

8GF40-110

Technical data



8GF40-110hh003klmm

8GF40-110hh004klmm

8GF40-110hh005klmm

8GF40-110hh008klmm

8GF40-110hh010klmm

8GF40-110hh009klmm

8GF40-110hh012klmm

8GF40-110hh015klmm

8GF40-110hh016klmm

8GF40-110hh020klmm

8GF40-110hh025klmm

8GF40-110hh032klmm

8GF40-110hh040klmm

8GF40-110hh064klmm

8GF40-110hh100klmm

Gearboxes

Number of stages					1					2									
Ratio i	3	4	5	8	10	9	12	15	16	20	25	32	40	64	100				
Nominal output torque T_{2N} [Nm] ¹⁾	115	155	195	120	95	240	260	230	260		230	260	230	120	95				
Max. output torque T_{2max} [Nm] ¹⁾	184	248	312	192	152	384	416	368	416		368	416	368	192	152				
Emergency stop torque T_{2estop} [Nm] ²⁾	230	310	390	240	190	480	520	460	520		460	520	460	240	190				
No load running torque at 20°C and 3,000 [min ⁻¹] [Nm]	1	0.8	0.7	0.6		0.5					0.4								
Max. average input speed at 50% T_{2N} and S1 $n_{1N50\%}$ [min ⁻¹]	2450	2550	2650	3500		3200	3300	3500											
Max. average input speed at 100% T_{2N} and S1 $n_{1N100\%}$ [min ⁻¹]	1700		3250		2000			2650	2450	2900	3500								
Max. input speed n_{1max} [min ⁻¹]									6500										
Max. backlash j_t [arcmin]	<8					<12													
Reduced backlash j_r [arcmin]									-										
Torsional rigidity C_{t21} [Nm/arcmin]	93					68													
Tilting rigidity C_{2K} [Nm/arcmin]									-										
Max. tilting moment M_{2KMax} [Nm]									-										
Max. radial force for 30,000 h Fr_{max} [N] ³⁾									2100										
Max. radial force for 20,000 h Fr_{max} [N] ³⁾									2400										
Max. axial force for 30,000 h Fa_{max} [N] ³⁾									3300										
Max. axial force for 20,000 h Fa_{max} [N] ³⁾									3300										
Running noise L_{PA} [dB(A)] ⁴⁾									65										
Efficiency at full load η [%]	96					94													
Min. operating temperature $B_{Tempmin}$ [°C] ⁵⁾									-25										
Max. operating temperature $B_{Tempmax}$ [°C] ⁵⁾									90										
Mounting orientation									Any										
Protection class									IP 54										
Weight m [Kg]	7					9													
Moment of inertia J_1 [Kgcm ²]	3.43	2.28	1.84	1.45	1.42	2.87	2.75	2.68	1.96	1.84	1.64	1.42	1.4	1.38	1.35				

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

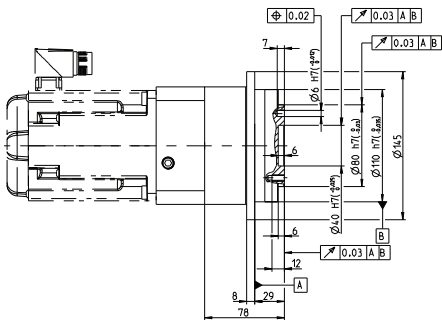
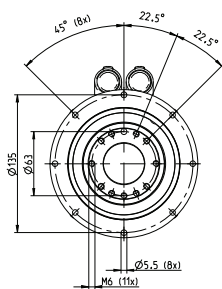
²⁾ Approved for 1000x

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

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

⁵⁾ With reference to the middle of the housing surface

1 stage gearboxes



2 stage gearboxes

