1.3	1.3	1.3	–	1.6	1.9	2.6
Brake								
0.9	0.9	1.4	1.4	1.4	0.9	1.4	1.5	2.4

At the non-drive end

Gearbox size	Solid shaft V□□	2nd output shaft end V□□	Hollow shaft with shrink disc S□□	Flange □□K	Torque plate Pitch circle	Torque plate Housing foot
04	0.3	0.1	0.3	0.5	0.4	-
05	1.0	0.3	0.8	1.0	1.3	2.0
06	1.7	0.5	1.0	1.0	2.1	3.7

Weights in [kg] with oil capacity for mounting position A. All data is approximate

Selection tables - Bevel gearboxes

Naturally ventilated synchronous geared servo motors



M ₂ [Nm]	n _{2 trans} [rpm]	c	i	M _{2 max} short-time on geared motor at				M _{2 Gr} gearbox c=1 n ₁ ≤ 1400 rpm [Nm]	n _{2 therm} [rpm]	J _{GM} referred to motor shaft [kgm ²]	Bevel geared servo motor Dimensions on Page 5-28
				8 kHz		16 kHz					
				M _{2 max} [Nm]	Type EVS	M _{2 max} [Nm]	Type EVS				
13	733	3.7	5.185	23	9322	26	9323	69	657	2.21E-04	GKR04 - 2S □□□ 056C23 MDSKS□□ 056-23 190
15	637	3.3	5.963	26	9322	30	9323	72	562	2.12E-04	GKR04 - 2S □□□ 056C23 MDSKS□□ 056-23 190
19	534	3.0	7.111	31	9322	36	9323	78	514	1.85E-04	GKR04 - 2S □□□ 056C23 MDSKS□□ 056-23 190
21	465	2.7	8.178	36	9322	42	9323	81	440	1.81E-04	GKR04 - 2S □□□ 056C23 MDSKS□□ 056-23 190
24	418	2.6	9.101	40	9322	46	9323	84	418	4.67E-04	GKR04 - 2S □□□ 056C23 MDSKS□□ 056-23 190
27	363	2.3	10.466	46	9322	53	9323	89	363	1.70E-04	GKR04 - 2S □□□ 056C23 MDSKS□□ 056-23 190
30	332	2.2	11.449	50	9322	58	9323	90	332	1.66E-04	GKR04 - 2S □□□ 056C23 MDSKS□□ 056-23 190
33	299	2.0	12.698	56	9322	65	9323	90	299	3.39E-04	GKR04 - 2S □□□ 056C23 MDSKS□□ 056-23 190
39	260	1.7	14.603	64	9322	74	9323	90	260	1.58E-04	GKR04 - 2S □□□ 056C23 MDSKS□□ 056-23 190
41	244	1.6	15.556	68	9322	79	9323	90	244	2.87E-04	GKR04 - 2S □□□ 056C23 MDSKS□□ 056-23 190
47	212	1.4	17.889	79	9322	91	9323	90	212	1.54E-04	GKR04 - 2S □□□ 056C23 MDSKS□□ 056-23 190
52	194	1.3	19.556	86	9322	100	9323	90	194	1.50E-04	GKR04 - 2S □□□ 056C23 MDSKS□□ 056-23 190
60	169	1.1	22.489	99	9322	115	9323	90	169	1.49E-04	GKR04 - 2S □□□ 056C23 MDSKS□□ 056-23 190
67	151	1.1	25.185	111	9322	128	9323	90	151	1.46E-04	GKR04 - 2S □□□ 056C23 MDSKS□□ 056-23 190
20	771	2.4	5.185	34	9323	44	9324	69	605	2.81E-04	GKR04 - 2S □□□ 056C33 MDSKS□□ 056-33 200
23	671	2.2	5.963	39	9323	51	9324	72	516	2.72E-04	GKR04 - 2S □□□ 056C33 MDSKS□□ 056-33 200
28	563	2.0	7.111	47	9323	61	9324	78	477	2.45E-04	GKR04 - 2S □□□ 056C33 MDSKS□□ 056-33 200
32	489	1.8	8.178	54	9323	70	9324	81	395	2.41E-04	GKR04 - 2S □□□ 056C33 MDSKS□□ 056-33 200
36	440	1.7	9.101	60	9323	78	9324	84	404	5.27E-04	GKR04 - 2S □□□ 056C33 MDSKS□□ 056-33 200
42	382	1.5	10.466	68	9323	89	9324	89	335	2.30E-04	GKR04 - 2S □□□ 056C33 MDSKS□□ 056-33 200
45	349	1.4	11.449	75	9323	98	9324	90	310	2.26E-04	GKR04 - 2S □□□ 056C33 MDSKS□□ 056-33 200
51	315	1.3	12.698	83	9323	108	9324	90	307	3.99E-04	GKR04 - 2S □□□ 056C33 MDSKS□□ 056-33 200
58	274	1.1	14.603	96	9323	124	9324	90	254	2.18E-04	GKR04 - 2S □□□ 056C33 MDSKS□□ 056-33 200
62	257	1.0	15.556	102	9323	132	9324	90	257	3.47E-04	GKR04 - 2S □□□ 056C33 MDSKS□□ 056-33 200
28	656	1.9	5.185	40	9323	52	9324	69	564	6.81E-04	GKR04 - 2S □□□ 071C03 MDSKS□□ 071-03 170
32	570	1.7	5.963	45	9323	60	9324	72	466	6.72E-04	GKR04 - 2S □□□ 071C03 MDSKS□□ 071-03 170
38	478	1.5	7.111	54	9323	72	9324	78	422	6.45E-04	GKR04 - 2S □□□ 071C03 MDSKS□□ 071-03 170
44	416	1.4	8.178	62	9323	82	9324	81	352	6.41E-04	GKR04 - 2S □□□ 071C03 MDSKS□□ 071-03 170
49	374	1.3	9.101	69	9323	92	9324	84	358	9.27E-04	GKR04 - 2S □□□ 071C03 MDSKS□□ 071-03 170
57	325	1.2	10.466	80	9323	105	9324	89	298	6.30E-04	GKR04 - 2S □□□ 071C03 MDSKS□□ 071-03 170
62	297	1.1	11.449	87	9323	115	9324	90	278	6.26E-04	GKR04 - 2S □□□ 071C03 MDSKS□□ 071-03 170
41	714	1.2	5.185	61	9324	85	9325	69	457	8.81E-04	GKR04 - 2S □□□ 071C13 MDSKS□□ 071-13 185
47	621	1.1	5.963	71	9324	97	9325	72	381	8.72E-04	GKR04 - 2S □□□ 071C13 MDSKS□□ 071-13 185
56	520	1.0	7.111	84	9324	116	9325	78	358	8.45E-04	GKR04 - 2S □□□ 071C13 MDSKS□□ 071-13 185

Observe the notes for thermal dimensioning.

Selection tables - Bevel gearboxes

Naturally ventilated synchronous geared servo motors

M ₂ [Nm]	n _{2 trans} [rpm]	c	i	M _{2 max} short-time on geared motor at				M _{2 Gr} gearbox c=1 n ₁ ≤1400 rpm [Nm]	n _{2 therm} [rpm]	J _{GM} referred to motor shaft [kgm ²]	Bevel geared servo motor Dimensions on Page 5-28
				8 kHz		16 kHz					
				M _{2 max} [Nm]	Type EVS	M _{2 max} [Nm]	Type EVS				
16	607	5.5	6.257	28	9322	32	9323	125	607	3.19E-04	GKR05 - 2S □□□ 056C23 MDSKS□□ 056-23 190
31	315	4.8	12.081	53	9322	62	9323	208	315	2.42E-04	GKR05 - 2S □□□ 056C23 MDSKS□□ 056-23 190
34	288	4.5	13.216	58	9322	67	9323	214	288	2.27E-04	GKR05 - 2S □□□ 056C23 MDSKS□□ 056-23 190
35	277	4.4	13.719	60	9322	70	9323	217	274	2.34E-04	GKR05 - 2S □□□ 056C23 MDSKS□□ 056-23 190
39	253	4.1	15.008	66	9322	76	9323	223	253	2.20E-04	GKR05 - 2S □□□ 056C23 MDSKS□□ 056-23 190
43	225	3.9	16.857	74	9322	86	9323	240	225	2.00E-04	GKR05 - 2S □□□ 056C23 MDSKS□□ 056-23 190
50	199	3.5	19.143	84	9322	98	9323	240	199	1.95E-04	GKR05 - 2S □□□ 056C23 MDSKS□□ 056-23 190
54	184	3.2	20.650	91	9322	105	9323	240	184	1.84E-04	GKR05 - 2S □□□ 056C23 MDSKS□□ 056-23 190
61	162	2.8	23.450	103	9322	119	9323	240	162	1.81E-04	GKR05 - 2S □□□ 056C23 MDSKS□□ 056-23 190
70	141	2.8	26.878	118	9322	137	9323	240	141	1.67E-04	GKR05 - 2S □□□ 056C23 MDSKS□□ 056-23 190
80	125	2.5	30.522	134	9322	155	9323	240	125	1.65E-04	GKR05 - 2S □□□ 056C23 MDSKS□□ 056-23 190
88	114	2.2	33.433	147	9322	170	9323	240	114	1.59E-04	GKR05 - 2S □□□ 056C23 MDSKS□□ 056-23 190
100	100	2.0	37.967	167	9322	193	9323	240	100	1.58E-04	GKR05 - 2S □□□ 056C23 MDSKS□□ 056-23 190
114	88	1.9	43.267	190	9322	220	9323	240	88	1.52E-04	GKR05 - 2S □□□ 056C23 MDSKS□□ 056-23 190
130	77	1.7	49.133	216	9322	250	9323	240	77	1.51E-04	GKR05 - 2S □□□ 056C23 MDSKS□□ 056-23 190
139	72	1.6	52.510	231	9322	267	9323	240	72	1.49E-04	GKR05 - 2S □□□ 056C23 MDSKS□□ 056-23 190
158	64	1.4	59.630	262	9322	304	9323	240	64	1.48E-04	GKR05 - 2S □□□ 056C23 MDSKS□□ 056-23 190
24	639	3.6	6.257	41	9323	53	9324	125	581	3.79E-04	GKR05 - 2S □□□ 056C33 MDSKS□□ 056-33 200
47	331	3.1	12.081	79	9323	103	9324	208	293	3.02E-04	GKR05 - 2S □□□ 056C33 MDSKS□□ 056-33 200
52	303	2.9	13.216	86	9323	113	9324	214	275	2.87E-04	GKR05 - 2S □□□ 056C33 MDSKS□□ 056-33 200
54	292	2.9	13.719	90	9323	117	9324	217	254	2.94E-04	GKR05 - 2S □□□ 056C33 MDSKS□□ 056-33 200
59	267	2.7	15.008	98	9323	128	9324	223	238	2.80E-04	GKR05 - 2S □□□ 056C33 MDSKS□□ 056-33 200
66	237	2.6	16.857	110	9323	144	9324	240	237	2.60E-04	GKR05 - 2S □□□ 056C33 MDSKS□□ 056-33 200
75	209	2.3	19.143	125	9323	163	9324	240	209	2.55E-04	GKR05 - 2S □□□ 056C33 MDSKS□□ 056-33 200
81	194	2.1	20.650	135	9323	176	9324	240	194	2.44E-04	GKR05 - 2S □□□ 056C33 MDSKS□□ 056-33 200
93	171	1.9	23.450	153	9323	200	9324	240	171	2.41E-04	GKR05 - 2S □□□ 056C33 MDSKS□□ 056-33 200
106	149	1.8	26.878	176	9323	229	9324	240	149	2.27E-04	GKR05 - 2S □□□ 056C33 MDSKS□□ 056-33 200
121	131	1.6	30.522	200	9323	260	9324	240	131	2.25E-04	GKR05 - 2S □□□ 056C33 MDSKS□□ 056-33 200
133	120	1.5	33.433	219	9323	285	9324	240	120	2.19E-04	GKR05 - 2S □□□ 056C33 MDSKS□□ 056-33 200
151	105	1.3	37.967	248	9323	323	9324	240	105	2.18E-04	GKR05 - 2S □□□ 056C33 MDSKS□□ 056-33 200
172	92	1.3	43.267	283	9323	360	9324	240	92	2.12E-04	GKR05 - 2S □□□ 056C33 MDSKS□□ 056-33 200
196	81	1.1	49.133	321	9323	360	9324	240	81	2.11E-04	GKR05 - 2S □□□ 056C33 MDSKS□□ 056-33 200
209	76	1.0	52.510	343	9323	360	9324	240	76	2.09E-04	GKR05 - 2S □□□ 056C33 MDSKS□□ 056-33 200
18	954	5.4	3.565	27	9323	36	9324	138	860	1.10E-03	GKR05 - 2S □□□ 071C03 MDSKS□□ 071-03 170

Observe the notes for thermal dimensioning.

Selection tables - Bevel gearboxes

Naturally ventilated synchronous geared servo motors



M ₂ [Nm]	n _{2 trans} [rpm]	c	i	M _{2 max} short-time on geared motor at				M _{2 Gr} gearbox c=1 n ₁ ≤ 1400 rpm [Nm]	n _{2 therm} [rpm]	J _{GM} referred to motor shaft [kgm ²]	Bevel geared servo motor Dimensions on Page 5-28
				8 kHz		16 kHz					
				M _{2 max} [Nm]	Type EVS	M _{2 max} [Nm]	Type EVS				
26	695	4.2	4.889	37	9323	49	9324	147	695	8.79E-04	GKR05 - 2S □□□ 071C03 MDSKS□□ 071-03 170
33	543	3.5	6.257	48	9323	63	9324	156	543	7.79E-04	GKR05 - 2S □□□ 071C03 MDSKS□□ 071-03 170
36	494	3.7	6.883	52	9323	69	9324	179	412	8.57E-04	GKR05 - 2S □□□ 071C03 MDSKS□□ 071-03 170
41	435	3.4	7.817	60	9323	79	9324	187	357	8.32E-04	GKR05 - 2S □□□ 071C03 MDSKS□□ 071-03 170
50	360	2.8	9.440	72	9323	95	9324	191	336	7.53E-04	GKR05 - 2S □□□ 071C03 MDSKS□□ 071-03 170
57	317	2.7	10.720	82	9323	108	9324	204	292	7.40E-04	GKR05 - 2S □□□ 071C03 MDSKS□□ 071-03 170
64	281	2.4	12.081	92	9323	122	9324	208	280	7.02E-04	GKR05 - 2S □□□ 071C03 MDSKS□□ 071-03 170
71	257	2.3	13.216	101	9323	133	9324	214	257	6.87E-04	GKR05 - 2S □□□ 071C03 MDSKS□□ 071-03 170
73	248	2.2	13.719	104	9323	138	9324	217	242	6.94E-04	GKR05 - 2S □□□ 071C03 MDSKS□□ 071-03 170
80	227	2.1	15.008	114	9323	151	9324	223	227	6.80E-04	GKR05 - 2S □□□ 071C03 MDSKS□□ 071-03 170
90	202	2.0	16.857	128	9323	170	9324	240	202	6.60E-04	GKR05 - 2S □□□ 071C03 MDSKS□□ 071-03 170
103	178	1.8	19.143	146	9323	193	9324	240	178	6.55E-04	GKR05 - 2S □□□ 071C03 MDSKS□□ 071-03 170
111	165	1.6	20.650	157	9323	208	9324	240	165	6.44E-04	GKR05 - 2S □□□ 071C03 MDSKS□□ 071-03 170
126	145	1.4	23.450	179	9323	236	9324	240	145	6.41E-04	GKR05 - 2S □□□ 071C03 MDSKS□□ 071-03 170
145	127	1.4	26.878	205	9323	270	9324	240	127	6.27E-04	GKR05 - 2S □□□ 071C03 MDSKS□□ 071-03 170
165	111	1.3	30.522	232	9323	307	9324	240	111	6.25E-04	GKR05 - 2S □□□ 071C03 MDSKS□□ 071-03 170
181	102	1.1	33.433	254	9323	336	9324	240	102	6.19E-04	GKR05 - 2S □□□ 071C03 MDSKS□□ 071-03 170
206	90	1.0	37.967	289	9323	360	9324	240	90	6.18E-04	GKR05 - 2S □□□ 071C03 MDSKS□□ 071-03 170
27	1038	3.6	3.565	42	9324	58	9325	138	795	1.30E-03	GKR05 - 2S □□□ 071C13 MDSKS□□ 071-13 185
38	757	2.8	4.889	58	9324	80	9325	147	647	1.08E-03	GKR05 - 2S □□□ 071C13 MDSKS□□ 071-13 185
49	591	2.3	6.257	74	9324	102	9325	156	537	9.79E-04	GKR05 - 2S □□□ 071C13 MDSKS□□ 071-13 185
53	538	2.4	6.883	81	9324	112	9325	179	379	1.06E-03	GKR05 - 2S □□□ 071C13 MDSKS□□ 071-13 185
61	473	2.2	7.817	93	9324	128	9325	187	328	1.03E-03	GKR05 - 2S □□□ 071C13 MDSKS□□ 071-13 185
74	392	1.9	9.440	112	9324	154	9325	191	304	9.53E-04	GKR05 - 2S □□□ 071C13 MDSKS□□ 071-13 185
84	345	1.8	10.720	127	9324	175	9325	204	259	9.40E-04	GKR05 - 2S □□□ 071C13 MDSKS□□ 071-13 185
95	306	1.6	12.081	143	9324	197	9325	208	243	9.02E-04	GKR05 - 2S □□□ 071C13 MDSKS□□ 071-13 185
104	280	1.5	13.216	156	9324	216	9325	214	226	8.87E-04	GKR05 - 2S □□□ 071C13 MDSKS□□ 071-13 185
108	270	1.5	13.719	162	9324	224	9325	217	205	8.94E-04	GKR05 - 2S □□□ 071C13 MDSKS□□ 071-13 185
118	247	1.4	15.008	178	9324	245	9325	223	191	8.80E-04	GKR05 - 2S □□□ 071C13 MDSKS□□ 071-13 185
132	219	1.3	16.857	199	9324	275	9325	240	197	8.60E-04	GKR05 - 2S □□□ 071C13 MDSKS□□ 071-13 185
151	193	1.2	19.143	226	9324	312	9325	240	164	8.55E-04	GKR05 - 2S □□□ 071C13 MDSKS□□ 071-13 185
163	179	1.1	20.650	244	9324	337	9325	240	168	8.44E-04	GKR05 - 2S □□□ 071C13 MDSKS□□ 071-13 185
41	1010	2.5	3.565	81	9325	61	9325	138	734	1.50E-03	GKR05 - 2S □□□ 071C33 MDSKS□□ 071-33 180
57	736	1.9	4.889	111	9325	83	9325	147	592	1.28E-03	GKR05 - 2S □□□ 071C33 MDSKS□□ 071-33 180

Observe the notes for thermal dimensioning.

