8GA55-064 - Technical data

Model number	8GA55-064h- h003klmm	8GA55-064h- h004klmm	8GA55-064h- h005klmm	8GA55-064h- h007klmm	8GA55-064h- h008klmm	8GA55-064h- h009klmm			
Gearbox									
Number of gear stages	1					2			
Gear ratio i	3	4	5	7	8	9			
Nominal output torque T _{2N} [Nm]	14	19	24	25	18	44			
Max. output torque T _{2max} [Nm]	22	30	38	40	29	70			
Emergency stop torque T _{2stop} [Nm]	66 86 80					88			
Idle torque [Nm] at 20°C and 3000 rpm	0.3	0.25	0.15	0.1	0.4	0.15			
Max. average drive speed $n_{1N50\%}$ [rpm] at 50% T_{2N} and S1	4000	4400	4500			4300			
Max. average drive speed n _{1N100%} [rpm] at 100% T _{2N} and S1	3300	3500	3700	4400	4500	3200			
Max. drive speed n _{1max} [rpm]	13000								
Max. backlash J _t [arcmin]	16								
Torsional rigidity C _{t21} [Nm/arcmin]	11.6	11.9	11.3	10.7	9.8	11.6			
Max. radial force Fr _{max} [N] for 30,000 h		500							
Max. radial force Fr _{max} [N] for 20,000 h	550								
Max. axial force Fa _{max} [N] for 30,000 h	1200								
Max. axial force Fa _{max} [N] for 20,000 h	1200								
Operating noise L _{PA} [dB(A)]	70								
Efficiency at full load ŋ [%]		93		92	91	92			
Min. operating temperature B _{Tempmin} [°C]	-25								
Max. operating temperature B _{Tempmax} [°C]	90								
Mounting orientation	Any								
Degree of protection	IP54								
Weight m [kg]	1.4 2.3								
Moment of inertia J ₁ [kgcm ²]	0.439	0.294	0.265	0.24	0.235	0.359			

Note regarding output torque / max. output torque: Refers to output shaft speed $n_2 = 100$ rpm and application factor $K_A = 1$ as well as S1 operating mode for electrical machines and $T = 30^{\circ}$ C depending on the diameter of the motor shaft. The maximum output torque is only permitted for 30,000 revolutions!

NOTE regarding emergency switch-off torque: 1000 times permitted

Note regarding axial/radial force: Refers to the center of the output shaft (or front face of the flange output shaft). Refers to output shaft speed $n_2 = 100$ rpm and

application factor K_A = 1 as well as S1 operating mode for electrical machines and T = 30 $^{\circ}$ C.

Note regarding running noise: Sound pressure level at 1 m distance at output speed n_1 = 3000 rpm without load, i = 5

Note regarding operating temperature: Refers to the middle of the housing surface
Note regarding weight: Planetary gearbox including universal flange (specific weight upon request)

01.02.2019

8GA55-064 - Technical data

Model number	8GA55-064h- h010klmm	8GA55-064h- h012klmm	8GA55-064h- h015klmm	8GA55-064h- h016klmm	8GA55-064h- h020klmm	8GA55-064h- h025klmm		
Gearbox								
Number of gear stages	1	2						
Gear ratio i	10	12	15	16	20	25		
Nominal output torque T _{2N} [Nm]	15		40					
Max. output torque T _{2max} [Nm]	24		70					
Emergency stop torque T _{2stop} [Nm]	70		80					
Idle torque [Nm] at 20°C and 3000 rpm	0.15	0.2	0.4	0.2	0.1	0.35		
Max. average drive speed $n_{1N50\%}$ [rpm] at 50% T_{2N} and S1	4500							
Max. average drive speed n _{1N100%} [rpm] at 100% T _{2N} and S1	4500	3700	4300 4400 4		500			
Max. drive speed n _{1max} [rpm]	13000							
Max. backlash J _t [arcmin]	16	18						
Torsional rigidity C ₁₂₁ [Nm/arcmin]	8.9	11.6	11.3					
Max. radial force Fr _{max} [N] for 30,000 h	500							
Max. radial force Fr _{max} [N] for 20,000 h	550							
Max. axial force Fa _{max} [N] for 30,000 h	1200							
Max. axial force Fa _{max} [N] for 20,000 h	1200							
Operating noise L _{PA} [dB(A)]	70							
Efficiency at full load ŋ [%]	90	92	91 90			89		
Min. operating temperature B _{Tempmin} [°C]	-25							
Max. operating temperature B _{Tempmax} [°C]	90							
Mounting orientation	Any							
Degree of protection	IP54							
Weight m [kg]	1.4 2.3							
Moment of inertia J ₁ [kgcm ²]	0.228	0.352	0.235	0.244	0.233	0.232		

Note regarding output torque / max. output torque: Refers to output shaft speed 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 permitted for 30,000 revolutions!

