8GF60-200 premium

Technical data

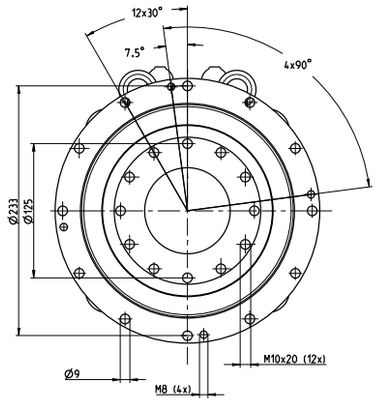
	8GF60-200hh004klmm	8GF60-200hh040klmm	8GF60-200hh005klmm	8GF60-200hh008klmm	8GF60-200hh010klmm	8GF60-200hh016klmm	8GF60-200hh020klmm	8GF60-200hh025klmm	8GF60-200hh032klmm	8GF60-200hh050klmm	8GF60-200hh064klmm	8GF60-200hh100klmm
Gearbox												
Number of gear stages	1	2	1	1	1	2	2	2	2	2	2	2
Gear ratio i	4	40	5	8	10	16	20	25	32	50	64	100
Nominal output torque T_{2N} [Nm]	1300	1800	1600	1000	630	1800	1800	1800	1800	1525	1000	630
Max. output torque T_{2max} [Nm]	2080	2880	2560	1600	1008	2880	2880	2880	2880	2440	1600	1008
E-stop torque T_{2stop} [Nm]	2700	3600	3200	2600	1350	3600	3600	3600	3600	3600	2600	1350
Idle torque [Nm] at 20°C and 3000 rpm	25.75	2.5	17.1	7.9	5.95	7.8	5.25	4.7	2.75	2	2.15	1.6
Max. average drive speed $n_{1N50\%}$ [rpm] at 50% T_{2N} and S1	500	2250	600	1000	1300	1100	1350	1550	2000	2750	3000	3000
Max. average drive speed $n_{1N100\%}$ [rpm] at 100% T_{2N} and S1	400	1650	450	800	1150	800	950	1100	1400	2100	2650	3000
Max. drive speed n_{1max} [rpm]	6000											
Max. backlash J_t [arcmin]	3	5	3	3	3	5	5	5	5	5	5	5
Reduced backlash J_t [arcmin] less than	1											
Torsional rigidity C_{t21} [Nm/arcmin]	650	550	650	650	650	550	550	550	550	550	550	550
Tilting rigidity C_{2K} [Nm/arcmin]	2200											
Max. breakdown torque M_{2Kmax} [Nm]	4928											
Max. radial force Fr_{max} [N] for 30,000 h	29500											
Max. radial force Fr_{max} [N] for 20,000 h	33000											
Max. axial force Fa_{max} [N] for 30,000 h	13500											
Max. axial force Fa_{max} [N] for 20,000 h	15000											
Operating noise L_{PA} [dB(A)]	76											
Efficiency at full load ŋ [%]	98	95	98	98	98	95	95	95	95	95	95	95
Min. operating temperature $B_{Tempmin}$ [°C]	-25											
Max. operating temperature $B_{Tempmax}$ [°C]	90											
Mounting orientation	Any											
Protection	IP65											
Weight m [kg]	35.5	42.5	35.5	35.5	35.5	42.5	42.5	42.5	42.5	42.5	42.5	42.5
Moment of inertia J_1 [kgcm^2]	56.66	28.49	43.67	29.1	25.8	42.55	40.78	29.7	39.8	28.27	15.89	12.12

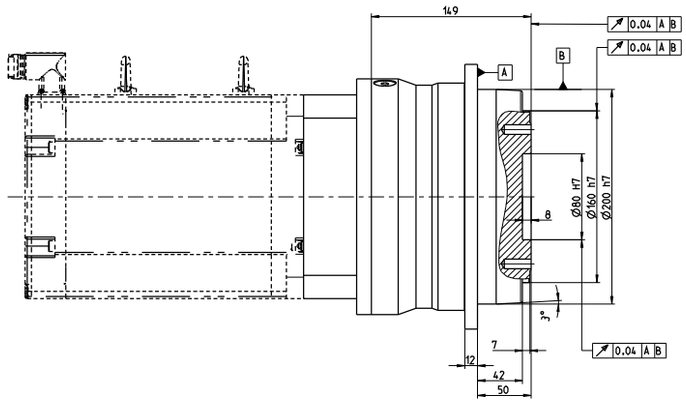
NOTE – Output torque / Max. output torque: This refers to an output shaft speed of n_2 = 100 rpm and application factor K_A = 1 as well as S1 operating mode for electrical machines and T = 30°C, depending on the diameter of the motor shaft. The maximum output torque is only permissible for 30,000 revolutions!
NOTE – E-stop torque: Approved for 1000x

NOTE – Axial / radial force: With reference to the middle of the output shaft; the entries refer to an output shaft speed of n_2 = 100 rpm and application factor K_A = 1 as well as S1 operating mode for electrical machines and T = 30°C

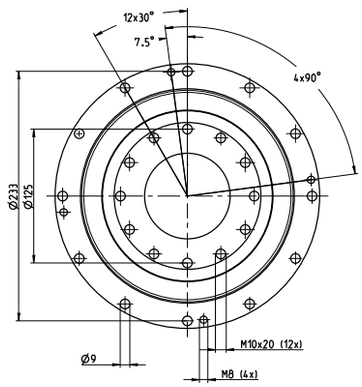
NOTE – Running noise: Noise level at a distance of 1 m; at an output speed of n_1 = 3000 rpm without a load; i = 5
NOTE – Operating temperature: With reference to the middle of the housing surface
NOTE – Weight: Planetary gearbox including universal flange (specific weight upon request)

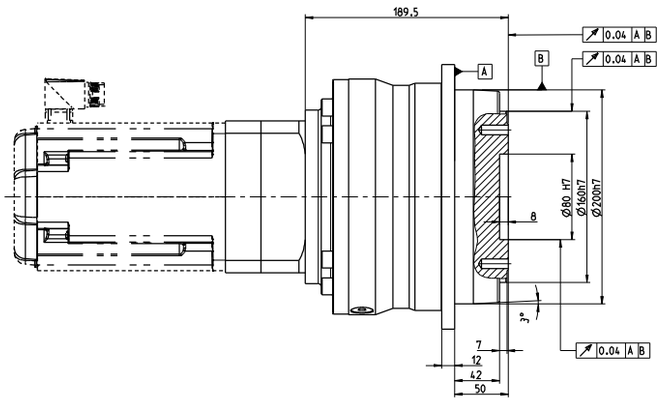
1-stage gear





2-stage gear





Adapter flange - Overview of dimensions

The flange length L completes the diagram for determining the gearbox length.

8GF60-200	8LSA/C4	8LSA/C5	8LSA/C6	8LSA/ C7(3-5)	8LSA/ C7(6-8)	8LSA/ C83/84	8LSA/ C85/86	8JSA5	8JSA6	8JSA7	8LSN4	8LSN5
One-stage												
Flange length L [mm]	---	63.5	63.5	63.5	83.5	83.5	113.5	63.5	63.5	83.5	---	63.5
Flange diameter Q [mm]	---	190	190	190	190	240	240	190	190	190	---	190
Two-stage												
Flange length L [mm]	74.5	74.5	74.5	84.5	112.5	112.5	142.5	74.5	84.5	112.5	74.5	74.5
Flange diameter Q [mm]	142	142	190	190	190	240	240	142	190	190	142	142