

8GA45-067 - Technical data

Model number	8GA45-067h-h003klmm	8GA45-067h-h004klmm	8GA45-067h-h005klmm	8GA45-067h-h007klmm	8GA45-067h-h008klmm	8GA45-067h-h010klmm
Gearbox						
Number of gear stages	1					
Gear ratio i	3	4	5	7	8	10
Nominal output torque T_{2N} [Nm]	14	19	24	25	18	15
Max. output torque T_{2max} [Nm]	22	30	38	40	29	24
Emergency stop torque T_{2stop} [Nm]	66	86	80			70
Idle torque [Nm] at 20°C and 3000 rpm	0.3	0.25			0.2	
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	3700	3800	3850	4500		
Max. drive speed n_{1max} [rpm]	13000					
Max. backlash J_i [arcmin]	16					
Reduced backlash J_i [arcmin] less than	0					
Torsional rigidity C_{i21} [Nm/arcmin]	1.5					
Tilting rigidity C_{2K} [Nm/arcmin]	0					
Max. breakdown torque M_{2Kmax} [Nm]	0					
Max. radial force F_{rmax} [N] for 30,000 h	700					
Max. radial force F_{rmax} [N] for 20,000 h	900					
Max. axial force F_{amax} [N] for 30,000 h	800					
Max. axial force F_{amax} [N] for 20,000 h	1000					
Operating noise L_{pA} [dB(A)]	70					
Efficiency at full load η [%]	94					
Min. operating temperature $B_{Tempmin}$ [°C]	-25					
Max. operating temperature $B_{Tempmax}$ [°C]	90					
Mounting orientation	Any					
Protection	IP54					
Weight m [kg]	1.9					
Moment of inertia J_i [kgcm ²]	0.246	0.204	0.189	0.183	0.176	0.175

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 $T = 30^\circ\text{C}$ 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 $T = 30^\circ\text{C}$.

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)

8GA45-067 - Technical data

Model number	8GA45-067h-h009klmm	8GA45-067h-h012klmm	8GA45-067h-h015klmm	8GA45-067h-h016klmm	8GA45-067h-h020klmm	8GA45-067h-h025klmm
Gearbox						
Number of gear stages	2					
Gear ratio i	9	12	15	16	20	25
Nominal output torque T_{2N} [Nm]	44					40
Max. output torque T_{2max} [Nm]	70					64
Emergency stop torque T_{2stop} [Nm]	88					80
Idle torque [Nm] at 20°C and 3000 rpm	0.25		0.2			
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	3500	4100	4500			
Max. drive speed n_{1max} [rpm]	13000					
Max. backlash J_i [arcmin]	18					
Reduced backlash J_i [arcmin] less than	0					
Torsional rigidity C_{i21} [Nm/arcmin]	2.5					
Tilting rigidity C_{2K} [Nm/arcmin]	0					
Max. breakdown torque M_{2Kmax} [Nm]	0					
Max. radial force F_{rmax} [N] for 30,000 h	700					
Max. radial force F_{rmax} [N] for 20,000 h	900					
Max. axial force F_{amax} [N] for 30,000 h	800					
Max. axial force F_{amax} [N] for 20,000 h	1000					
Operating noise L_{pA} [dB(A)]	70					
Efficiency at full load η [%]	92					
Min. operating temperature $B_{Tempmin}$ [°C]	-25					
Max. operating temperature $B_{Tempmax}$ [°C]	90					
Mounting orientation	Any					
Protection	IP54					
Weight m [kg]	2.1					
Moment of inertia J_1 [kgcm ²]	0.242	0.238	0.188	0.199	0.186	

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 $T = 30^\circ\text{C}$ 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 $T = 30^\circ\text{C}$.

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	8GA45-067h-h032klmm	8GA45-067h-h040klmm	8GA45-067h-h060klmm	8GA45-067h-h064klmm	8GA45-067h-h080klmm	8GA45-067h-h100klmm
Gearbox						
Number of gear stages	2		3	2	3	2
Gear ratio i	32	40	60	64	80	100
Nominal output torque T_{2N} [Nm]	44	40	44	18	44	15
Max. output torque T_{2max} [Nm]	70	64	70	29	70	24
Emergency stop torque T_{2stop} [Nm]	88	80	88	80	88	80
Idle torque [Nm] at 20°C and 3000 rpm	0.2					
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_i [arcmin]	18		21	18	21	18
Reduced backlash J_i [arcmin] less than	0					
Torsional rigidity C_{i21} [Nm/arcmin]	2.5					
Tilting rigidity C_{2K} [Nm/arcmin]	0					
Max. breakdown torque M_{2Kmax} [Nm]	0					
Max. radial force F_{rmax} [N] for 30,000 h	700					
Max. radial force F_{rmax} [N] for 20,000 h	900					
Max. axial force F_{amax} [N] for 30,000 h	800					
Max. axial force F_{amax} [N] for 20,000 h	1000					
Operating noise L_{PA} [dB(A)]	70					
Efficiency at full load η [%]	92		88	92	88	92
Min. operating temperature $B_{Tempmin}$ [°C]	-25					
Max. operating temperature $B_{Tempmax}$ [°C]	90					
Mounting orientation	Any					
Protection	IP54					
Weight m [kg]	2.1		2.3	2.1	2.3	2.1
Moment of inertia J_1 [kgcm ²]	0.175		0.187	0.175	0.186	0.175

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 $T = 30^\circ\text{C}$ 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 $T = 30^\circ\text{C}$.

