8GF60-110

Technical data

Gearboxes	8GF60-110hh004klmm	8GF60-110hh005klmm	8GF60-110hh008klmm	8GF60-110hh010klmm	8GF60-110hh016klmm	8GF60-110hh020klmm	8GF60-110hh025klmm	8GF60-110hh032klmm	8GF60-110hh040klmm	8GF60-110hh050klmm	8GF60-110hh064klmm	8GF60-110hh100klmm
Number of stages	1				2							
Ratio i	4	5	8	10	16	20	25	32	40	50	64	100
Nominal output torque T_{2N} [Nm][1]	300	260	150	125	300		260	300	260		150	125
Max. output torque T_{2max} [Nm][1]	480	416	240	200	480		416	480	416		240	200
Emergency stop torque T_{2estop} [Nm][2]	600	520	300	250	600		520	600	520		300	250
No load running torque at 20°C and 3,000 [min^{-1}] [Nm]	1.5	1.18	0.8	0.6	0.38	0.34	0.3	0.26	0.24		0.22	
Max. average input speed at 50% T_{2N} and S1 $n_{1N50\%}$ [min^{-1}]	1550	1950	3300	4000	3850	4500	5500	6000				
Max. average input speed at 100% T_{2N} and S1 $n_{1N100\%}$ [min^{-1}]	1050	1400	2650	3350	2550	3050	3900	4400	5500		6000	
Max. input speed n_{1max} [min^{-1}]	8500											
Max. backlash j_t [arcmin]	<3				<5							
Reduced backlash j_t [arcmin]	<1											
Torsional rigidity C_{t21} [Nm/arcmin]	90				80							
Tilting rigidity C_{2K} [Nm/arcmin]	590											
Max. tilting moment M_{2KMax} [Nm]	534											
Max. radial force for 30,000 h Fr_{max} [N][3]	4800											
Max. radial force for 20,000 h Fr_{max} [N][3]	5500											
Max. axial force for 30,000 h Fa_{max} [N][3]	8400											
Max. axial force for 20,000 h Fa_{max} [N][3]	9500											
Running noise L_{PA} [dB(A)][4]	< 68											
Efficiency at full load η [%]	98				95							
Min. operating temperature $B_{Tempmin}$ [°C][5]	-25											
Max. operating temperature $B_{Tempmax}$ [°C][5]	90											
Mounting orientation	Any											
Protection class	IP 65											
Weight m [Kg]	6.5				8							
Moment of inertia J_1 [$Kgcm^2$]	2.94	2.51	2.08	2	1.73	1.65	1.3	1.6	1.24	0.8	0.85	0.75

[1] The entries refer to an output shaft speed of n_2=100min^{-1} and application factor K_A=1 as well as S1 operating mode for electrical machines and T=30°C; depending on the respective motor shaft diameter

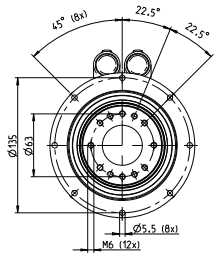
[2] Approved for 1000x

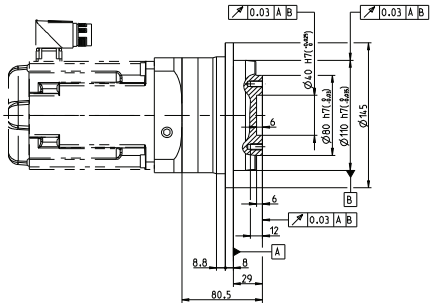
[3] With reference to the middle of the output shaft; the entries refer to an output shaft speed of n_2=100min^{-1} and application factor K_A=1 as well as S1 operating mode for electrical machines and T=30°C

[4] Noise level at a distance of 1 m; measured at a drive speed of n_1=3000min^{-1} without a load; i=5

[5] With reference to the middle of the housing surface

1 stage gearboxes





2 stage gearboxes