Selection tables - Bevel gearboxes

Naturally ventilated synchronous geared servo motors

M ₂ [Nm]	n ₂ trans [rpm]	c	i	M ₂ max short-time on geared motor at				M ₂ Gr gearbox c=1 n ₁ ≤ 1400 rpm [Nm]	n ₂ therm [rpm]	J _{GM} referred to motor shaft [kgm ²]	Bevel geared servo motor Dimensions on Page 5-28
				8 kHz		16 kHz					
				M ₂ max [Nm]	Type EVS	M ₂ max [Nm]	Type EVS				
73	575	1.6	6.257	143	9325	107	9325	156	466	1.18E-03	GKR05 - 2S □□□ 071C33 MDSKS□□ 071-33 180
80	523	1.7	6.883	157	9325	117	9325	179	329	1.26E-03	GKR05 - 2S □□□ 071C33 MDSKS□□ 071-33 180
91	461	1.5	7.817	178	9325	133	9325	187	277	1.23E-03	GKR05 - 2S □□□ 071C33 MDSKS□□ 071-33 180
110	381	1.3	9.440	215	9325	161	9325	191	248	1.15E-03	GKR05 - 2S □□□ 071C33 MDSKS□□ 071-33 180
125	336	1.2	10.720	244	9325	183	9325	204	211	1.14E-03	GKR05 - 2S □□□ 071C33 MDSKS□□ 071-33 180
141	298	1.1	12.081	275	9325	206	9325	208	205	1.10E-03	GKR05 - 2S □□□ 071C33 MDSKS□□ 071-33 180
154	272	1.0	13.216	301	9325	226	9325	214	193	1.09E-03	GKR05 - 2S □□□ 071C33 MDSKS□□ 071-33 180
160	262	1.0	13.719	313	9325	234	9325	217	175	1.09E-03	GKR05 - 2S □□□ 071C33 MDSKS□□ 071-33 180
40	239	5.5	15.873	70	9322	81	9323	317	239	2.72E-04	GKR06 - 2S □□□ 056C23 MDSKS□□ 056-23 190
44	217	5.5	17.500	77	9322	89	9323	349	217	2.63E-04	GKR06 - 2S □□□ 056C23 MDSKS□□ 056-23 190
64	150	5.2	25.309	111	9322	129	9323	421	150	2.03E-04	GKR06 - 2S □□□ 056C23 MDSKS□□ 056-23 190
71	136	5.1	27.903	123	9322	142	9323	450	136	1.99E-04	GKR06 - 2S □□□ 056C23 MDSKS□□ 056-23 190
81	121	4.4	31.481	139	9322	160	9323	441	121	1.86E-04	GKR06 - 2S □□□ 056C23 MDSKS□□ 056-23 190
89	109	4.1	34.708	153	9322	177	9323	450	109	1.83E-04	GKR06 - 2S □□□ 056C23 MDSKS□□ 056-23 190
105	93	3.8	40.741	179	9322	208	9323	450	93	1.68E-04	GKR06 - 2S □□□ 056C23 MDSKS□□ 056-23 190
116	85	3.5	44.917	198	9322	229	9323	450	85	1.67E-04	GKR06 - 2S □□□ 056C23 MDSKS□□ 056-23 190
129	77	3.2	49.444	218	9322	252	9323	450	77	1.61E-04	GKR06 - 2S □□□ 056C23 MDSKS□□ 056-23 190
142	70	2.9	54.513	240	9322	278	9323	450	70	1.60E-04	GKR06 - 2S □□□ 056C23 MDSKS□□ 056-23 190
164	61	2.1	62.500	275	9322	318	9323	378	61	1.53E-04	GKR06 - 2S □□□ 056C23 MDSKS□□ 056-23 190
181	55	2.1	68.906	303	9322	351	9323	417	55	1.53E-04	GKR06 - 2S □□□ 056C23 MDSKS□□ 056-23 190
62	252	3.6	15.873	104	9323	135	9324	317	231	3.32E-04	GKR06 - 2S □□□ 056C33 MDSKS□□ 056-33 200
68	229	3.6	17.500	114	9323	149	9324	349	210	3.23E-04	GKR06 - 2S □□□ 056C33 MDSKS□□ 056-33 200
98	158	3.4	25.309	165	9323	215	9324	421	158	2.63E-04	GKR06 - 2S □□□ 056C33 MDSKS□□ 056-33 200
109	143	3.3	27.903	182	9323	238	9324	450	143	2.59E-04	GKR06 - 2S □□□ 056C33 MDSKS□□ 056-33 200
123	127	2.9	31.481	206	9323	268	9324	441	127	2.46E-04	GKR06 - 2S □□□ 056C33 MDSKS□□ 056-33 200
136	115	2.7	34.708	227	9323	295	9324	450	115	2.43E-04	GKR06 - 2S □□□ 056C33 MDSKS□□ 056-33 200
160	98	2.5	40.741	266	9323	347	9324	450	98	2.28E-04	GKR06 - 2S □□□ 056C33 MDSKS□□ 056-33 200
177	89	2.3	44.917	294	9323	382	9324	450	89	2.27E-04	GKR06 - 2S □□□ 056C33 MDSKS□□ 056-33 200
195	81	2.1	49.444	323	9323	421	9324	450	81	2.21E-04	GKR06 - 2S □□□ 056C33 MDSKS□□ 056-33 200
216	73	1.9	54.513	356	9323	464	9324	450	73	2.20E-04	GKR06 - 2S □□□ 056C33 MDSKS□□ 056-33 200
248	64	1.4	62.500	409	9323	532	9324	378	64	2.13E-04	GKR06 - 2S □□□ 056C33 MDSKS□□ 056-33 200
274	58	1.4	68.906	450	9323	587	9324	417	58	2.13E-04	GKR06 - 2S □□□ 056C33 MDSKS□□ 056-33 200
31	565	5.6	6.022	46	9323	61	9324	241	565	9.66E-04	GKR06 - 2S □□□ 071C03 MDSKS□□ 071-03 170
59	299	5.4	11.376	87	9323	114	9324	436	299	8.21E-04	GKR06 - 2S □□□ 071C03 MDSKS□□ 071-03 170

Observe the notes for thermal dimensioning.

Selection tables - Bevel gearboxes

Naturally ventilated synchronous geared servo motors



M ₂ [Nm]	n ₂ trans [rpm]	c	i	M ₂ max short-time on geared motor at				M ₂ Gr gearbox c=1 n ₁ ≤ 1400 rpm [Nm]	n ₂ therm [rpm]	J _{GM} referred to motor shaft [kgm ²]	Bevel geared servo motor Dimensions on Page 5-28
				8 kHz		16 kHz					
				M ₂ max [Nm]	Type EVS	M ₂ max [Nm]	Type EVS				
64	273	5.1	12.444	95	9323	125	9324	450	273	7.89E-04	GKR06 - 2S □□□ 071C03 MDSKS□□ 071-03 170
72	248	4.4	13.720	104	9323	138	9324	426	248	7.73E-04	GKR06 - 2S □□□ 071C03 MDSKS□□ 071-03 170
83	214	4.0	15.873	121	9323	160	9324	450	214	7.32E-04	GKR06 - 2S □□□ 071C03 MDSKS□□ 071-03 170
92	194	3.6	17.500	133	9323	176	9324	450	194	7.23E-04	GKR06 - 2S □□□ 071C03 MDSKS□□ 071-03 170
103	175	3.3	19.444	148	9323	196	9324	450	175	6.99E-04	GKR06 - 2S □□□ 071C03 MDSKS□□ 071-03 170
114	159	3.0	21.438	163	9323	216	9324	450	159	6.93E-04	GKR06 - 2S □□□ 071C03 MDSKS□□ 071-03 170
134	134	2.8	25.309	193	9323	255	9324	450	134	6.63E-04	GKR06 - 2S □□□ 071C03 MDSKS□□ 071-03 170
149	122	2.6	27.903	212	9323	281	9324	450	122	6.59E-04	GKR06 - 2S □□□ 071C03 MDSKS□□ 071-03 170
168	108	2.3	31.481	240	9323	317	9324	450	108	6.46E-04	GKR06 - 2S □□□ 071C03 MDSKS□□ 071-03 170
186	98	2.1	34.708	264	9323	349	9324	450	98	6.43E-04	GKR06 - 2S □□□ 071C03 MDSKS□□ 071-03 170
218	83	2.0	40.741	310	9323	410	9324	450	83	6.28E-04	GKR06 - 2S □□□ 071C03 MDSKS□□ 071-03 170
241	76	1.8	44.917	342	9323	452	9324	450	76	6.27E-04	GKR06 - 2S □□□ 071C03 MDSKS□□ 071-03 170
266	69	1.6	49.444	376	9323	498	9324	450	69	6.21E-04	GKR06 - 2S □□□ 071C03 MDSKS□□ 071-03 170
294	62	1.5	54.513	415	9323	548	9324	450	62	6.20E-04	GKR06 - 2S □□□ 071C03 MDSKS□□ 071-03 170
46	614	3.8	6.022	71	9324	98	9325	241	538	1.17E-03	GKR06 - 2S □□□ 071C13 MDSKS□□ 071-13 185
87	325	3.6	11.376	135	9324	186	9325	436	283	1.02E-03	GKR06 - 2S □□□ 071C13 MDSKS□□ 071-13 185
96	297	3.4	12.444	147	9324	203	9325	450	264	9.89E-04	GKR06 - 2S □□□ 071C13 MDSKS□□ 071-13 185
106	270	2.9	13.720	162	9324	224	9325	426	233	9.73E-04	GKR06 - 2S □□□ 071C13 MDSKS□□ 071-13 185
123	233	2.7	15.873	188	9324	259	9325	450	219	9.32E-04	GKR06 - 2S □□□ 071C13 MDSKS□□ 071-13 185
136	211	2.4	17.500	207	9324	286	9325	450	195	9.23E-04	GKR06 - 2S □□□ 071C13 MDSKS□□ 071-13 185
151	190	2.2	19.444	230	9324	317	9325	450	190	8.99E-04	GKR06 - 2S □□□ 071C13 MDSKS□□ 071-13 185
167	173	2.0	21.438	254	9324	350	9325	450	173	8.93E-04	GKR06 - 2S □□□ 071C13 MDSKS□□ 071-13 185
198	146	1.9	25.309	299	9324	413	9325	450	146	8.63E-04	GKR06 - 2S □□□ 071C13 MDSKS□□ 071-13 185
218	133	1.7	27.903	330	9324	455	9325	450	133	8.59E-04	GKR06 - 2S □□□ 071C13 MDSKS□□ 071-13 185
247	118	1.5	31.481	372	9324	514	9325	450	118	8.46E-04	GKR06 - 2S □□□ 071C13 MDSKS□□ 071-13 185
273	107	1.4	34.708	411	9324	566	9325	450	107	8.43E-04	GKR06 - 2S □□□ 071C13 MDSKS□□ 071-13 185
320	91	1.3	40.741	482	9324	665	9325	450	91	8.28E-04	GKR06 - 2S □□□ 071C13 MDSKS□□ 071-13 185
353	82	1.2	44.917	531	9324	675	9325	450	82	8.27E-04	GKR06 - 2S □□□ 071C13 MDSKS□□ 071-13 185
390	75	1.1	49.444	585	9324	675	9325	450	75	8.21E-04	GKR06 - 2S □□□ 071C13 MDSKS□□ 071-13 185
69	598	2.6	6.022	137	9325	103	9325	241	498	1.37E-03	GKR06 - 2S □□□ 071C33 MDSKS□□ 071-33 180
131	316	2.4	11.376	259	9325	194	9325	436	261	1.22E-03	GKR06 - 2S □□□ 071C33 MDSKS□□ 071-33 180
143	289	2.3	12.444	284	9325	212	9325	450	244	1.19E-03	GKR06 - 2S □□□ 071C33 MDSKS□□ 071-33 180
159	262	2.0	13.720	313	9325	234	9325	426	215	1.17E-03	GKR06 - 2S □□□ 071C33 MDSKS□□ 071-33 180
184	227	1.8	15.873	362	9325	271	9325	450	198	1.13E-03	GKR06 - 2S □□□ 071C33 MDSKS□□ 071-33 180

Observe the notes for thermal dimensioning.

Selection tables - Bevel gearboxes

Naturally ventilated synchronous geared servo motors

M ₂ [Nm]	n ₂ trans [rpm]	c	i	M ₂ max short-time on geared motor at				M ₂ Gr gearbox c=1 n ₁ ≤ 1400 rpm [Nm]	n ₂ therm [rpm]	J _{GM} referred to motor shaft [kgm ²]	Bevel geared servo motor Dimensions on Page 5-28
				8 kHz		16 kHz					
				M ₂ max [Nm]	Type EVS	M ₂ max [Nm]	Type EVS				
203	206	1.6	17.500	399	9325	299	9325	450	171	1.12E-03	GKR06 - 2S □□□ 071C33 MDSKS□□ 071-33 180
226	185	1.5	19.444	443	9325	332	9325	450	171	1.10E-03	GKR06 - 2S □□□ 071C33 MDSKS□□ 071-33 180
250	168	1.3	21.438	489	9325	366	9325	450	148	1.09E-03	GKR06 - 2S □□□ 071C33 MDSKS□□ 071-33 180
295	142	1.3	25.309	577	9325	432	9325	450	142	1.06E-03	GKR06 - 2S □□□ 071C33 MDSKS□□ 071-33 180
325	129	1.2	27.903	636	9325	476	9325	450	127	1.06E-03	GKR06 - 2S □□□ 071C33 MDSKS□□ 071-33 180
368	114	1.0	31.481	675	9325	537	9325	450	114	1.05E-03	GKR06 - 2S □□□ 071C33 MDSKS□□ 071-33 180

Observe the notes for thermal dimensioning.

