

8GF40-090

Technical data



8GF40-090hh003klmm

8GF40-090hh004klmm

8GF40-090hh005klmm

8GF40-090hh008klmm

8GF40-090hh010klmm

8GF40-090hh009klmm

8GF40-090hh012klmm

8GF40-090hh015klmm

8GF40-090hh016klmm

8GF40-090hh020klmm

8GF40-090hh025klmm

8GF40-090hh032klmm

8GF40-090hh040klmm

8GF40-090hh064klmm

8GF40-090hh100klmm

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⁾	85	115	110	50	38	130	120	110	120		110	120	110	50	38		
Max. output torque T_{2max} [Nm] ¹⁾	136	184	176	80	61	208	192	176	192		176	192	176	80	61		
Emergency stop torque T_{2estop} [Nm] ²⁾	170	230	220	100	76	260	240	220	240		220	240	220	100	76		
No load running torque at 20°C and 3,000 [min ⁻¹] [Nm]	0.6	0.5	0.4	0.3					0.2								
Max. average input speed at 50% T_{2N} and S1 $n_{1N50\%}$ [min ⁻¹]	2750	2800	3400	4000													
Max. average input speed at 100% T_{2N} and S1 $n_{1N100\%}$ [min ⁻¹]	1900	1800	2250	4000		2500	3200	4000	3800	4000							
Max. input speed n_{1max} [min ⁻¹]	7000																
Max. backlash j_t [arcmin]	<8					<12											
Reduced backlash j_r [arcmin]									-								
Torsional rigidity C_{t21} [Nm/arcmin]	34					25											
Tilting rigidity C_{2K} [Nm/arcmin]									-								
Max. tilting moment M_{2KMax} [Nm]									-								
Max. radial force for 30,000 h Fr_{max} [N] ³⁾									1200								
Max. radial force for 20,000 h Fr_{max} [N] ³⁾									1400								
Max. axial force for 30,000 h Fa_{max} [N] ³⁾									3000								
Max. axial force for 20,000 h Fa_{max} [N] ³⁾									3000								
Running noise L_{PA} [dB(A)] ⁴⁾									60								
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]	2.9					3.3											
Moment of inertia J_1 [Kgcm ²]	1.01	0.67	0.53	0.41	0.39	0.79	0.75	0.73	0.54	0.45	0.44	0.46	0.45	0.43			

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

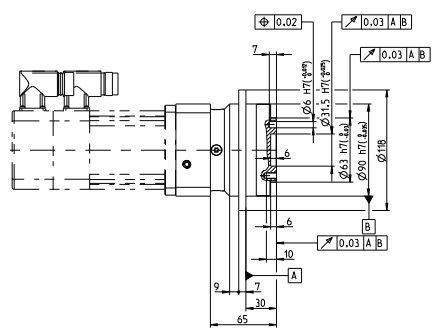
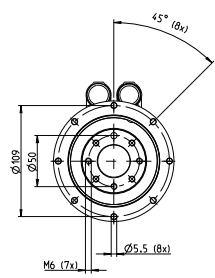
²⁾ Approved for 1000x

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

