

8GF60-090

Technical data



8GF60-090hh004klmm

8GF60-090hh005klmm

8GF60-090hh008klmm

8GF60-090hh010klmm

8GF60-090hh016klmm

8GF60-090hh020klmm

8GF60-090hh025klmm

8GF60-090hh032klmm

8GF60-090hh040klmm

8GF60-090hh050klmm

8GF60-090hh064klmm

8GF60-090hh100klmm

Gearboxes

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⁾	140		80	60	150		140	150	140	130	80	60
Max. output torque T _{2max} [Nm] ¹⁾	224		128	96	240		224	240	224	208	128	96
Emergency stop torque T _{2estop} [Nm] ²⁾	280		160	120	300		280	300	280	260	160	120
No load running torque at 20°C and 3,000 [min ⁻¹] [Nm]	0.82	0.66	0.4		0.28	0.26	0.24	0.22	0.2			0.18
Max. average input speed at 50% T _{2N} and S1 n _{1N50%} [min ⁻¹]	2050	2450	4050	4950	4450	5100	5850	6000				
Max. average input speed at 100% T _{2N} and S1 n _{1N100%} [min ⁻¹]	1500	1800	3300	4250	3200	3700	4400	5050	5900	6000		
Max. input speed n _{1max} [min ⁻¹]	10000											
Max. backlash j _i [arcmin]	<3				<5							
Reduced backlash j _i [arcmin]							<1					
Torsional rigidity C _{t21} [Nm/arcmin]	35				30							
Tilting rigidity C _{2K} [Nm/arcmin]							316					
Max. tilting moment M _{2KMax} [Nm]							363					
Max. radial force for 30,000 h Fr _{max} [N] ³⁾							3900					
Max. radial force for 20,000 h Fr _{max} [N] ³⁾							4400					
Max. axial force for 30,000 h Fa _{max} [N] ³⁾							7200					
Max. axial force for 20,000 h Fa _{max} [N] ³⁾							8200					
Running noise L _{PA} [dB(A)] ⁴⁾							< 65					
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]	3				4							
Moment of inertia J ₁ [Kgcm ²]	0.92	0.77	0.63	0.59	0.58	0.56	0.45	0.54	0.43	0.28	0.3	0.26

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

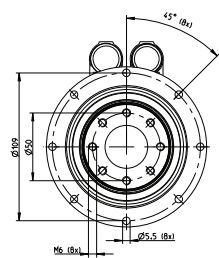
²⁾ Approved for 1000x

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