Selection tables - Bevel gearboxes

Forced ventilated synchronous geared servo motors



M ₂ [Nm]	n _{2 trans} [rpm]	c	i	M _{2 max} short-time on geared motor at				M _{2 Gr} gearbox c=1 n ₁ ≤ 1400 rpm [Nm]	n _{2 therm} [rpm]	J _{GM} referred to motor shaft [kgm ²]	Bevel geared servo motor Dimensions on Page 5-28
				8 kHz		16 kHz					
				M _{2 max} [Nm]	Type EVS	M _{2 max} [Nm]	Type EVS				
37	636	1.4	5.185	67	9324	52	9324	69	489	6.81E-04	GKR04 - 2S □□□ 071C03 MDFKS□□ 071-03 165
42	553	1.3	5.963	78	9324	60	9324	72	407	6.72E-04	GKR04 - 2S □□□ 071C03 MDFKS□□ 071-03 165
51	464	1.2	7.111	92	9324	72	9324	78	377	6.45E-04	GKR04 - 2S □□□ 071C03 MDFKS□□ 071-03 165
58	404	1.1	8.178	106	9324	82	9324	81	317	6.41E-04	GKR04 - 2S □□□ 071C03 MDFKS□□ 071-03 165
65	363	1.0	9.101	118	9324	92	9324	84	320	9.27E-04	GKR04 - 2S □□□ 071C03 MDFKS□□ 071-03 165
25	926	4.2	3.565	46	9324	36	9324	138	817	1.10E-03	GKR05 - 2S □□□ 071C03 MDFKS□□ 071-03 165
34	675	3.2	4.889	64	9324	49	9324	147	666	8.79E-04	GKR05 - 2S □□□ 071C03 MDFKS□□ 071-03 165
44	527	2.7	6.257	81	9324	63	9324	156	527	7.79E-04	GKR05 - 2S □□□ 071C03 MDFKS□□ 071-03 165
48	479	2.8	6.883	90	9324	69	9324	179	391	8.57E-04	GKR05 - 2S □□□ 071C03 MDFKS□□ 071-03 165
55	422	2.6	7.817	102	9324	79	9324	187	338	8.32E-04	GKR05 - 2S □□□ 071C03 MDFKS□□ 071-03 165
66	350	2.2	9.440	123	9324	95	9324	191	318	7.53E-04	GKR05 - 2S □□□ 071C03 MDFKS□□ 071-03 165
76	308	2.0	10.720	139	9324	108	9324	204	276	7.40E-04	GKR05 - 2S □□□ 071C03 MDFKS□□ 071-03 165
85	273	1.9	12.081	157	9324	122	9324	208	261	7.02E-04	GKR05 - 2S □□□ 071C03 MDFKS□□ 071-03 165
93	250	1.7	13.216	172	9324	133	9324	214	241	6.87E-04	GKR05 - 2S □□□ 071C03 MDFKS□□ 071-03 165
97	241	1.7	13.719	178	9324	138	9324	217	220	6.94E-04	GKR05 - 2S □□□ 071C03 MDFKS□□ 071-03 165
106	220	1.6	15.008	195	9324	151	9324	223	204	6.80E-04	GKR05 - 2S □□□ 071C03 MDFKS□□ 071-03 165
119	196	1.5	16.857	219	9324	170	9324	240	196	6.60E-04	GKR05 - 2S □□□ 071C03 MDFKS□□ 071-03 165
136	172	1.4	19.143	249	9324	193	9324	240	172	6.55E-04	GKR05 - 2S □□□ 071C03 MDFKS□□ 071-03 165
147	160	1.3	20.650	268	9324	208	9324	240	160	6.44E-04	GKR05 - 2S □□□ 071C03 MDFKS□□ 071-03 165
167	141	1.1	23.450	305	9324	236	9324	240	141	6.41E-04	GKR05 - 2S □□□ 071C03 MDFKS□□ 071-03 165
191	123	1.1	26.878	349	9324	270	9324	240	123	6.27E-04	GKR05 - 2S □□□ 071C03 MDFKS□□ 071-03 165
37	1010	2.8	3.565	74	9325	58	9325	138	751	1.30E-03	GKR05 - 2S □□□ 071C13 MDFKS□□ 071-13 180
50	736	2.1	4.889	101	9325	80	9325	147	612	1.08E-03	GKR05 - 2S □□□ 071C13 MDFKS□□ 071-13 180
65	575	1.8	6.257	130	9325	102	9325	156	492	9.79E-04	GKR05 - 2S □□□ 071C13 MDFKS□□ 071-13 180
71	523	1.9	6.883	143	9325	112	9325	179	350	1.06E-03	GKR05 - 2S □□□ 071C13 MDFKS□□ 071-13 180
81	461	1.7	7.817	162	9325	128	9325	187	294	1.03E-03	GKR05 - 2S □□□ 071C13 MDFKS□□ 071-13 180
98	381	1.4	9.440	196	9325	154	9325	191	262	9.53E-04	GKR05 - 2S □□□ 071C13 MDFKS□□ 071-13 180
112	336	1.4	10.720	222	9325	175	9325	204	223	9.40E-04	GKR05 - 2S □□□ 071C13 MDFKS□□ 071-13 180
126	298	1.2	12.081	250	9325	197	9325	208	215	9.02E-04	GKR05 - 2S □□□ 071C13 MDFKS□□ 071-13 180
138	272	1.2	13.216	274	9325	216	9325	214	201	8.87E-04	GKR05 - 2S □□□ 071C13 MDFKS□□ 071-13 180
143	262	1.1	13.719	284	9325	224	9325	217	182	8.94E-04	GKR05 - 2S □□□ 071C13 MDFKS□□ 071-13 180
157	240	1.1	15.008	311	9325	245	9325	223	172	8.80E-04	GKR05 - 2S □□□ 071C13 MDFKS□□ 071-13 180
176	214	1.0	16.857	349	9325	275	9325	240	176	8.60E-04	GKR05 - 2S □□□ 071C13 MDFKS□□ 071-13 180
54	982	1.9	3.565	81	9325	93	9326	138	682	1.50E-03	GKR05 - 2S □□□ 071C33 MDFKS□□ 071-33 175

Observe the notes for thermal dimensioning.

Selection tables - Bevel gearboxes

Forced ventilated synchronous geared servo motors

M ₂ [Nm]	n ₂ trans [rpm]	c	i	M ₂ max short-time on geared motor at				M ₂ Gr gearbox c=1 n ₁ ≤ 1400 rpm [Nm]	n ₂ therm [rpm]	J _{GM} referred to motor shaft [kgm ²]	Bevel geared servo motor Dimensions on Page 5-28
				8 kHz		16 kHz					
				M ₂ max [Nm]	Type EVS	M ₂ max [Nm]	Type EVS				
75	716	1.5	4.889	111	9325	128	9326	147	510	1.28E-03	GKR05 - 2S □□□ 071C33 MDFKS□□ 071-33 175
96	559	1.2	6.257	143	9325	164	9326	156	413	1.18E-03	GKR05 - 2S □□□ 071C33 MDFKS□□ 071-33 175
106	508	1.3	6.883	157	9325	180	9326	179	287	1.26E-03	GKR05 - 2S □□□ 071C33 MDFKS□□ 071-33 175
120	448	1.2	7.817	178	9325	205	9326	187	243	1.23E-03	GKR05 - 2S □□□ 071C33 MDFKS□□ 071-33 175
41	548	4.3	6.022	78	9324	61	9324	241	548	9.66E-04	GKR06 - 2S □□□ 071C03 MDFKS□□ 071-03 165
78	290	4.1	11.376	148	9324	114	9324	436	290	8.21E-04	GKR06 - 2S □□□ 071C03 MDFKS□□ 071-03 165
86	265	3.9	12.444	162	9324	125	9324	450	265	7.89E-04	GKR06 - 2S □□□ 071C03 MDFKS□□ 071-03 165
95	241	3.4	13.720	178	9324	138	9324	426	239	7.73E-04	GKR06 - 2S □□□ 071C03 MDFKS□□ 071-03 165
111	208	3.1	15.873	206	9324	160	9324	450	208	7.32E-04	GKR06 - 2S □□□ 071C03 MDFKS□□ 071-03 165
122	189	2.8	17.500	227	9324	176	9324	450	189	7.23E-04	GKR06 - 2S □□□ 071C03 MDFKS□□ 071-03 165
136	170	2.5	19.444	253	9324	196	9324	450	170	6.99E-04	GKR06 - 2S □□□ 071C03 MDFKS□□ 071-03 165
151	154	2.3	21.438	279	9324	216	9324	450	154	6.93E-04	GKR06 - 2S □□□ 071C03 MDFKS□□ 071-03 165
178	130	2.2	25.309	329	9324	255	9324	450	130	6.63E-04	GKR06 - 2S □□□ 071C03 MDFKS□□ 071-03 165
197	118	2.0	27.903	363	9324	281	9324	450	118	6.59E-04	GKR06 - 2S □□□ 071C03 MDFKS□□ 071-03 165
223	105	1.8	31.481	409	9324	317	9324	450	105	6.46E-04	GKR06 - 2S □□□ 071C03 MDFKS□□ 071-03 165
246	95	1.6	34.708	451	9324	349	9324	450	95	6.43E-04	GKR06 - 2S □□□ 071C03 MDFKS□□ 071-03 165
289	81	1.5	40.741	530	9324	410	9324	450	81	6.28E-04	GKR06 - 2S □□□ 071C03 MDFKS□□ 071-03 165
319	73	1.4	44.917	584	9324	452	9324	450	73	6.27E-04	GKR06 - 2S □□□ 071C03 MDFKS□□ 071-03 165
351	67	1.2	49.444	643	9324	498	9324	450	67	6.21E-04	GKR06 - 2S □□□ 071C03 MDFKS□□ 071-03 165
388	61	1.1	54.513	675	9324	548	9324	450	61	6.20E-04	GKR06 - 2S □□□ 071C03 MDFKS□□ 071-03 165
62	598	2.9	6.022	125	9325	98	9325	241	509	1.17E-03	GKR06 - 2S □□□ 071C13 MDFKS□□ 071-13 180
117	316	2.7	11.376	236	9325	186	9325	436	267	1.02E-03	GKR06 - 2S □□□ 071C13 MDFKS□□ 071-13 180
128	289	2.6	12.444	258	9325	203	9325	450	250	9.89E-04	GKR06 - 2S □□□ 071C13 MDFKS□□ 071-13 180
142	262	2.2	13.720	284	9325	224	9325	426	220	9.73E-04	GKR06 - 2S □□□ 071C13 MDFKS□□ 071-13 180
164	227	2.0	15.873	329	9325	259	9325	450	208	9.32E-04	GKR06 - 2S □□□ 071C13 MDFKS□□ 071-13 180
181	206	1.8	17.500	363	9325	286	9325	450	181	9.23E-04	GKR06 - 2S □□□ 071C13 MDFKS□□ 071-13 180
202	185	1.7	19.444	403	9325	317	9325	450	181	8.99E-04	GKR06 - 2S □□□ 071C13 MDFKS□□ 071-13 180
223	168	1.5	21.438	444	9325	350	9325	450	156	8.93E-04	GKR06 - 2S □□□ 071C13 MDFKS□□ 071-13 180
263	142	1.4	25.309	525	9325	413	9325	450	142	8.63E-04	GKR06 - 2S □□□ 071C13 MDFKS□□ 071-13 180
291	129	1.3	27.903	578	9325	455	9325	450	129	8.59E-04	GKR06 - 2S □□□ 071C13 MDFKS□□ 071-13 180
328	114	1.2	31.481	653	9325	514	9325	450	114	8.46E-04	GKR06 - 2S □□□ 071C13 MDFKS□□ 071-13 180
363	104	1.1	34.708	675	9325	566	9325	450	104	8.43E-04	GKR06 - 2S □□□ 071C13 MDFKS□□ 071-13 180
92	581	2.0	6.022	137	9325	158	9326	241	469	1.37E-03	GKR06 - 2S □□□ 071C33 MDFKS□□ 071-33 175
173	308	1.9	11.376	259	9325	298	9326	436	242	1.22E-03	GKR06 - 2S □□□ 071C33 MDFKS□□ 071-33 175

Observe the notes for thermal dimensioning.

Selection tables - Bevel gearboxes

Forced ventilated synchronous geared servo motors



M ₂ [Nm]	n ₂ trans [rpm]	c	i	M ₂ max short-time on geared motor at				M ₂ Gr gearbox c=1 n ₁ ≤ 1400 rpm [Nm]	n ₂ therm [rpm]	J _{GM} referred to motor shaft [kgm ²]	Bevel geared servo motor Dimensions on Page 5-28
				8 kHz		16 kHz					
				M ₂ max [Nm]	Type EVS	M ₂ max [Nm]	Type EVS				
190	281	1.8	12.444	284	9325	326	9326	450	222	1.19E-03	GKR06 - 2S □□□ 071C33 MDFKS□□ 071-33 175
210	255	1.5	13.720	313	9325	359	9326	426	185	1.17E-03	GKR06 - 2S □□□ 071C33 MDFKS□□ 071-33 175
243	221	1.4	15.873	362	9325	416	9326	450	175	1.13E-03	GKR06 - 2S □□□ 071C33 MDFKS□□ 071-33 175
269	200	1.3	17.500	399	9325	458	9326	450	152	1.12E-03	GKR06 - 2S □□□ 071C33 MDFKS□□ 071-33 175
299	180	1.1	19.444	443	9325	509	9326	450	151	1.10E-03	GKR06 - 2S □□□ 071C33 MDFKS□□ 071-33 175
330	163	1.0	21.438	489	9325	561	9326	450	131	1.09E-03	GKR06 - 2S □□□ 071C33 MDFKS□□ 071-33 175

Observe the notes for thermal dimensioning.

Selection tables - Bevel gearboxes

Naturally ventilated asynchronous geared servo motors

M ₂ [Nm]	n ₂ trans [rpm]	c	i	M ₂ max short-time on geared motor at				M ₂ Gr gearbox c=1 n ₁ ≤ 1400 rpm [Nm]	n ₂ therm [rpm]	J _G M referred to motor shaft [kgm ²]	Bevel geared servo motor Dimensions on Page 5-28
				8 kHz		16 kHz					
				M ₂ max [Nm]	Type EVS	M ₂ max [Nm]	Type EVS				
9	762	5.1	5.185	22	9322	26	9323	69	697	3.21E-04	GKR04 - 2A □□□ 056C22 MDSKA□□ 056-22 140
11	662	4.6	5.963	25	9322	30	9323	72	597	3.12E-04	GKR04 - 2A □□□ 056C22 MDSKA□□ 056-22 140
13	555	4.2	7.111	30	9322	36	9323	78	543	2.85E-04	GKR04 - 2A □□□ 056C22 MDSKA□□ 056-22 140
15	483	3.8	8.178	35	9322	41	9323	81	465	2.81E-04	GKR04 - 2A □□□ 056C22 MDSKA□□ 056-22 140
17	434	3.5	9.101	39	9322	46	9323	84	434	5.67E-04	GKR04 - 2A □□□ 056C22 MDSKA□□ 056-22 140
19	377	3.2	10.466	44	9322	53	9323	89	377	2.70E-04	GKR04 - 2A □□□ 056C22 MDSKA□□ 056-22 140
21	345	3.0	11.449	48	9322	58	9323	90	345	2.66E-04	GKR04 - 2A □□□ 056C22 MDSKA□□ 056-22 140
24	311	2.7	12.698	54	9322	64	9323	90	311	4.39E-04	GKR04 - 2A □□□ 056C22 MDSKA□□ 056-22 140
27	270	2.3	14.603	62	9322	74	9323	90	270	2.58E-04	GKR04 - 2A □□□ 056C22 MDSKA□□ 056-22 140
29	254	2.2	15.556	66	9322	78	9323	90	254	3.87E-04	GKR04 - 2A □□□ 056C22 MDSKA□□ 056-22 140
34	221	1.9	17.889	76	9322	90	9323	90	221	2.54E-04	GKR04 - 2A □□□ 056C22 MDSKA□□ 056-22 140
37	202	1.8	19.556	83	9322	99	9323	90	202	2.50E-04	GKR04 - 2A □□□ 056C22 MDSKA□□ 056-22 140
42	176	1.5	22.489	95	9322	113	9323	90	176	2.49E-04	GKR04 - 2A □□□ 056C22 MDSKA□□ 056-22 140
48	157	1.5	25.185	107	9322	127	9323	90	157	2.46E-04	GKR04 - 2A □□□ 056C22 MDSKA□□ 056-22 140
55	136	1.3	28.963	122	9322	135	9323	90	136	2.46E-04	GKR04 - 2A □□□ 056C22 MDSKA□□ 056-22 140
19	781	2.5	5.185	62	9324	45	9324	69	611	9.11E-04	GKR04 - 2A □□□ 071C22 MDSKA□□ 071-22 140
22	679	2.3	5.963	71	9324	52	9324	72	521	9.02E-04	GKR04 - 2A □□□ 071C22 MDSKA□□ 071-22 140
27	570	2.1	7.111	85	9324	62	9324	78	480	8.75E-04	GKR04 - 2A □□□ 071C22 MDSKA□□ 071-22 140
31	495	1.9	8.178	98	9324	72	9324	81	404	8.71E-04	GKR04 - 2A □□□ 071C22 MDSKA□□ 071-22 140
34	445	1.8	9.101	109	9324	80	9324	84	414	1.16E-03	GKR04 - 2A □□□ 071C22 MDSKA□□ 071-22 140
40	387	1.6	10.466	125	9324	92	9324	89	343	8.60E-04	GKR04 - 2A □□□ 071C22 MDSKA□□ 071-22 140
43	354	1.5	11.449	135	9324	100	9324	90	316	8.56E-04	GKR04 - 2A □□□ 071C22 MDSKA□□ 071-22 140
48	319	1.3	12.698	135	9324	111	9324	90	312	1.03E-03	GKR04 - 2A □□□ 071C22 MDSKA□□ 071-22 140
55	277	1.2	14.603	135	9324	128	9324	90	258	8.48E-04	GKR04 - 2A □□□ 071C22 MDSKA□□ 071-22 140
59	260	1.1	15.556	135	9324	135	9324	90	260	9.77E-04	GKR04 - 2A □□□ 071C22 MDSKA□□ 071-22 140
27	263	5.7	15.008	63	9322	76	9323	223	263	3.20E-04	GKR05 - 2A □□□ 056C22 MDSKA□□ 056-22 140
31	234	5.4	16.857	71	9322	85	9323	240	234	3.00E-04	GKR05 - 2A □□□ 056C22 MDSKA□□ 056-22 140
35	206	4.8	19.143	81	9322	96	9323	240	206	2.95E-04	GKR05 - 2A □□□ 056C22 MDSKA□□ 056-22 140
38	191	4.4	20.650	87	9322	104	9323	240	191	2.84E-04	GKR05 - 2A □□□ 056C22 MDSKA□□ 056-22 140
43	168	3.9	23.450	99	9322	118	9323	240	168	2.81E-04	GKR05 - 2A □□□ 056C22 MDSKA□□ 056-22 140
50	147	3.9	26.878	114	9322	135	9323	240	147	2.67E-04	GKR05 - 2A □□□ 056C22 MDSKA□□ 056-22 140
57	129	3.4	30.522	129	9322	154	9323	240	129	2.65E-04	GKR05 - 2A □□□ 056C22 MDSKA□□ 056-22 140
62	118	3.1	33.433	141	9322	168	9323	240	118	2.59E-04	GKR05 - 2A □□□ 056C22 MDSKA□□ 056-22 140
71	104	2.7	37.967	161	9322	191	9323	240	104	2.58E-04	GKR05 - 2A □□□ 056C22 MDSKA□□ 056-22 140

Observe the notes for thermal dimensioning.