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)

8GA45-067 - Technical data

Model number	8GA45-067h-h120klmm	8GA45-067h-h160klmm	8GA45-067h-h200klmm	8GA45-067h-h256klmm	8GA45-067h-h320klmm	8GA45-067h-h512klmm
Gearbox						
Number of gear stages	3					
Gear ratio i	120	160	200	256	320	512
Nominal output torque T_{2N} [Nm]	44	40	40	44	40	18
Max. output torque T_{2max} [Nm]	70	64	64	70	64	29
Emergency stop torque T_{2stop} [Nm]	88	80	80	88	80	80
Idle torque [Nm] at 20°C and 3000 rpm	0.2					
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_i [arcmin]	21					
Reduced backlash J_i [arcmin] less than	0					
Torsional rigidity C_{i21} [Nm/arcmin]	2.5					
Tilting rigidity C_{2K} [Nm/arcmin]	0					
Max. breakdown torque M_{2Kmax} [Nm]	0					
Max. radial force F_{rmax} [N] for 30,000 h	700					
Max. radial force F_{rmax} [N] for 20,000 h	900					
Max. axial force F_{amax} [N] for 30,000 h	800					
Max. axial force F_{amax} [N] for 20,000 h	1000					
Operating noise L_{PA} [dB(A)]	70					
Efficiency at full load η [%]	88					
Min. operating temperature $B_{Tempmin}$ [°C]	-25					
Max. operating temperature $B_{Tempmax}$ [°C]	90					
Mounting orientation	Any					
Protection	IP54					
Weight m [kg]	2.3					
Moment of inertia J_1 [kgcm ²]	0.175					

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 $T = 30^\circ\text{C}$ 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 $T = 30^\circ\text{C}$.

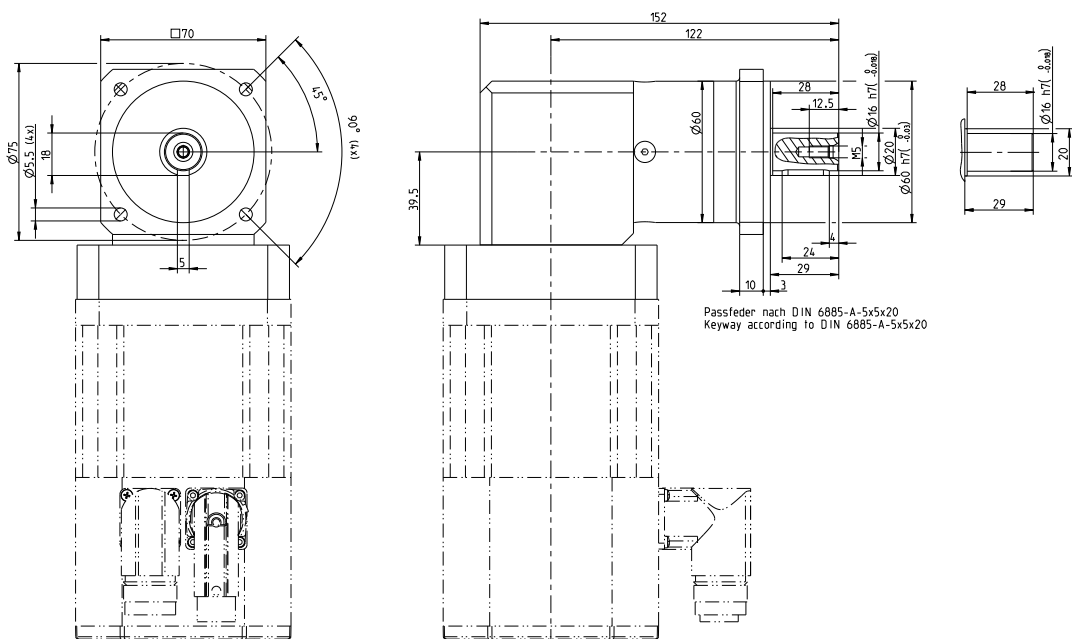
Note regarding running noise: Sound pressure level at 1 m distance at output speed $n_1 = 3000$ rpm without load, $i = 5$