NOTE regarding emergency switch-off torque: 1000 times permitted

Note regarding axial/radial force: Refers to the center of the output shaft (or front face of the flange output shaft). Refers to output shaft speed n_2 = 100 rpm and application factor K_A = 1 as well as S1 operating mode for electrical machines and T = 30°C.

Note regarding running noise: Sound pressure level at 1 m distance at output speed n_1 = 3000 rpm without load, i = 5

Note regarding operating temperature: Refers to the middle of the housing surface

Note regarding weight: Planetary gearbox including universal flange (specific weight upon request)

Model number	8GA55-064hh032klmm	8GA55-064hh040klmm	8GA55-064hh064klmm	8GA55-064hh100klmm				
Gearbox				,				
Number of gear stages	2							
Gear ratio i	32	40	64	100				
Nominal output torque T _{2N} [Nm]	44	40	18	15				
Max. output torque T _{2max} [Nm]	70	64	29	24				
Emergency stop torque T _{2stop} [Nm]	88	88 80						
Idle torque [Nm] at 20°C and 3000 rpm	0.1	0.1 0.35						
Max. average drive speed n _{1N50%} [rpm] at 50% T _{2N} and S1	4500							
Max. average drive speed n _{1N100%} [rpm] at 100% T _{2N} and S1	4500							
Max. drive speed n _{1max} [rpm]	13000							
Max. backlash J _t [arcmin]	18							
Torsional rigidity C _{t21} [Nm/arcmin]	10.5	10.1	9.6	9.1				
Max. radial force Fr _{max} [N] for 30,000 h		500						
Max. radial force Fr _{max} [N] for 20,000 h		550						
Max. axial force Fa _{max} [N] for 30,000 h	1200							
Max. axial force Fa _{max} [N] for 20,000 h	1200							
Operating noise L _{PA} [dB(A)]	70							
Efficiency at full load ŋ [%]	89	87	75	64				
Min. operating temperature B _{Tempmin} [°C]		-2	25					
Max. operating temperature B _{Tempmax} [°C]	90							
Mounting orientation	Any							
Degree of protection	IP54							
Weight m [kg]	2.3							
Moment of inertia J ₁ [kgcm ²]	0.2	223	0.222	0.22				

Note regarding output torque / max. output torque: Refers to output shaft speed 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 permitted for 30,000 revolutions!

NOTE regarding emergency switch-off torque: 1000 times permitted

Note regarding axial/radial force: Refers to the center of the output shaft (or front face of the flange output shaft). Refers to output shaft speed n_2 = 100 rpm and application factor K_A = 1 as well as S1 operating mode for electrical machines and T = 30°C.

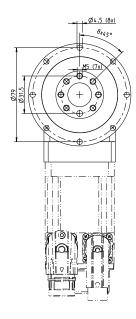
Note regarding running noise: Sound pressure level at 1 m distance at output speed n₁ = 3000 rpm without load, i = 5

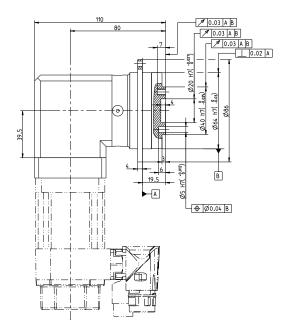
Note regarding operating temperature: Refers to the middle of the housing surface

Note regarding weight: Planetary gearbox including universal flange (specific weight upon request)

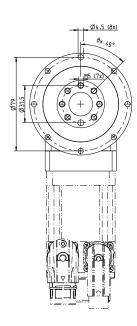
4 8GA55-064 - Dimensions

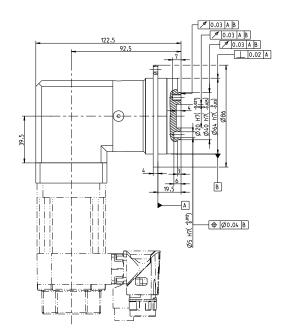
1-stage gearbox



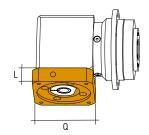


2-stage gearbox





Adapter flange 8GA55-064



The gearbox is fastened to the motor's output side using adapter plates tailored precisely to the respective motor.

Dimensions	8LSAA	8LSA2	8LSA3	8LVA2	8JSA2	8JSA3	80MPD	80MPF	80MPH
Flange length L [mm]	23	17	23	23	16	23	16	16	25
Flange diameter Q [mm]	70	60	90	60	60	70	60	60	80

01.02.2019