Selection tables - Bevel gearboxes

Naturally ventilated asynchronous geared servo motors



M ₂ [Nm]	n _{2 trans} [rpm]	c	i	M _{2 max} short-time on geared motor at				M _{2 Gr} gearbox c=1 n ₁ ≤ 1400 rpm [Nm]	n _{2 therm} [rpm]	J _{GM} referred to motor shaft [kgm ²]	Bevel geared servo motor Dimensions on Page 5-28
				8 kHz		16 kHz					
				M _{2 max} [Nm]	Type EVS	M _{2 max} [Nm]	Type EVS				
81	91	2.7	43.267	183	9322	218	9323	240	91	2.52E-04	GKR05 - 2A □□□ 056C22 MDSKA□□ 056-22 140
92	80	2.3	49.133	208	9322	247	9323	240	80	2.51E-04	GKR05 - 2A □□□ 056C22 MDSKA□□ 056-22 140
99	75	2.2	52.510	222	9322	264	9323	240	75	2.49E-04	GKR05 - 2A □□□ 056C22 MDSKA□□ 056-22 140
112	66	1.9	59.630	252	9322	300	9323	240	66	2.48E-04	GKR05 - 2A □□□ 056C22 MDSKA□□ 056-22 140
18	828	5.7	4.889	59	9324	43	9324	147	739	1.11E-03	GKR05 - 2A □□□ 071C22 MDSKA□□ 071-22 140
23	647	4.7	6.257	75	9324	55	9324	156	608	1.01E-03	GKR05 - 2A □□□ 071C22 MDSKA□□ 071-22 140
25	588	4.9	6.883	82	9324	60	9324	179	437	1.09E-03	GKR05 - 2A □□□ 071C22 MDSKA□□ 071-22 140
29	518	4.5	7.817	94	9324	68	9324	187	379	1.06E-03	GKR05 - 2A □□□ 071C22 MDSKA□□ 071-22 140
35	429	3.8	9.440	113	9324	83	9324	191	356	9.83E-04	GKR05 - 2A □□□ 071C22 MDSKA□□ 071-22 140
40	378	3.6	10.720	128	9324	94	9324	204	310	9.70E-04	GKR05 - 2A □□□ 071C22 MDSKA□□ 071-22 140
45	335	3.3	12.081	145	9324	106	9324	208	295	9.32E-04	GKR05 - 2A □□□ 071C22 MDSKA□□ 071-22 140
49	306	3.1	13.216	158	9324	116	9324	214	277	9.17E-04	GKR05 - 2A □□□ 071C22 MDSKA□□ 071-22 140
51	295	3.0	13.719	164	9324	120	9324	217	256	9.24E-04	GKR05 - 2A □□□ 071C22 MDSKA□□ 071-22 140
56	270	2.8	15.008	180	9324	131	9324	223	240	9.10E-04	GKR05 - 2A □□□ 071C22 MDSKA□□ 071-22 140
63	240	2.7	16.857	202	9324	147	9324	240	240	8.90E-04	GKR05 - 2A □□□ 071C22 MDSKA□□ 071-22 140
72	212	2.4	19.143	229	9324	167	9324	240	212	8.85E-04	GKR05 - 2A □□□ 071C22 MDSKA□□ 071-22 140
77	196	2.2	20.650	247	9324	181	9324	240	196	8.74E-04	GKR05 - 2A □□□ 071C22 MDSKA□□ 071-22 140
88	173	1.9	23.450	281	9324	205	9324	240	173	8.71E-04	GKR05 - 2A □□□ 071C22 MDSKA□□ 071-22 140
101	151	1.9	26.878	322	9324	235	9324	240	151	8.57E-04	GKR05 - 2A □□□ 071C22 MDSKA□□ 071-22 140
115	133	1.7	30.522	360	9324	267	9324	240	133	8.55E-04	GKR05 - 2A □□□ 071C22 MDSKA□□ 071-22 140
126	121	1.5	33.433	360	9324	292	9324	240	121	8.49E-04	GKR05 - 2A □□□ 071C22 MDSKA□□ 071-22 140
144	107	1.4	37.967	360	9324	332	9324	240	107	8.48E-04	GKR05 - 2A □□□ 071C22 MDSKA□□ 071-22 140
22	561	5.5	3.565	51	9323	72	9324	138	561	2.42E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 70
30	409	4.3	4.889	70	9323	99	9324	147	409	2.20E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 70
39	320	3.6	6.257	90	9323	126	9324	156	320	2.10E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 70
43	291	3.7	6.883	99	9323	139	9324	179	291	2.18E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 70
48	256	3.4	7.817	112	9323	157	9324	187	256	2.15E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 70
59	212	2.9	9.440	135	9323	190	9324	191	212	2.07E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 70
67	187	2.7	10.720	154	9323	216	9324	204	187	2.06E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 70
76	166	2.5	12.081	173	9323	243	9324	208	166	2.02E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 70
83	151	2.3	13.216	190	9323	266	9324	214	151	2.01E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 70
86	146	2.3	13.719	197	9323	276	9324	217	146	2.01E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 70
94	133	2.1	15.008	215	9323	302	9324	223	133	2.00E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 70
106	119	2.0	16.857	242	9323	340	9324	240	119	1.98E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 70

Observe the notes for thermal dimensioning.



Selection tables - Bevel gearboxes

Naturally ventilated asynchronous geared servo motors

M ₂ [Nm]	n ₂ trans [rpm]	c	i	M ₂ max short-time on geared motor at				M ₂ Gr gearbox c=1 n ₁ ≤ 1400 rpm [Nm]	n ₂ therm [rpm]	J _{GM} referred to motor shaft [kgm ²]	Bevel geared servo motor Dimensions on Page 5-28
				8 kHz		16 kHz					
				M ₂ max [Nm]	Type EVS	M ₂ max [Nm]	Type EVS				
121	104	1.8	19.143	275	9323	360	9324	240	104	1.98E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 70
131	97	1.7	20.650	296	9323	360	9324	240	97	1.96E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 70
149	85	1.5	23.450	336	9323	360	9324	240	85	1.96E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 70
17	1150	5.4	3.565	45	9324	65	9325	138	858	2.42E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 140
24	839	4.2	4.889	61	9324	89	9325	147	699	2.20E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 140
31	655	3.5	6.257	79	9324	114	9325	156	574	2.10E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 140
34	596	3.6	6.883	86	9324	125	9325	179	412	2.18E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 140
39	525	3.3	7.817	98	9324	142	9325	187	356	2.15E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 140
48	434	2.8	9.440	118	9324	171	9325	191	335	2.07E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 140
54	382	2.6	10.720	134	9324	195	9325	204	292	2.06E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 140
61	339	2.4	12.081	152	9324	219	9325	208	279	2.02E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 140
67	310	2.3	13.216	166	9324	240	9325	214	262	2.01E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 140
69	299	2.2	13.719	172	9324	249	9325	217	242	2.01E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 140
76	273	2.1	15.008	188	9324	272	9325	223	227	2.00E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 140
86	243	2.0	16.857	211	9324	306	9325	240	213	1.98E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 140
97	214	1.7	19.143	240	9324	347	9325	240	188	1.98E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 140
105	199	1.6	20.650	259	9324	360	9325	240	174	1.96E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 140
120	175	1.4	23.450	294	9324	360	9325	240	153	1.96E-03	GKR05 - 2A □□□ 080C22 MDSKA□□ 080-22 140
63	114	5.6	34.708	147	9322	175	9323	450	114	2.83E-04	GKR06 - 2A □□□ 056C22 MDSKA□□ 056-22 140
74	97	5.3	40.741	172	9322	205	9323	450	97	2.68E-04	GKR06 - 2A □□□ 056C22 MDSKA□□ 056-22 140
82	88	4.8	44.917	190	9322	226	9323	450	88	2.67E-04	GKR06 - 2A □□□ 056C22 MDSKA□□ 056-22 140
91	80	4.4	49.444	209	9322	249	9323	450	80	2.61E-04	GKR06 - 2A □□□ 056C22 MDSKA□□ 056-22 140
100	72	4.0	54.513	231	9322	275	9323	450	72	2.60E-04	GKR06 - 2A □□□ 056C22 MDSKA□□ 056-22 140
116	63	2.9	62.500	264	9322	315	9323	378	63	2.53E-04	GKR06 - 2A □□□ 056C22 MDSKA□□ 056-22 140
128	57	2.9	68.906	291	9322	347	9323	417	57	2.53E-04	GKR06 - 2A □□□ 056C22 MDSKA□□ 056-22 140
49	295	5.9	13.720	164	9324	120	9324	426	265	1.00E-03	GKR06 - 2A □□□ 071C22 MDSKA□□ 071-22 140
58	255	5.4	15.873	190	9324	139	9324	450	247	9.62E-04	GKR06 - 2A □□□ 071C22 MDSKA□□ 071-22 140
64	231	4.9	17.500	210	9324	153	9324	450	221	9.53E-04	GKR06 - 2A □□□ 071C22 MDSKA□□ 071-22 140
71	208	4.4	19.444	233	9324	170	9324	450	208	9.29E-04	GKR06 - 2A □□□ 071C22 MDSKA□□ 071-22 140
79	189	4.0	21.438	257	9324	187	9324	450	189	9.23E-04	GKR06 - 2A □□□ 071C22 MDSKA□□ 071-22 140
93	160	3.8	25.309	303	9324	221	9324	450	160	8.93E-04	GKR06 - 2A □□□ 071C22 MDSKA□□ 071-22 140
103	145	3.5	27.903	334	9324	244	9324	450	145	8.89E-04	GKR06 - 2A □□□ 071C22 MDSKA□□ 071-22 140
117	129	3.1	31.481	377	9324	275	9324	450	129	8.76E-04	GKR06 - 2A □□□ 071C22 MDSKA□□ 071-22 140
129	117	2.8	34.708	416	9324	303	9324	450	117	8.73E-04	GKR06 - 2A □□□ 071C22 MDSKA□□ 071-22 140

Observe the notes for thermal dimensioning.

Selection tables - Bevel gearboxes

Naturally ventilated asynchronous geared servo motors



M ₂ [Nm]	n ₂ trans [rpm]	c	i	M ₂ max short-time on geared motor at				M ₂ Gr gearbox c=1 n ₁ ≤ 1400 rpm [Nm]	n ₂ therm [rpm]	J _{GM} referred to motor shaft [kgm ²]	Bevel geared servo motor Dimensions on Page 5-28
				8 kHz		16 kHz					
				M ₂ max [Nm]	Type EVS	M ₂ max [Nm]	Type EVS				
152	99	2.6	40.741	488	9324	356	9324	450	99	8.58E-04	GKR06 - 2A □□□ 071C22 MDSKA□□ 071-22 140
168	90	2.4	44.917	538	9324	393	9324	450	90	8.57E-04	GKR06 - 2A □□□ 071C22 MDSKA□□ 071-22 140
186	82	2.2	49.444	592	9324	432	9324	450	82	8.51E-04	GKR06 - 2A □□□ 071C22 MDSKA□□ 071-22 140
205	74	2.0	54.513	653	9324	477	9324	450	74	8.50E-04	GKR06 - 2A □□□ 071C22 MDSKA□□ 071-22 140
59	204	5.6	9.800	141	9323	197	9324	384	204	2.21E-03	GKR06 - 2A □□□ 080C22 MDSKA□□ 080-22 70
69	176	5.5	11.376	163	9323	229	9324	436	176	2.14E-03	GKR06 - 2A □□□ 080C22 MDSKA□□ 080-22 70
76	161	5.2	12.444	179	9323	251	9324	450	161	2.11E-03	GKR06 - 2A □□□ 080C22 MDSKA□□ 080-22 70
84	146	4.4	13.720	197	9323	276	9324	426	146	2.09E-03	GKR06 - 2A □□□ 080C22 MDSKA□□ 080-22 70
98	126	4.0	15.873	228	9323	320	9324	450	126	2.05E-03	GKR06 - 2A □□□ 080C22 MDSKA□□ 080-22 70
108	114	3.7	17.500	251	9323	353	9324	450	114	2.04E-03	GKR06 - 2A □□□ 080C22 MDSKA□□ 080-22 70
121	103	3.3	19.444	279	9323	392	9324	450	103	2.02E-03	GKR06 - 2A □□□ 080C22 MDSKA□□ 080-22 70
134	93	3.0	21.438	308	9323	432	9324	450	93	2.01E-03	GKR06 - 2A □□□ 080C22 MDSKA□□ 080-22 70
158	79	2.8	25.309	363	9323	510	9324	450	79	1.98E-03	GKR06 - 2A □□□ 080C22 MDSKA□□ 080-22 70
175	72	2.5	27.903	400	9323	562	9324	450	72	1.98E-03	GKR06 - 2A □□□ 080C22 MDSKA□□ 080-22 70
198	64	2.2	31.481	452	9323	634	9324	450	64	1.97E-03	GKR06 - 2A □□□ 080C22 MDSKA□□ 080-22 70
219	58	2.0	34.708	498	9323	675	9324	450	58	1.96E-03	GKR06 - 2A □□□ 080C22 MDSKA□□ 080-22 70
48	418	5.5	9.800	123	9324	178	9325	384	307	2.21E-03	GKR06 - 2A □□□ 080C22 MDSKA□□ 080-22 140
56	360	5.3	11.376	143	9324	206	9325	436	305	2.14E-03	GKR06 - 2A □□□ 080C22 MDSKA□□ 080-22 140
61	329	5.0	12.444	156	9324	226	9325	450	284	2.11E-03	GKR06 - 2A □□□ 080C22 MDSKA□□ 080-22 140
68	299	4.3	13.720	172	9324	249	9325	426	251	2.09E-03	GKR06 - 2A □□□ 080C22 MDSKA□□ 080-22 140
79	258	4.0	15.873	199	9324	288	9325	450	226	2.05E-03	GKR06 - 2A □□□ 080C22 MDSKA□□ 080-22 140
87	234	3.6	17.500	220	9324	318	9325	450	205	2.04E-03	GKR06 - 2A □□□ 080C22 MDSKA□□ 080-22 140
97	211	3.2	19.444	244	9324	353	9325	450	185	2.02E-03	GKR06 - 2A □□□ 080C22 MDSKA□□ 080-22 140
108	191	2.9	21.438	269	9324	389	9325	450	167	2.01E-03	GKR06 - 2A □□□ 080C22 MDSKA□□ 080-22 140
127	162	2.8	25.309	317	9324	459	9325	450	142	1.98E-03	GKR06 - 2A □□□ 080C22 MDSKA□□ 080-22 140
141	147	2.6	27.903	350	9324	506	9325	450	129	1.98E-03	GKR06 - 2A □□□ 080C22 MDSKA□□ 080-22 140
159	130	2.3	31.481	395	9324	571	9325	450	114	1.97E-03	GKR06 - 2A □□□ 080C22 MDSKA□□ 080-22 140
176	118	2.1	34.708	435	9324	630	9325	450	103	1.96E-03	GKR06 - 2A □□□ 080C22 MDSKA□□ 080-22 140
34	670	4.9	3.431	80	9324	113	9325	200	670	4.56E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 80
47	489	4.5	4.706	109	9324	154	9325	250	489	4.16E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 80
60	382	3.9	6.022	140	9324	197	9325	280	382	3.97E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 80
64	355	4.6	6.481	150	9324	212	9325	350	355	4.11E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 80
71	322	4.1	7.146	166	9324	234	9325	348	322	4.05E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 80
88	259	3.9	8.889	206	9324	291	9325	408	259	3.92E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 80

Observe the notes for thermal dimensioning.