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

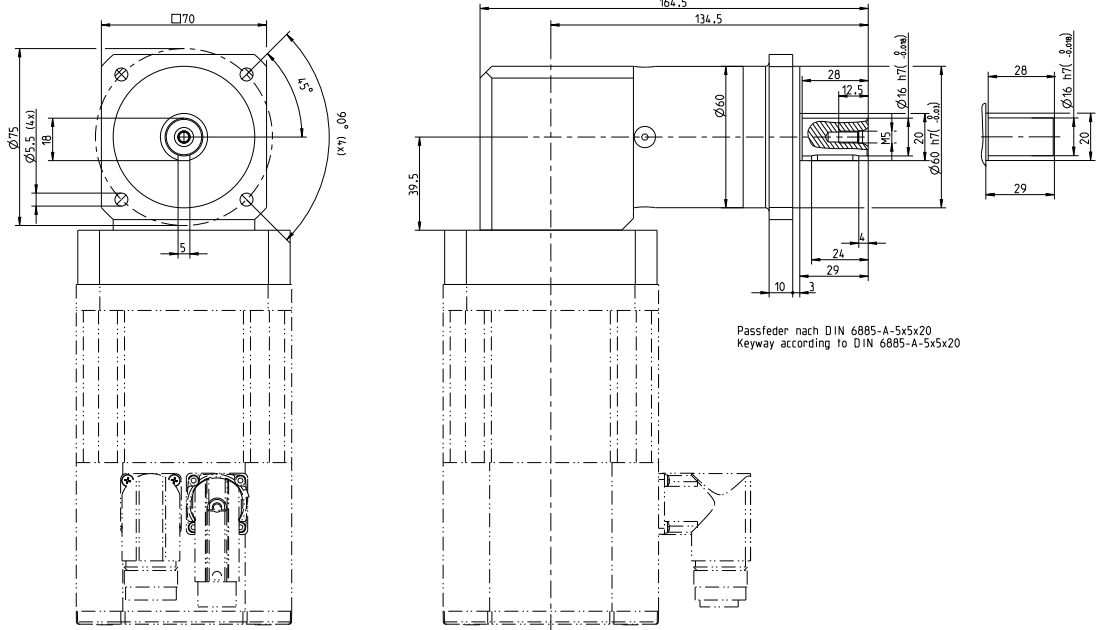
Note regarding weight: Planetary gearbox including universal flange (specific weight upon request)

5 8GA45-067 - Dimensions

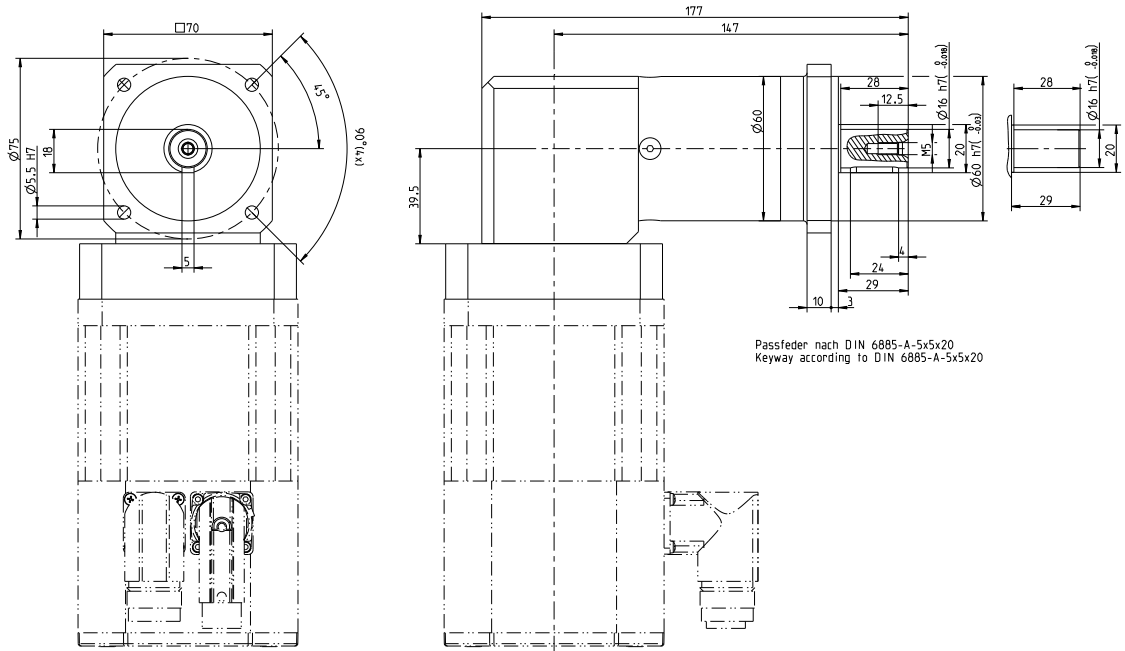
1-stage gearbox



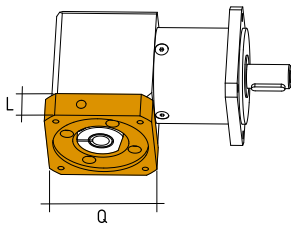
2-stage gearbox



3-stage gearbox



Adapter flange 8GA45-067



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

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