

8GP30-060 economy

Technical data



8GP30-060hh005klmm

8GP30-060hh010klmm

8GP30-060hh025klmm

Gearbox

Number of gear stages	1	1	2
Gear ratio i	5	10	25
Nominal output torque T_{2N} [Nm]	30	15	30
Max. output torque T_{2max} [Nm]	48	24	48
E-stop torque T_{2stop} [Nm]	60	30	60
Idle torque [Nm] at 20°C and 3000 rpm		0.1	
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]	10	10	12
Reduced backlash J_i [arcmin] less than		0	
Torsional rigidity C_{t21} [Nm/arcmin]	2.3	2.3	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		340	
Max. radial force F_{rmax} [N] for 20,000 h		400	
Max. axial force F_{amax} [N] for 30,000 h		450	
Max. axial force F_{amax} [N] for 20,000 h		500	
Operating noise L_{pA} [dB(A)]		58	
Efficiency at full load η [%]	96	96	94
Min. operating temperature $B_{Tempmin}$ [°C]		-25	
Max. operating temperature $B_{Tempmax}$ [°C]		90	
Mounting orientation		Any	
Protection		IP54	
Weight m [kg]	0.9	0.9	1.1
Moment of inertia J_1 [kgcm ²]	0.197	0.177	0.186

NOTE – Output torque / Max. output torque: This refers to an output shaft speed of $n_2 = 100$ 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 permissible for 30,000 revolutions!

NOTE – E-stop torque: Approved for 1000x

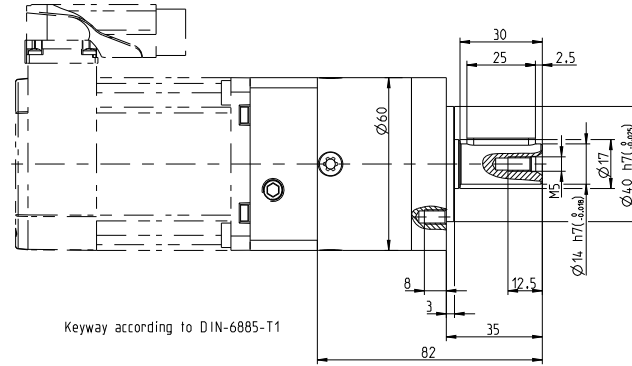
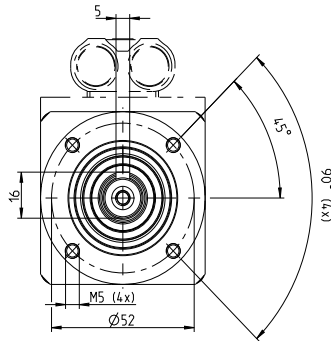
NOTE – Axial / radial force: With reference to the middle of the output shaft; the entries refer to an output shaft speed of $n_2 = 100$ rpm and application factor $K_A = 1$ as well as S1 operating mode for electrical machines and $T = 30^\circ\text{C}$

NOTE – Running noise: Noise level at a distance of 1 m; at an output speed of $n_1 = 3000$ rpm without a load; $i = 5$

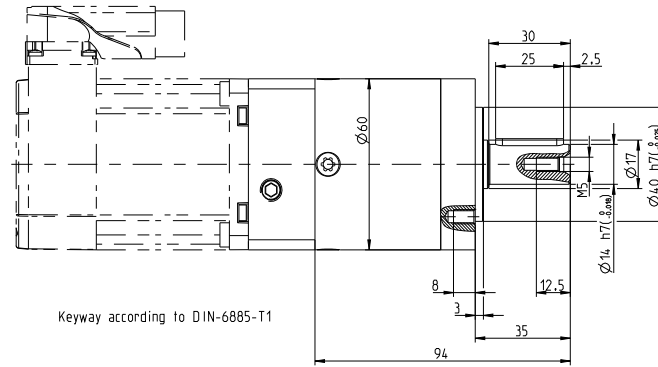
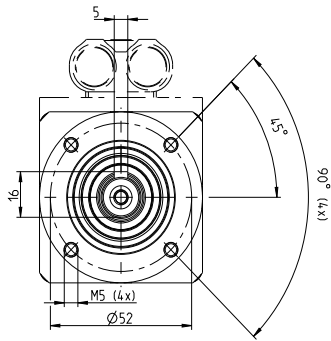
NOTE – Operating temperature: With reference to the middle of the housing surface

NOTE – Weight: Planetary gearbox including universal flange (specific weight upon request)

1-stage gear



2-stage gear



Adapter flange - Overview of dimensions

The flange length L completes the diagram for determining the gearbox length.

8GP30-060	8LSA2	8LSA3	8LVA2	8JSA2	8JSA3	80MPD	80MPF	80MPH
Flange length L [mm]	26.1	31.1	31.1	26.6	31.1	26.1	26.1	33.1
Flange diameter Q [mm]	61	91	61	61	70	61	61	90