Selection tables - Bevel gearboxes

Naturally ventilated asynchronous geared servo motors

M ₂ [Nm]	n ₂ trans [rpm]	c	i	M ₂ max short-time on geared motor at				M ₂ Gr gearbox c=1 n ₁ ≤ 1400 rpm [Nm]	n ₂ therm [rpm]	J _{GM} referred to motor shaft [kgm ²]	Bevel geared servo motor Dimensions on Page 5-28
				8 kHz		16 kHz					
				M ₂ max [Nm]	Type EVS	M ₂ max [Nm]	Type EVS				
98	235	3.3	9.800	227	9324	321	9325	384	235	3.89E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 80
114	202	3.2	11.376	264	9324	373	9325	436	202	3.82E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 80
125	185	3.1	12.444	289	9324	408	9325	450	185	3.79E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 80
138	168	2.6	13.720	318	9324	450	9325	426	168	3.77E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 80
160	145	2.4	15.873	368	9324	520	9325	450	145	3.73E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 80
177	131	2.2	17.500	406	9324	574	9325	450	131	3.72E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 80
198	118	2.0	19.444	451	9324	637	9325	450	118	3.70E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 80
218	107	1.8	21.438	497	9324	675	9325	450	107	3.69E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 80
30	1198	4.6	3.431	76	9325	91	9326	200	733	4.56E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 140
41	873	4.2	4.706	105	9325	125	9326	250	608	4.16E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 140
53	682	3.7	6.022	134	9325	160	9326	280	517	3.97E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 140
56	634	4.3	6.481	144	9325	172	9326	350	382	4.11E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 140
63	575	3.9	7.146	159	9325	190	9326	348	339	4.05E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 140
78	462	3.6	8.889	198	9325	237	9326	408	313	3.92E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 140
86	419	3.1	9.800	218	9325	261	9326	384	274	3.89E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 140
100	361	3.0	11.376	253	9325	303	9326	436	273	3.82E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 140
110	330	2.9	12.444	277	9325	331	9326	450	250	3.79E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 140
122	300	2.5	13.720	305	9325	365	9326	426	225	3.77E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 140
141	259	2.2	15.873	353	9325	422	9326	450	196	3.73E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 140
156	235	2.0	17.500	389	9325	466	9326	450	178	3.72E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 140
174	211	1.8	19.444	432	9325	517	9326	450	160	3.70E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 140
192	192	1.7	21.438	477	9325	570	9326	450	145	3.69E-03	GKR06 - 2A □□□ 090C22 MDSKA□□ 090-22 140

Observe the notes for thermal dimensioning.

Selection tables - Bevel gearboxes

Forced ventilated asynchronous geared servo motors



M ₂ [Nm]	n ₂ trans [rpm]	c	i	M ₂ max short-time on geared motor at				M ₂ Gr gearbox c=1 n ₁ ≤ 1400 rpm [Nm]	n ₂ therm [rpm]	J _{GM} referred to motor shaft [kgm ²]	Bevel geared servo motor Dimensions on Page 5-28
				8 kHz		16 kHz					
				M ₂ max [Nm]	Type EVS	M ₂ max [Nm]	Type EVS				
31	658	1.7	5.185	64	9324	94	9325	69	533	9.11E-04	GKR04 - 2A □□□ 071C22 MDFKA□□ 071-22 120
35	572	1.5	5.963	74	9324	108	9325	72	441	9.02E-04	GKR04 - 2A □□□ 071C22 MDFKA□□ 071-22 120
42	480	1.4	7.111	88	9324	116	9325	78	404	8.75E-04	GKR04 - 2A □□□ 071C22 MDFKA□□ 071-22 120
49	417	1.3	8.178	101	9324	122	9325	81	337	8.71E-04	GKR04 - 2A □□□ 071C22 MDFKA□□ 071-22 120
54	375	1.2	9.101	112	9324	127	9325	84	342	1.16E-03	GKR04 - 2A □□□ 071C22 MDFKA□□ 071-22 120
63	326	1.1	10.466	129	9324	133	9325	89	286	8.60E-04	GKR04 - 2A □□□ 071C22 MDFKA□□ 071-22 120
20	957	4.9	3.565	44	9324	64	9325	138	843	1.33E-03	GKR05 - 2A □□□ 071C22 MDFKA□□ 071-22 120
28	698	3.8	4.889	60	9324	88	9325	147	687	1.11E-03	GKR05 - 2A □□□ 071C22 MDFKA□□ 071-22 120
37	545	3.2	6.257	77	9324	113	9325	156	545	1.01E-03	GKR05 - 2A □□□ 071C22 MDFKA□□ 071-22 120
40	495	3.3	6.883	85	9324	124	9325	179	404	1.09E-03	GKR05 - 2A □□□ 071C22 MDFKA□□ 071-22 120
46	436	3.0	7.817	97	9324	141	9325	187	350	1.06E-03	GKR05 - 2A □□□ 071C22 MDFKA□□ 071-22 120
56	361	2.6	9.440	117	9324	170	9325	191	329	9.83E-04	GKR05 - 2A □□□ 071C22 MDFKA□□ 071-22 120
63	318	2.4	10.720	132	9324	194	9325	204	286	9.70E-04	GKR05 - 2A □□□ 071C22 MDFKA□□ 071-22 120
71	282	2.2	12.081	149	9324	218	9325	208	274	9.32E-04	GKR05 - 2A □□□ 071C22 MDFKA□□ 071-22 120
78	258	2.1	13.216	163	9324	239	9325	214	258	9.17E-04	GKR05 - 2A □□□ 071C22 MDFKA□□ 071-22 120
81	249	2.0	13.719	169	9324	248	9325	217	238	9.24E-04	GKR05 - 2A □□□ 071C22 MDFKA□□ 071-22 120
89	227	1.9	15.008	185	9324	271	9325	223	221	9.10E-04	GKR05 - 2A □□□ 071C22 MDFKA□□ 071-22 120
100	202	1.8	16.857	208	9324	304	9325	240	202	8.90E-04	GKR05 - 2A □□□ 071C22 MDFKA□□ 071-22 120
114	178	1.6	19.143	236	9324	346	9325	240	178	8.85E-04	GKR05 - 2A □□□ 071C22 MDFKA□□ 071-22 120
123	165	1.5	20.650	255	9324	360	9325	240	165	8.74E-04	GKR05 - 2A □□□ 071C22 MDFKA□□ 071-22 120
140	145	1.3	23.450	290	9324	360	9325	240	145	8.71E-04	GKR05 - 2A □□□ 071C22 MDFKA□□ 071-22 120
160	127	1.3	26.878	332	9324	360	9325	240	127	8.57E-04	GKR05 - 2A □□□ 071C22 MDFKA□□ 071-22 120
182	112	1.1	30.522	360	9324	360	9325	240	112	8.55E-04	GKR05 - 2A □□□ 071C22 MDFKA□□ 071-22 120
200	102	1.0	33.433	360	9324	360	9325	240	102	8.49E-04	GKR05 - 2A □□□ 071C22 MDFKA□□ 071-22 120
40	459	3.3	3.565	100	9324	73	9324	138	459	2.42E-03	GKR05 - 2A □□□ 080C22 MDFKA□□ 080-22 60
55	334	2.6	4.889	138	9324	100	9324	147	334	2.20E-03	GKR05 - 2A □□□ 080C22 MDFKA□□ 080-22 60
70	261	2.1	6.257	176	9324	128	9324	156	261	2.10E-03	GKR05 - 2A □□□ 080C22 MDFKA□□ 080-22 60
77	238	2.2	6.883	194	9324	141	9324	179	238	2.18E-03	GKR05 - 2A □□□ 080C22 MDFKA□□ 080-22 60
88	209	2.0	7.817	220	9324	160	9324	187	209	2.15E-03	GKR05 - 2A □□□ 080C22 MDFKA□□ 080-22 60
107	173	1.7	9.440	266	9324	193	9324	191	173	2.07E-03	GKR05 - 2A □□□ 080C22 MDFKA□□ 080-22 60
121	153	1.6	10.720	302	9324	219	9324	204	153	2.06E-03	GKR05 - 2A □□□ 080C22 MDFKA□□ 080-22 60
137	135	1.5	12.081	312	9324	247	9324	208	135	2.02E-03	GKR05 - 2A □□□ 080C22 MDFKA□□ 080-22 60
150	124	1.4	13.216	321	9324	270	9324	214	124	2.01E-03	GKR05 - 2A □□□ 080C22 MDFKA□□ 080-22 60
156	119	1.3	13.719	325	9324	280	9324	217	119	2.01E-03	GKR05 - 2A □□□ 080C22 MDFKA□□ 080-22 60

Observe the notes for thermal dimensioning.

Selection tables - Bevel gearboxes

Forced ventilated asynchronous geared servo motors

M ₂ [Nm]	n ₂ trans [rpm]	c	i	M ₂ max short-time on geared motor at				M ₂ Gr gearbox c=1 n ₁ ≤ 1400 rpm [Nm]	n ₂ therm [rpm]	J _{GM} referred to motor shaft [kgm ²]	Bevel geared servo motor Dimensions on Page 5-28
				8 kHz		16 kHz					
				M ₂ max [Nm]	Type EVS	M ₂ max [Nm]	Type EVS				
171	109	1.3	15.008	335	9324	307	9324	223	109	2.00E-03	GKR05 - 2A □□□ 080C22 MDFKA□□ 080-22 60
192	97	1.2	16.857	360	9324	344	9324	240	97	1.98E-03	GKR05 - 2A □□□ 080C22 MDFKA□□ 080-22 60
218	85	1.1	19.143	360	9324	360	9324	240	85	1.98E-03	GKR05 - 2A □□□ 080C22 MDFKA□□ 080-22 60
36	969	2.9	3.565	99	9325	72	9325	138	757	2.42E-03	GKR05 - 2A □□□ 080C22 MDFKA□□ 080-22 120
50	707	2.2	4.889	136	9325	99	9325	147	616	2.20E-03	GKR05 - 2A □□□ 080C22 MDFKA□□ 080-22 120
64	552	1.8	6.257	174	9325	126	9325	156	501	2.10E-03	GKR05 - 2A □□□ 080C22 MDFKA□□ 080-22 120
70	502	1.9	6.883	192	9325	139	9325	179	356	2.18E-03	GKR05 - 2A □□□ 080C22 MDFKA□□ 080-22 120
80	442	1.8	7.817	218	9325	157	9325	187	299	2.15E-03	GKR05 - 2A □□□ 080C22 MDFKA□□ 080-22 120
96	366	1.5	9.440	263	9325	190	9325	191	266	2.07E-03	GKR05 - 2A □□□ 080C22 MDFKA□□ 080-22 120
110	322	1.4	10.720	298	9325	216	9325	204	227	2.06E-03	GKR05 - 2A □□□ 080C22 MDFKA□□ 080-22 120
124	286	1.3	12.081	312	9325	243	9325	208	218	2.02E-03	GKR05 - 2A □□□ 080C22 MDFKA□□ 080-22 120
135	261	1.2	13.216	321	9325	266	9325	214	204	2.01E-03	GKR05 - 2A □□□ 080C22 MDFKA□□ 080-22 120
141	252	1.2	13.719	325	9325	276	9325	217	185	2.01E-03	GKR05 - 2A □□□ 080C22 MDFKA□□ 080-22 120
154	230	1.1	15.008	335	9325	302	9325	223	174	2.00E-03	GKR05 - 2A □□□ 080C22 MDFKA□□ 080-22 120
173	205	1.1	16.857	360	9325	340	9325	240	178	1.98E-03	GKR05 - 2A □□□ 080C22 MDFKA□□ 080-22 120
34	566	5.1	6.022	74	9324	109	9325	241	566	1.20E-03	GKR06 - 2A □□□ 071C22 MDFKA□□ 071-22 120
65	300	4.9	11.376	141	9324	205	9325	436	300	1.05E-03	GKR06 - 2A □□□ 071C22 MDFKA□□ 071-22 120
72	274	4.6	12.444	154	9324	225	9325	450	274	1.02E-03	GKR06 - 2A □□□ 071C22 MDFKA□□ 071-22 120
80	249	3.9	13.720	169	9324	248	9325	426	247	1.00E-03	GKR06 - 2A □□□ 071C22 MDFKA□□ 071-22 120
92	215	3.6	15.873	196	9324	287	9325	450	215	9.62E-04	GKR06 - 2A □□□ 071C22 MDFKA□□ 071-22 120
102	195	3.3	17.500	216	9324	316	9325	450	195	9.53E-04	GKR06 - 2A □□□ 071C22 MDFKA□□ 071-22 120
114	175	2.9	19.444	240	9324	351	9325	450	175	9.29E-04	GKR06 - 2A □□□ 071C22 MDFKA□□ 071-22 120
126	159	2.7	21.438	265	9324	387	9325	450	159	9.23E-04	GKR06 - 2A □□□ 071C22 MDFKA□□ 071-22 120
149	135	2.6	25.309	313	9324	457	9325	450	135	8.93E-04	GKR06 - 2A □□□ 071C22 MDFKA□□ 071-22 120
165	122	2.3	27.903	345	9324	504	9325	450	122	8.89E-04	GKR06 - 2A □□□ 071C22 MDFKA□□ 071-22 120
186	108	2.1	31.481	389	9324	568	9325	450	108	8.76E-04	GKR06 - 2A □□□ 071C22 MDFKA□□ 071-22 120
206	98	1.9	34.708	429	9324	627	9325	450	98	8.73E-04	GKR06 - 2A □□□ 071C22 MDFKA□□ 071-22 120
242	84	1.8	40.741	503	9324	675	9325	450	84	8.58E-04	GKR06 - 2A □□□ 071C22 MDFKA□□ 071-22 120
267	76	1.6	44.917	555	9324	675	9325	450	76	8.57E-04	GKR06 - 2A □□□ 071C22 MDFKA□□ 071-22 120
295	69	1.5	49.444	611	9324	675	9325	450	69	8.51E-04	GKR06 - 2A □□□ 071C22 MDFKA□□ 071-22 120
325	63	1.3	54.513	673	9324	675	9325	450	63	8.50E-04	GKR06 - 2A □□□ 071C22 MDFKA□□ 071-22 120
37	476	5.0	3.431	97	9324	70	9324	200	476	2.88E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 60
52	347	4.5	4.706	132	9324	96	9324	250	347	2.48E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 60
67	271	4.0	6.022	169	9324	123	9324	280	271	2.29E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 60

Observe the notes for thermal dimensioning.

Selection tables - Bevel gearboxes

Forced ventilated asynchronous geared servo motors



M ₂ [Nm]	n ₂ trans [rpm]	c	i	M ₂ max short-time on geared motor at				M ₂ Gr gearbox c=1 n ₁ ≤ 1400 rpm [Nm]	n ₂ therm [rpm]	J _{GM} referred to motor shaft [kgm ²]	Bevel geared servo motor Dimensions on Page 5-28
				8 kHz		16 kHz					
				M ₂ max [Nm]	Type EVS	M ₂ max [Nm]	Type EVS				
71	252	4.6	6.481	182	9324	132	9324	350	252	2.43E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 60
79	229	4.2	7.146	201	9324	146	9324	348	229	2.37E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 60
98	184	3.9	8.889	250	9324	182	9324	408	184	2.24E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 60
109	167	3.3	9.800	276	9324	200	9324	384	167	2.21E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 60
127	144	3.3	11.376	320	9324	232	9324	436	144	2.14E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 60
139	131	3.1	12.444	350	9324	254	9324	450	131	2.11E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 60
154	119	2.6	13.720	386	9324	280	9324	426	119	2.09E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 60
178	103	2.4	15.873	446	9324	324	9324	450	103	2.05E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 60
197	93	2.2	17.500	492	9324	358	9324	450	93	2.04E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 60
219	84	2.0	19.444	547	9324	397	9324	450	84	2.02E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 60
242	76	1.8	21.438	603	9324	438	9324	450	76	2.01E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 60
287	65	1.6	25.309	675	9324	517	9324	450	65	1.98E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 60
317	59	1.4	27.903	675	9324	570	9324	450	59	1.98E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 60
358	52	1.3	31.481	675	9324	643	9324	450	52	1.97E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 60
395	47	1.1	34.708	675	9324	675	9324	450	47	1.96E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 60
34	1007	4.3	3.431	96	9325	69	9325	200	722	2.88E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 120
47	734	3.9	4.706	131	9325	95	9325	250	600	2.48E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 120
60	574	3.4	6.022	168	9325	121	9325	280	529	2.29E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 120
64	533	4.0	6.481	180	9325	131	9325	350	376	2.43E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 120
71	484	3.6	7.146	199	9325	144	9325	348	334	2.37E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 120
89	389	3.4	8.889	247	9325	179	9325	408	308	2.24E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 120
99	353	2.9	9.800	273	9325	197	9325	384	270	2.21E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 120
114	304	2.8	11.376	317	9325	229	9325	436	269	2.14E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 120
125	278	2.7	12.444	346	9325	251	9325	450	252	2.11E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 120
139	252	2.3	13.720	382	9325	276	9325	426	221	2.09E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 120
161	218	2.1	15.873	442	9325	320	9325	450	209	2.05E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 120
178	197	1.9	17.500	487	9325	353	9325	450	184	2.04E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 120
198	178	1.7	19.444	541	9325	392	9325	450	178	2.02E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 120
219	161	1.5	21.438	597	9325	432	9325	450	159	2.01E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 120
258	137	1.5	25.309	675	9325	510	9325	450	137	1.98E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 120
285	124	1.4	27.903	675	9325	562	9325	450	124	1.98E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 120
322	110	1.2	31.481	675	9325	634	9325	450	110	1.97E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 120
356	100	1.1	34.708	675	9325	675	9325	450	100	1.96E-03	GKR06 - 2A □□□ 080C22 MDFKA□□ 080-22 120
69	490	2.7	3.431	187	9325	137	9325	200	490	4.56E-03	GKR06 - 2A □□□ 090C22 MDFKA□□ 090-22 60

Observe the notes for thermal dimensioning.

Selection tables - Bevel gearboxes

Forced ventilated asynchronous geared servo motors

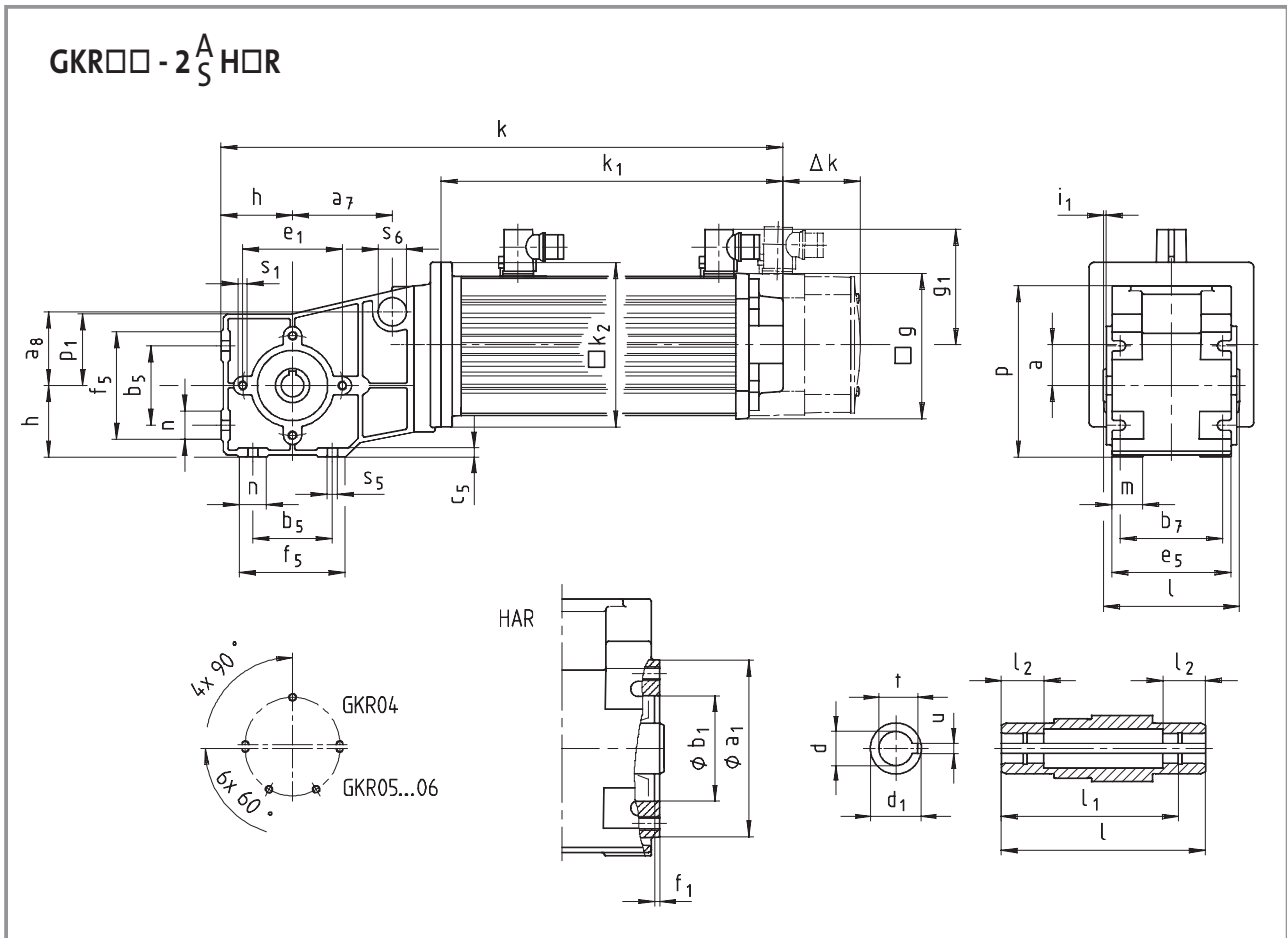
M ₂ [Nm]	n ₂ trans [rpm]	c	i	M ₂ max short-time on geared motor at				M ₂ Gr gearbox c=1 n ₁ ≤ 1400 rpm [Nm]	n ₂ therm [rpm]	J _{GM} referred to motor shaft [kgm ²]	Bevel geared servo motor Dimensions on Page 5-28
				8 kHz		16 kHz					
				M ₂ max [Nm]	Type EVS	M ₂ max [Nm]	Type EVS				
95	357	2.5	4.706	256	9325	188	9325	250	357	4.16E-03	GKR06 - 2A □□□ 090C22 MDFKA□□ 090-22 60
121	279	2.2	6.022	327	9325	240	9325	280	279	3.97E-03	GKR06 - 2A □□□ 090C22 MDFKA□□ 090-22 60
130	259	2.5	6.481	352	9325	259	9325	350	259	4.11E-03	GKR06 - 2A □□□ 090C22 MDFKA□□ 090-22 60
144	235	2.3	7.146	388	9325	285	9325	348	235	4.05E-03	GKR06 - 2A □□□ 090C22 MDFKA□□ 090-22 60
179	189	2.2	8.889	483	9325	355	9325	408	189	3.92E-03	GKR06 - 2A □□□ 090C22 MDFKA□□ 090-22 60
198	171	1.8	9.800	533	9325	391	9325	384	171	3.89E-03	GKR06 - 2A □□□ 090C22 MDFKA□□ 090-22 60
230	148	1.8	11.376	618	9325	454	9325	436	148	3.82E-03	GKR06 - 2A □□□ 090C22 MDFKA□□ 090-22 60
252	135	1.7	12.444	675	9325	497	9325	450	135	3.79E-03	GKR06 - 2A □□□ 090C22 MDFKA□□ 090-22 60
279	122	1.5	13.720	639	9325	548	9325	426	122	3.77E-03	GKR06 - 2A □□□ 090C22 MDFKA□□ 090-22 60
323	106	1.3	15.873	675	9325	633	9325	450	106	3.73E-03	GKR06 - 2A □□□ 090C22 MDFKA□□ 090-22 60
357	96	1.2	17.500	675	9325	675	9325	450	96	3.72E-03	GKR06 - 2A □□□ 090C22 MDFKA□□ 090-22 60
397	86	1.1	19.444	675	9325	675	9325	450	86	3.70E-03	GKR06 - 2A □□□ 090C22 MDFKA□□ 090-22 60
61	1014	2.4	3.431	165	9326	145	9327	200	638	4.56E-03	GKR06 - 2A □□□ 090C22 MDFKA□□ 090-22 120
84	740	2.2	4.706	227	9326	199	9327	250	531	4.16E-03	GKR06 - 2A □□□ 090C22 MDFKA□□ 090-22 120
108	578	1.9	6.022	290	9326	255	9327	280	467	3.97E-03	GKR06 - 2A □□□ 090C22 MDFKA□□ 090-22 120
115	537	2.3	6.481	312	9326	275	9327	350	332	4.11E-03	GKR06 - 2A □□□ 090C22 MDFKA□□ 090-22 120
128	487	2.0	7.146	344	9326	303	9327	348	294	4.05E-03	GKR06 - 2A □□□ 090C22 MDFKA□□ 090-22 120
159	392	1.9	8.889	428	9326	377	9327	408	270	3.92E-03	GKR06 - 2A □□□ 090C22 MDFKA□□ 090-22 120
176	355	1.6	9.800	472	9326	415	9327	384	223	3.89E-03	GKR06 - 2A □□□ 090C22 MDFKA□□ 090-22 120
204	306	1.6	11.376	548	9326	482	9327	436	220	3.82E-03	GKR06 - 2A □□□ 090C22 MDFKA□□ 090-22 120
223	280	1.5	12.444	599	9326	527	9327	450	204	3.79E-03	GKR06 - 2A □□□ 090C22 MDFKA□□ 090-22 120
247	254	1.3	13.720	639	9326	581	9327	426	171	3.77E-03	GKR06 - 2A □□□ 090C22 MDFKA□□ 090-22 120
286	219	1.2	15.873	675	9326	673	9327	450	163	3.73E-03	GKR06 - 2A □□□ 090C22 MDFKA□□ 090-22 120
316	199	1.1	17.500	675	9326	675	9327	450	142	3.72E-03	GKR06 - 2A □□□ 090C22 MDFKA□□ 090-22 120

Observe the notes for thermal dimensioning.



Dimensions - Bevel gearboxes

Geared servo motors with resolver



Dimensions - Bevel gearboxes

Geared servo motors with resolver



Geared servo motor GKR□□ - 2^A S H□R		S (synchronous servo motors)					A (asynchronous servo motors)								
		056		071			056	071	080	090					
		C23	C33	C03	C13	C33	C22	C22	C22	C22					
Motor	g	102	102	131	131	131	102	131	142	165					
	g ₁	90	90	102	102	102	90	102	109	118					
	k ₂	145	145	145	145	145	145	145	180	180					
	k ₁ naturally ventilated	207	242	215	250	285	258	267	307	346					
	Δk** naturally ventilated+brake	27	27	35	35	35	25	35	33	35					
	forced ventilated	-	-	68	68	68	-	68	62	89					
	forced ventilated+brake	-	-	103	103	103	-	103	95	124					
Gearbox size	Gearbox Overall length						k								
	l*	p*	p ₁	a	h	o									
04	120	151	63	36	63	189	407	442	416	451	486	459	467		
05	143	181	82	40	80	251	461	496	469	504	539	512	521	571	
06	170	226	100	51	100	307	512	547	521	556	591	564	572	622	661

Gearbox size	d ²⁾	l	d ₁	Hollow shaft				a ₁	b ₁	Pitch circle			
	H7			l ₁	l ₂	u	t ¹⁾			e ₁	f ₁	i ₁	s ₁
04	20	120	30	105	25	6	22.8	104	62	88	3	2.5	M8x16
	25												
05	30	143	50	127	25	8	33.3	116	80	100	4	4	M8x15
	35												
06	40	170	65	150	30	12	43.3	140	100	120	4	5	M10x22
	45												

Gearbox size	Foot									Torque plate		
	b ₅	b ₇	c ₅	e ₅	f ₅	n	m	s ₅	a ₇	a ₈	s ₆	
04	70	90	8	105	95	25	28	9	88	65	25x17	
05	100	100	11	115	138	48	27	9		-		
06	120	125	12	145	164	53	32	11		-		

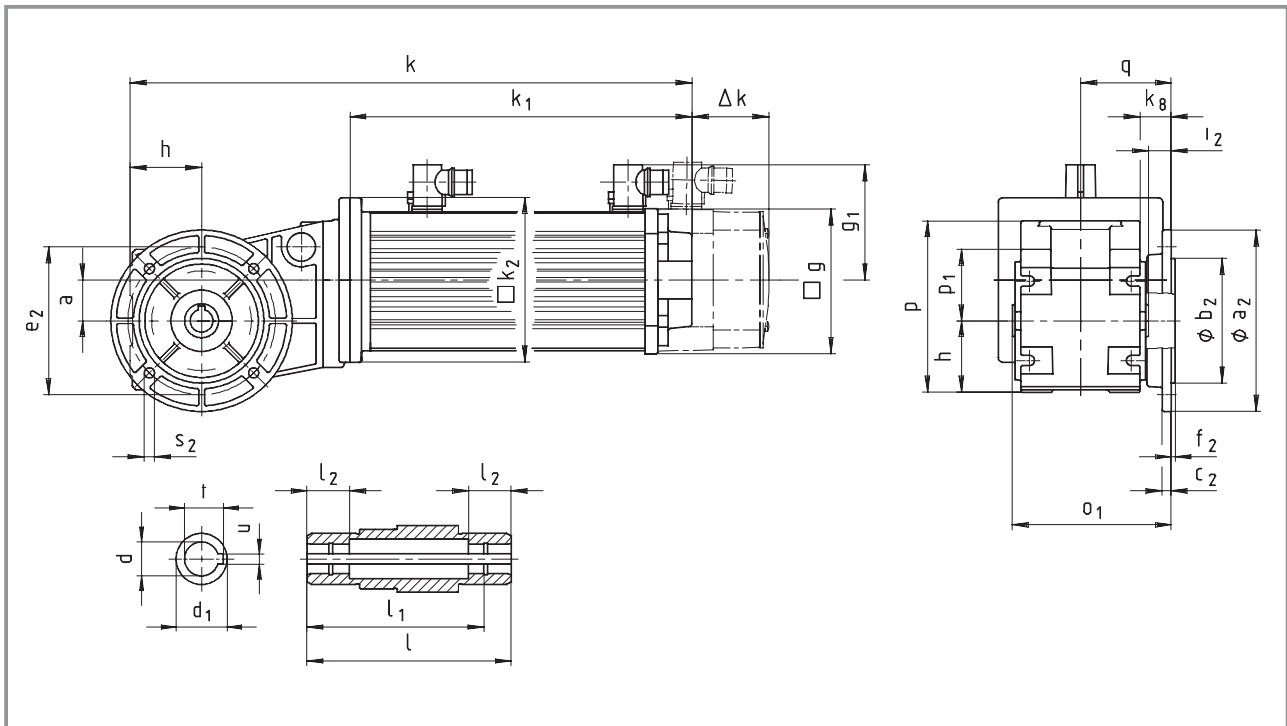
Dimensions in [mm] * Observe dimension k₂ ** See page 8-34 for more built-on accessories for motors

¹⁾ With hollow shaft d = 25 mm, use flat keyway to DIN 6885/3.

²⁾ Only in the l₂ range

Dimensions - Bevel gearboxes

Geared servo motors with resolver



Geared servo motor		S (synchronous servo motors)					A (asynchronous servo motors)										
GKR□□ - 2 ^A _S HAK		056		071			056	071	080	090							
		C23	C33	C03	C13	C33	C22	C22	C22	C22							
Motor	g	102	102	131	131	131	102	131	142	165							
	g ₁	90	90	102	102	102	90	102	109	118							
	k ₂	145	145	145	145	145	145	145	180	180							
	k ₁ naturally ventilated	207	242	215	250	285	258	267	307	346							
	Δk** naturally ventilated+brake	27	27	35	35	35	25	35	33	35							
	forced ventilated	-	-	68	68	68	-	68	62	89							
	forced ventilated+brake	-	-	103	103	103	-	103	95	124							
Gearbox size	Gearbox								Overall length								
	o ₁ *	p*	p ₁	a	h	k ₈	o	q	k								
04	140	151	63	36	63	28	189	80	407	442	416	451	486	459	467		
05	177	181	82	40	80	47	251	105	461	496	469	504	539	512	521	571	
06	212	226	100	51	100	54	307	126.5	512	547	521	556	591	564	572	622	661

Gearbox size	Hollow shaft			Output flange										
	d ²⁾ H7	l	d ₁	l ₁	l ₂	u JS9	t ¹⁾ +0.1	a ₂	b ₂ j7	c ₂	e ₂	f ₂	i ₂	s ₂ 4 x 90°
04	20	120	30	105	25	6	22.8	120	80	8	100	3	20	7
	25		35			8	27.0	160	110		130	3.5		9
05	30	143	50	127.5	25	8	33.3	160	110	12	130	3.5	33.5	9
	35					10	38.3	200	130		165	4		11
06	40	107	65	150	30	12	43.3	200	130	12	165	3.5	41.5	11
	45					14	48.8	250	180		215	4		14

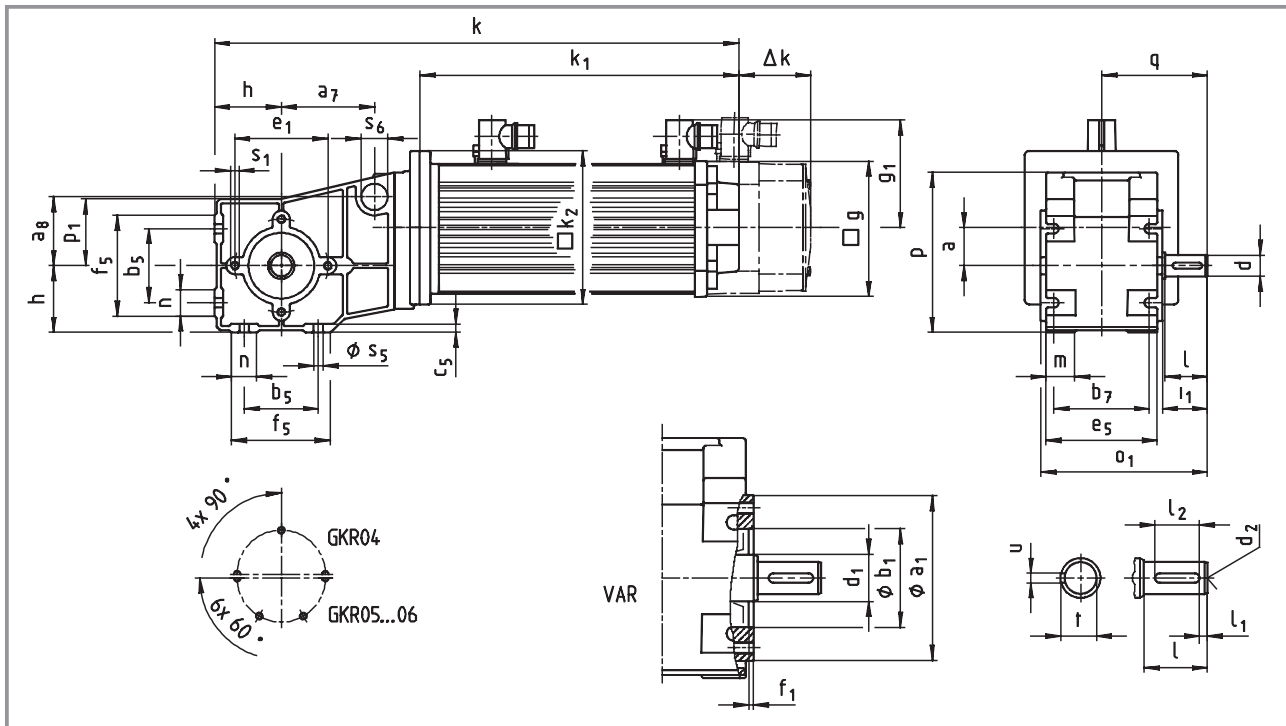
Dimensions in [mm] * Observe dimension k₂ ** See page 8-34 for more built-on accessories for motors

1) With hollow shaft d = 25 mm, use flat keyway to DIN 6885/3.

2) Only in the l₂ range

Dimensions - Bevel gearboxes

Geared servo motors with resolver



Geared servo motor		S (synchronous servo motors)					A (asynchronous servo motors)									
GKR□□ - 2 ^A _S V□□		056		071			056	071	080	090						
		C23	C33	C03	C13	C33	C22	C22	C22	C22						
Motor	g	102	102	131	131	131	102	131	142	165						
	g ₁	90	90	102	102	102	90	102	109	118						
	k ₂	145	145	145	145	145	145	145	180	180						
	k ₁ naturally ventilated	207	242	215	250	285	258	267	307	346						
	Δk** naturally ventilated+brake	27	27	35	35	35	25	35	33	35						
	forced ventilated	-	-	68	68	68	-	68	62	89						
	forced ventilated+brake	-	-	103	103	103	-	103	95	124						
Gearbox size	Gearbox Overall length							k								
	o ₁ *	p*	p ₁	a	h	o	q									
04	158	151	63	36	63	189	100	407	442	416	451	486	459	467		
05	199	181	82	40	80	251	131.5	461	496	469	504	539	512	521	571	
06	235	226	100	51	100	307	155	512	547	521	556	591	564	572	622	661

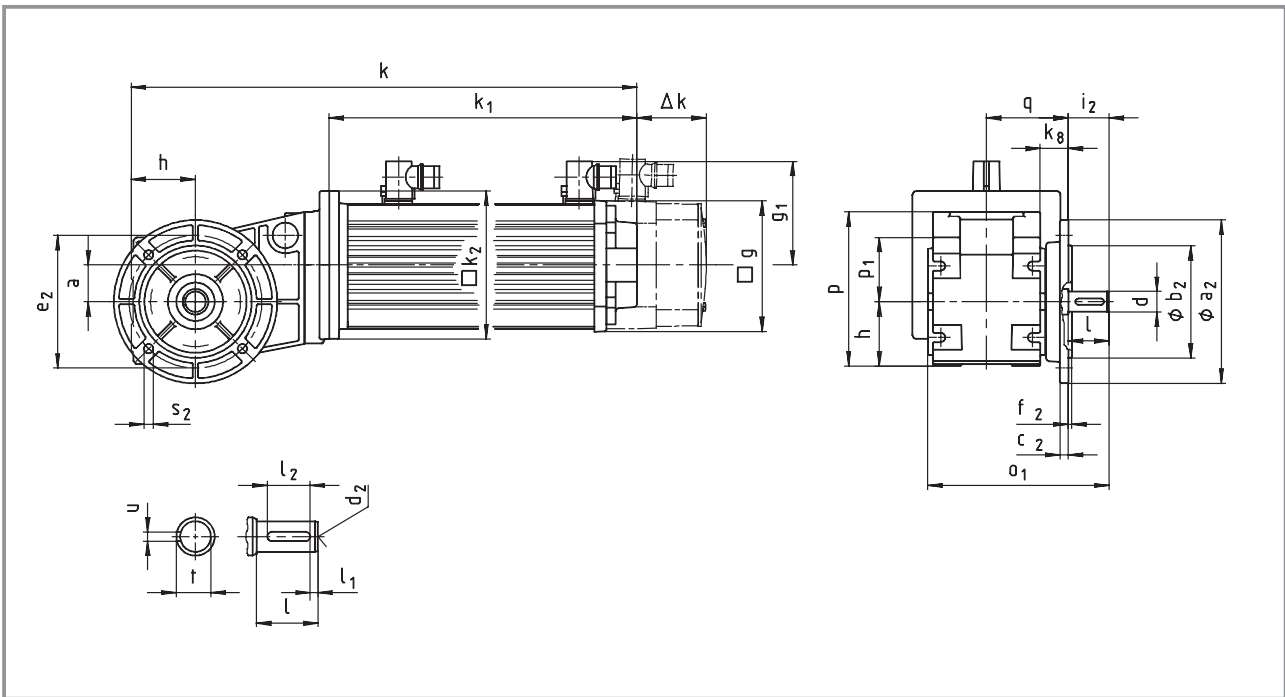
Gearbox size	Solid shaft									Pitch circle					
	d k6	l	d ₁	l ₁	l ₂	d ₂	u	t	a ₁	b ₁ J7	e ₁	f ₁	i ₁	s ₁	
04	20	40	30	5	28	M6	6	22.5	104	62	88	3	42.5	M8x16	
05	30	60	50	6	45	M10	8	33	116	80	100	4	64	M8x15	
06	35	70	65	7	56	M12	10	38	140	100	120	4	75	M10x22	

Gearbox size	Foot									Torque plate		
	b ₅	b ₇	c ₅	e ₅	f ₅	n	m	s ₅	a ₇	a ₈	s ₆	
04	70	90	8	105	95	25	28	9	88	65	25x17	
05	100	100	11	115	138	48	27	9		-		
06	120	125	12	145	164	53	32	11		-		

Dimensions in [mm] * Observe dimension k₂ ** See page 8-34 for more built-on accessories for motors

Dimensions - Bevel gearboxes

Geared servo motors with resolver



Geared servo motor GKR□□ - 2^A_S VAK		S (synchronous servo motors)					A (asynchronous servo motors)									
		056		071			056	071	080	090						
		C23	C33	C03	C13	C33	C22	C22	C22	C22						
Motor	g	102	102	131	131	131	102	131	142	165						
	g ₁	90	90	102	102	102	90	102	109	118						
	k ₂	145	145	145	145	145	145	145	180	180						
	k ₁	naturally ventilated	207	242	215	250	285	258	267	307	346					
	Δk**	naturally ventilated+brake	27	27	35	35	35	25	35	33	35					
	forced ventilated	-	-	68	68	68	-	68	62	89						
	forced ventilated+brake	-	-	103	103	103	-	103	95	124						
Gearbox size	Gearbox Overall length								k							
	o ₁	p*	p ₁	a	h	o	q	k ₈								
04	178	151	63	36	63	189	80.5	28	407	442	416	451	486	459	467	
05	233	181	82	40	80	251	105	47	461	496	469	504	539	512	521	571
06	277	226	100	51	100	307	126.5	54	512	547	521	556	591	564	572	622

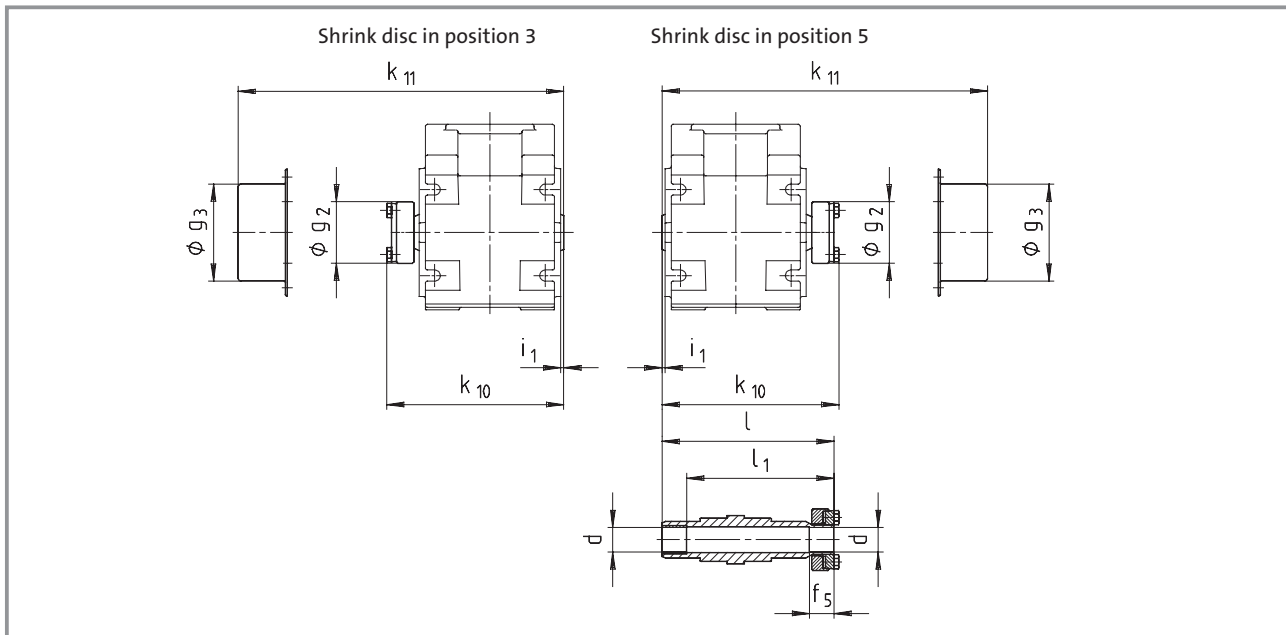
Gearbox size	Hollow shaft							Output flange						
	d k6	l	l ₁	l ₂	d ₂	u	t	a ₂	b ₂ j7	c ₂	e ₂	f ₂	i ₂	s ₂ 4 x 90°
04	20	40	5	28	M6	6	22.5	120 160	80 110	8	100 130	3 3.5	40	7 9
05	30	60	6	45	M10	8	33	160 200	110 130	12	130 165	3.5	60	9 11
06	35	70	7	56	M12	10	38	200 250	130 180	12	165 215	3.5 4	70	11 14

Dimensions in [mm] * Observe dimension k₂

** See page 8-34 for more built-on accessories for motors



Hollow shaft with shrink disc



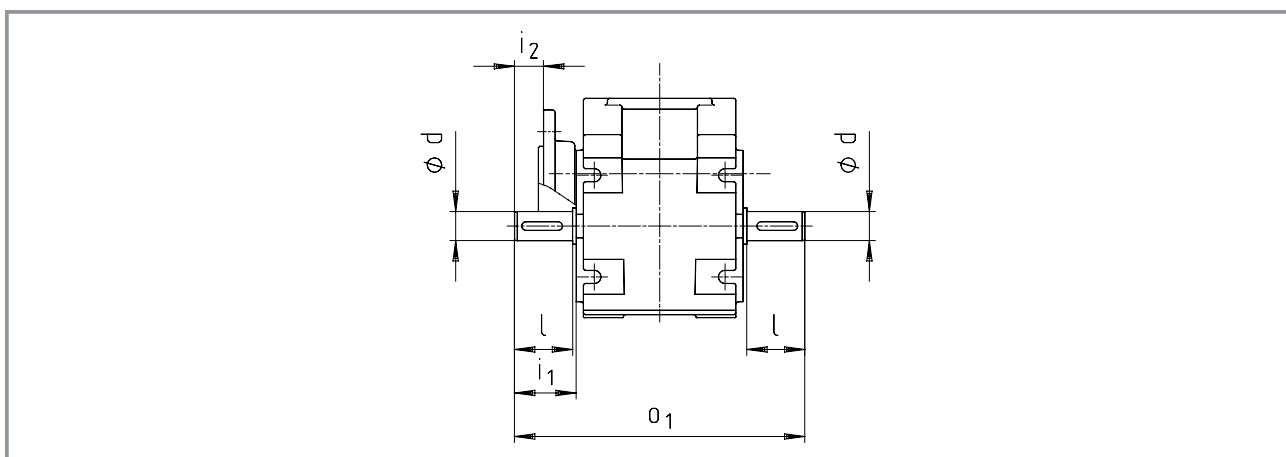
Gearbox size	Machine shaft *		Hollow shaft with shrink disc						Cover	
	d	Fit	i ₁	g ₂	k ₁₀	l	l ₁	f ₅	g ₃	k ₁₁
03	20	h6	2.5	50	124	120	100	20	65	137.5
04	20	h6	2.5	50	144	140	120	20	79	157.5
05	30 / 35	h6	4	80	176.5	171	151	28	90	182
06	40	h6	5	90	209.5	204	174	30	100	214

*Ensure that the strength of the shaft material is adequate in shrink disc designs. When using typical steels (e.g. C45, 42CrMo4), the torques listed in the selection tables can be used without restriction.

When using material that is considerably weaker, please consult with us. Medium surface roughness Rz must not exceed 15 µm (turning operation is sufficient).

Dimensions in [mm]

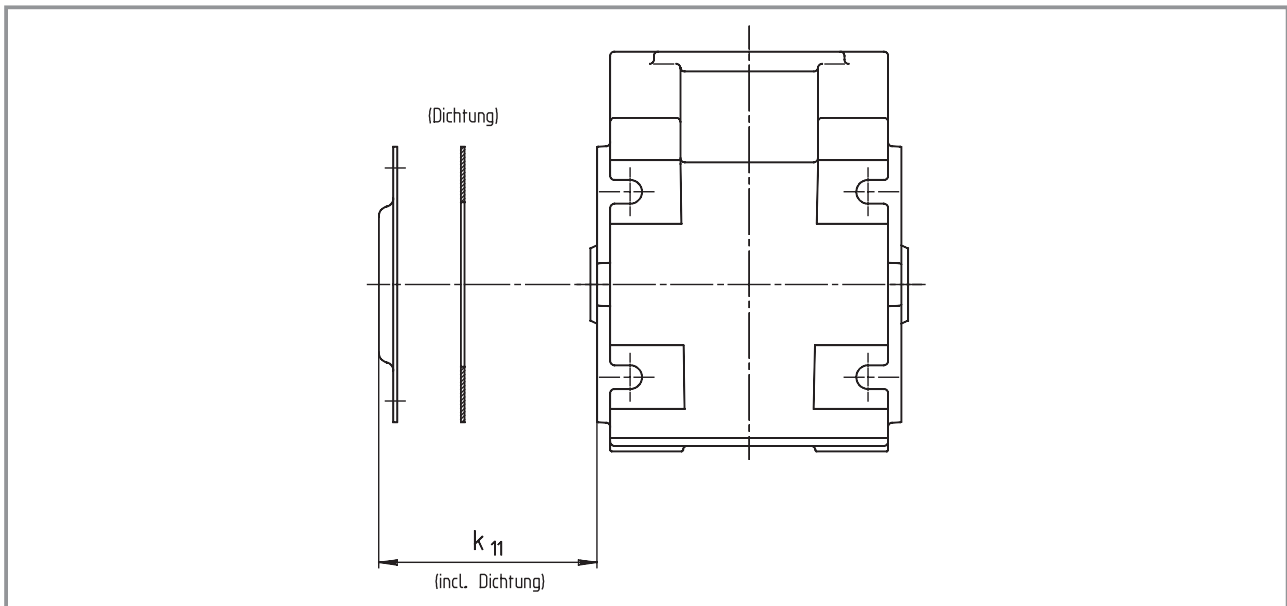
Gearbox with 2nd output shaft end



Gearbox size	d	l	i ₁	i ₂	o ₁
04	20	40	42.5	19.5	200
05	30	60	64	27	263
06	35	70	75	28.5	310

Dimensions in [mm]

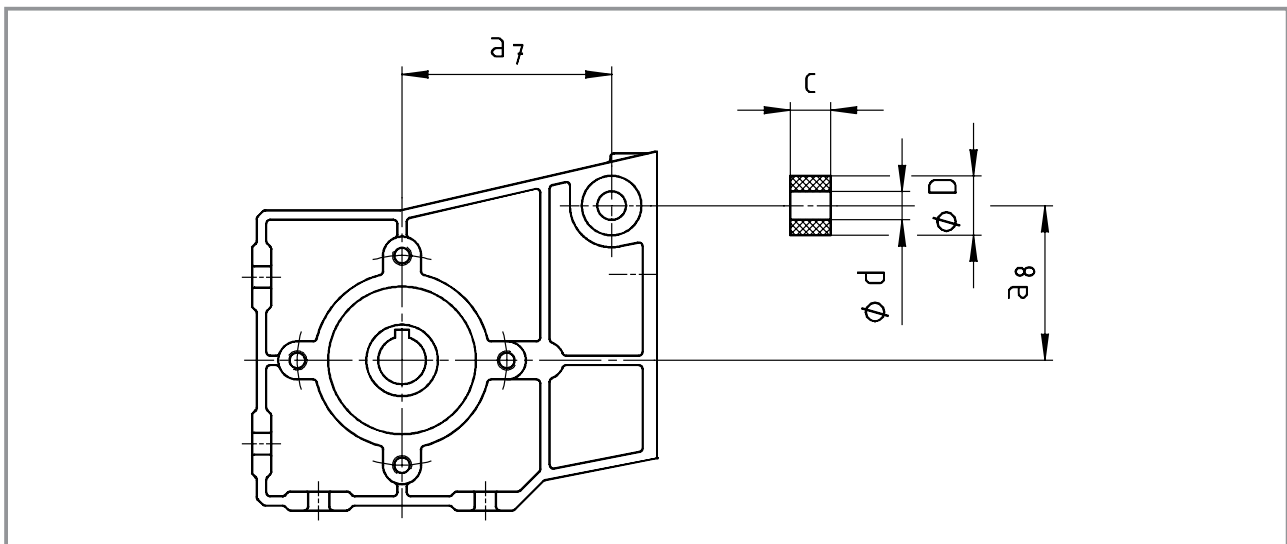
Hoseproof hollow shaft cover



Gearbox size	Cover k_{11}
04	9
05	10
06	11

5

Rubber buffer for torque plate

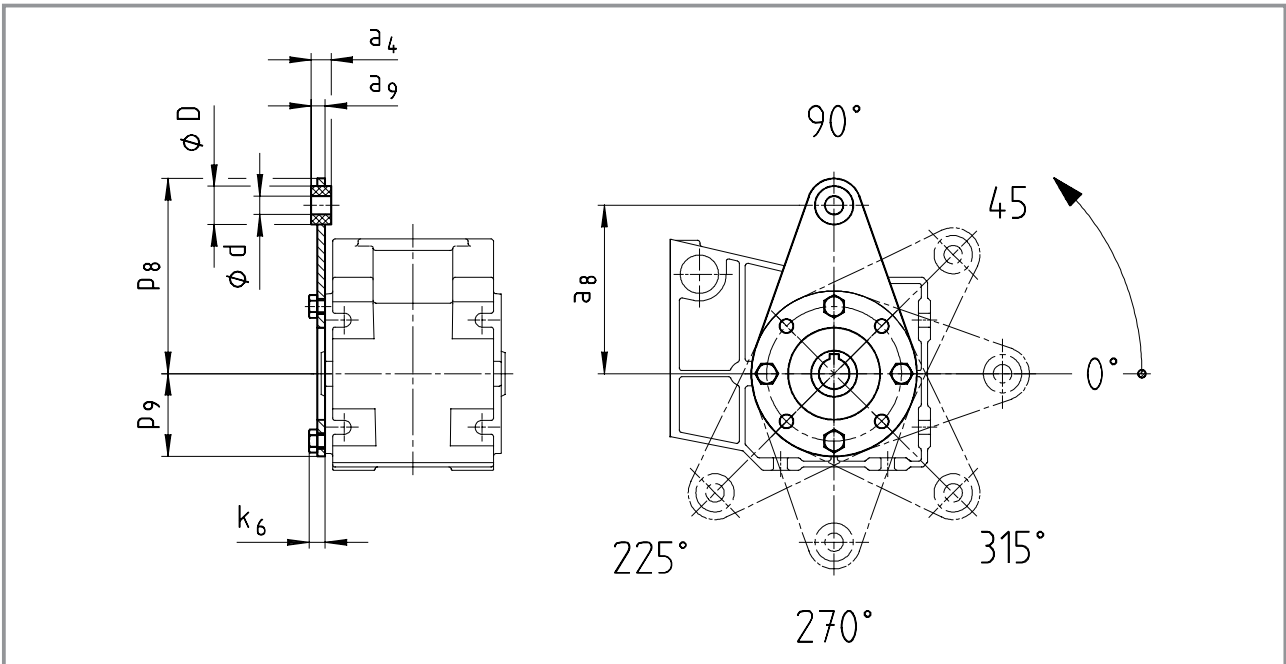


Gearbox size	d	D	c	a_7	a_8
04	10	25	13	88	65

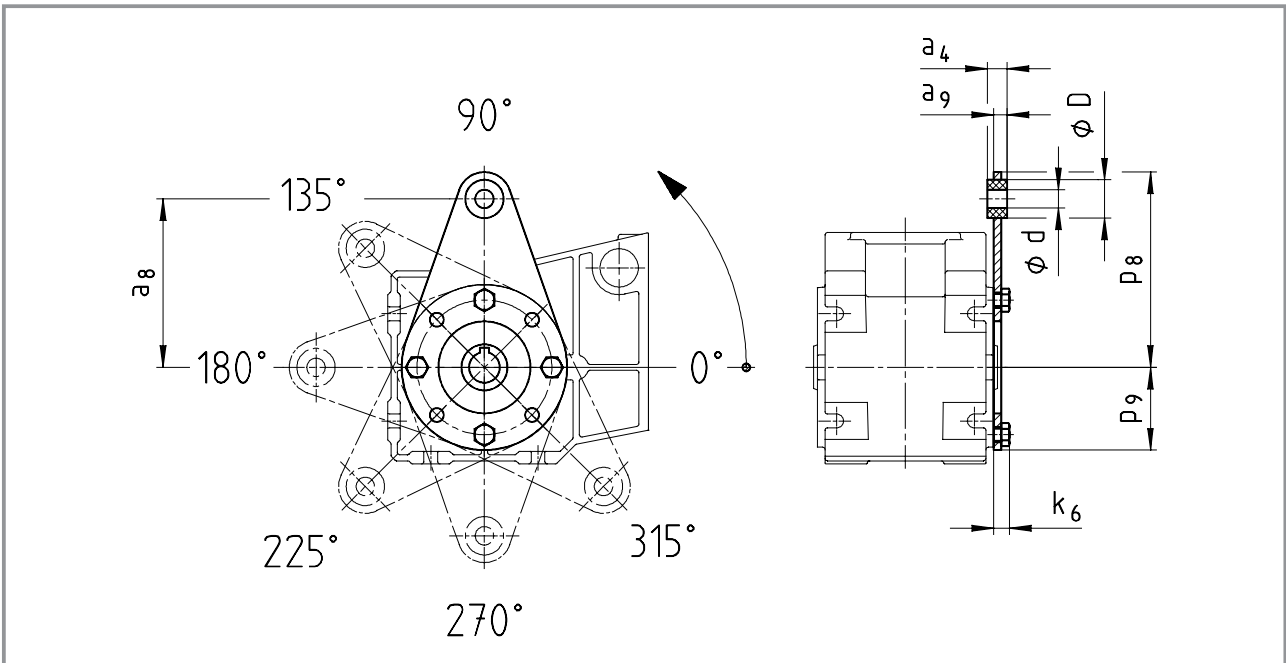
Dimensions in [mm]



GKR 04 Torque plate at pitch circle in position 3



GKR 04 Torque plate at pitch circle in position 5

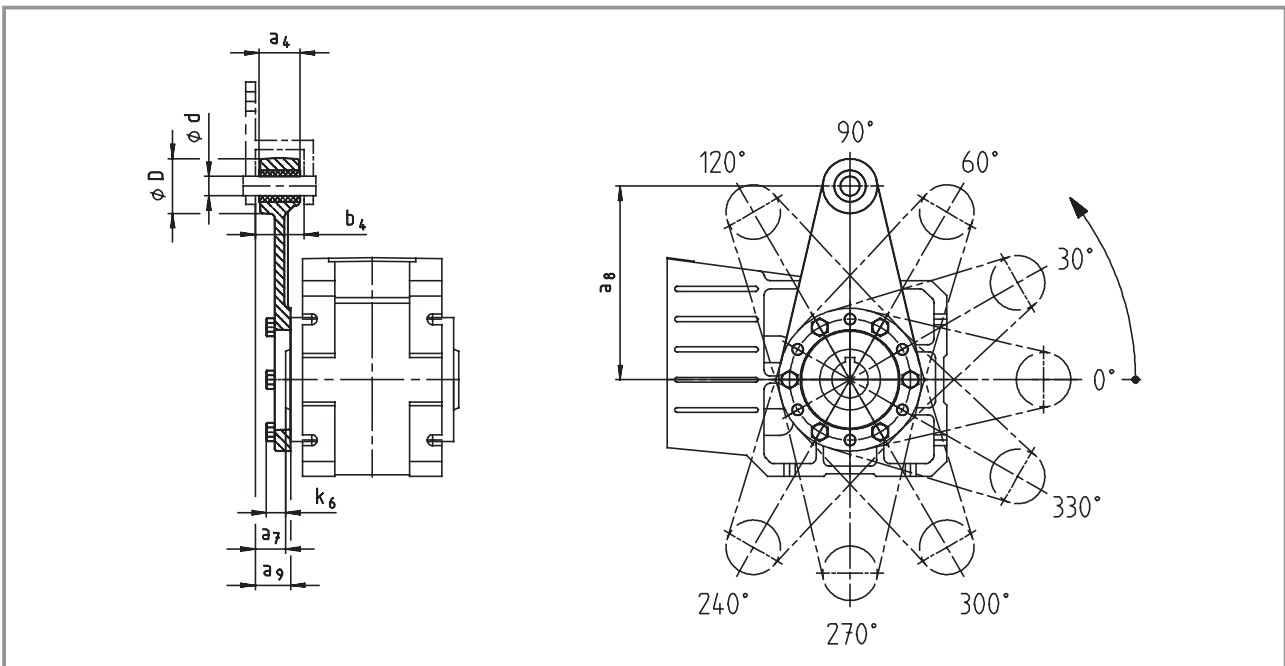


Gearbox size	Torque plate							
	a ₄	a ₈	a ₉	d	D	k ₆	P ₈	P ₉
04	13	110	9	10	25	11	128	52

Dimensions in [mm]

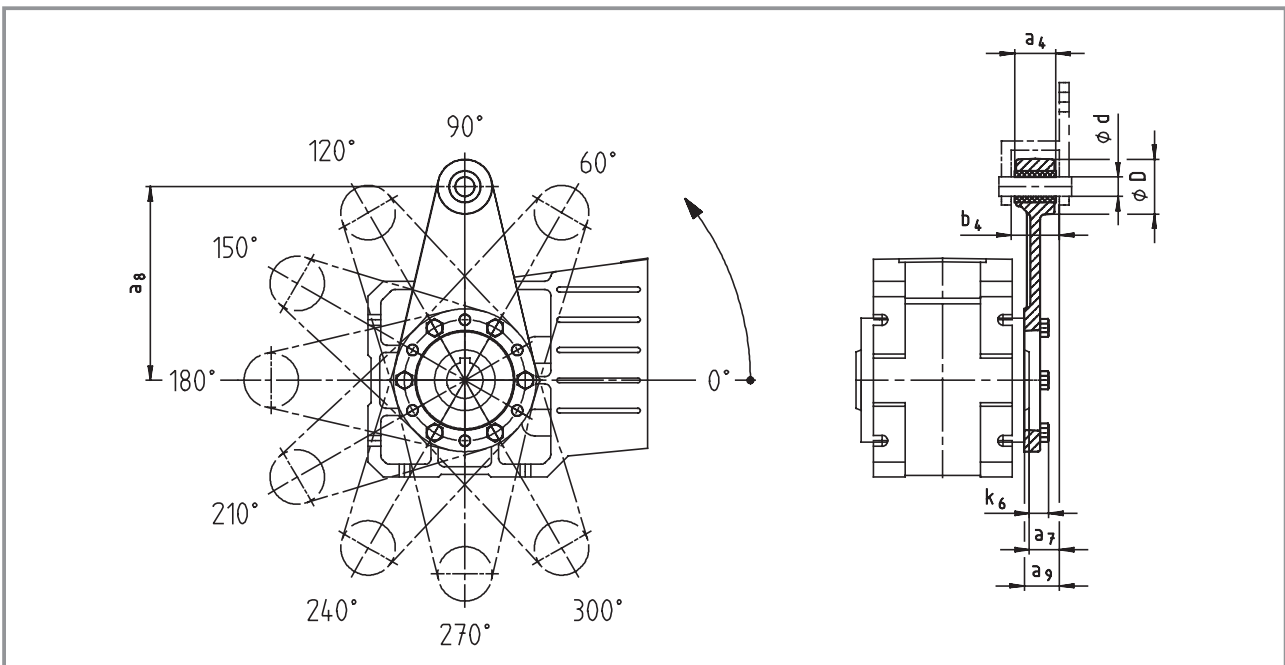
GKR 05/06

Torque plate at pitch circle in position 3



GKR 05/06

Torque plate at pitch circle in position 5

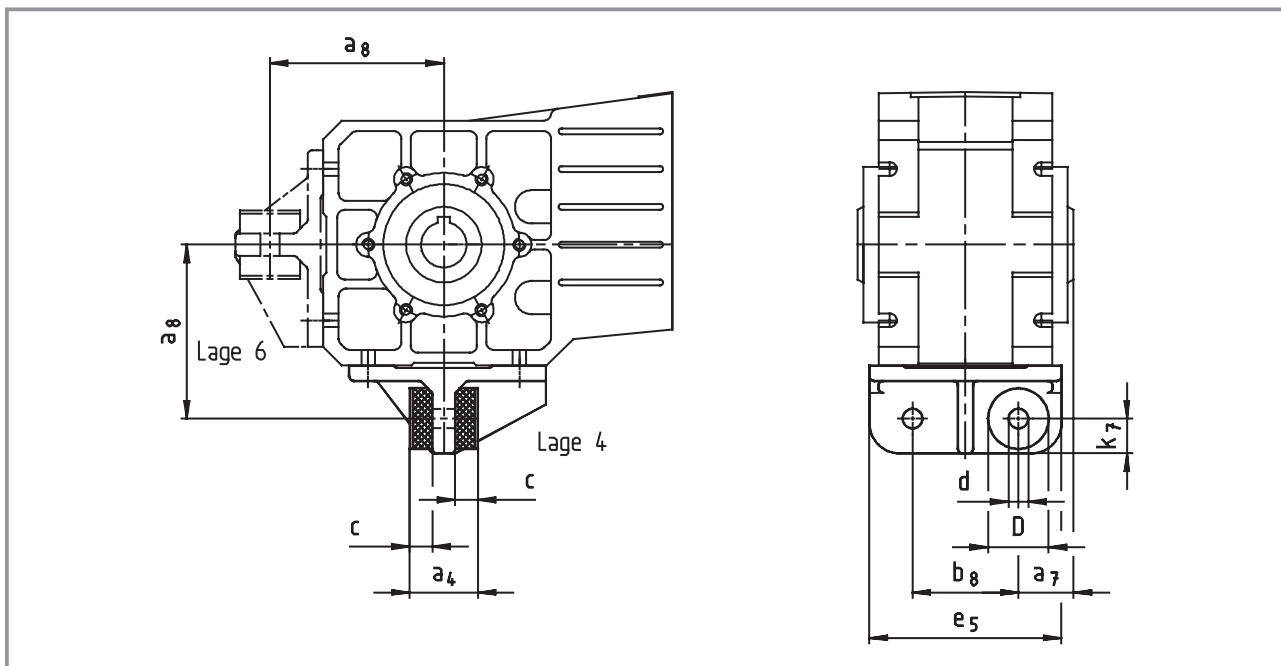


Gearbox size	Assembly space		Torque plate						
	a ₇	b ₄	a ₄	a ₈	a ₉	d	D	k ₆	
05	23.5	38.5	34	160	27.5	16	45	16	
06	28	44.5	40	200	33	20	50	18	

Dimensions in [mm]



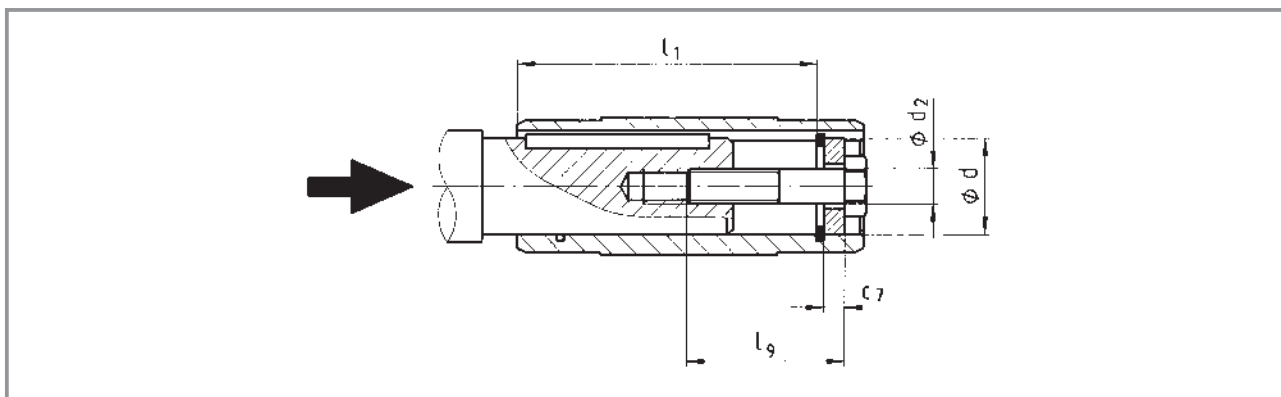
Torque plate on housing foot



Gearbox size	a ₄	a ₇	a ₈	b ₈	c	d	D	e ₅	k ₇
05	45	36.5	115	70	15	13	40	127	23
06	72	45	145	80	27	17	50	145	28

Dimensions in [mm]

Mounting set for hollow shaft circlip - Proposed design for auxiliary tools



Gearbox size	Hollow shaft (design H)			Mounting set for hollow shaft circlip (mounting auxiliary tool)		
	l	l ₁	d H7	d ₂	l ₉	c ₇
04	120	106	20	M6	40	4
			25	M10		5
05	143	128	30	M10	50	6
			35	M12		7
06	170	152	40	M16	60	8
			45			

Dimensions in [mm]