

# 8GP30-080 economy

## Technical data



8GP30-080hh005klmm

8GP30-080hh010klmm

8GP30-080hh025klmm

### Gearbox

Number of gear stages	1	1	2
Gear ratio $i$	5	10	25
Nominal output torque $T_{2N}$ [Nm]	82	38	82
Max. output torque $T_{2max}$ [Nm]	131	61	131
E-stop torque $T_{2stop}$ [Nm]	164	76	164
Idle torque [Nm] at 20°C and 3000 rpm	0.25	0.2	0.2
Max. average drive speed $n_{1N50\%}$ [rpm] at 50% $T_{2N}$ and S1		4000	
Max. average drive speed $n_{1N100\%}$ [rpm] at 100% $T_{2N}$ and S1	3900	4000	4000
Max. drive speed $n_{1max}$ [rpm]		7000	
Max. backlash $J_i$ [arcmin]	7	7	9
Reduced backlash $J_i$ [arcmin] less than		0	
Torsional rigidity $C_{t21}$ [Nm/arcmin]	6	6	6.5
Tilting rigidity $C_{2K}$ [Nm/arcmin]		0	
Max. breakdown torque $M_{2Kmax}$ [Nm]		0	
Max. radial force $F_{rmax}$ [N] for 30,000 h		650	
Max. radial force $F_{rmax}$ [N] for 20,000 h		750	
Max. axial force $F_{amax}$ [N] for 30,000 h		900	
Max. axial force $F_{amax}$ [N] for 20,000 h		1000	
Operating noise $L_{pA}$ [dB(A)]		60	
Efficiency at full load $\eta$ [%]	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]	2.1	2.1	2.6
Moment of inertia $J_1$ [kgcm <sup>2</sup> ]	0.899	0.819	0.859

**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

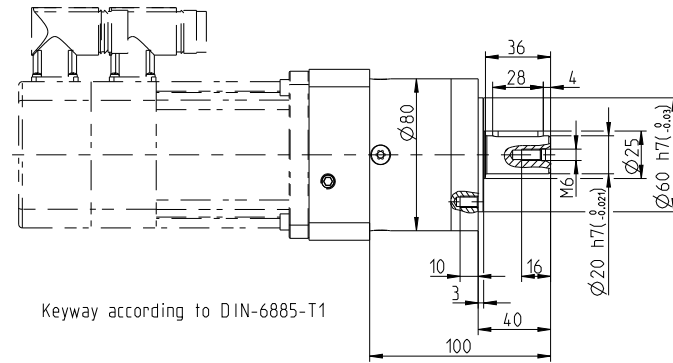
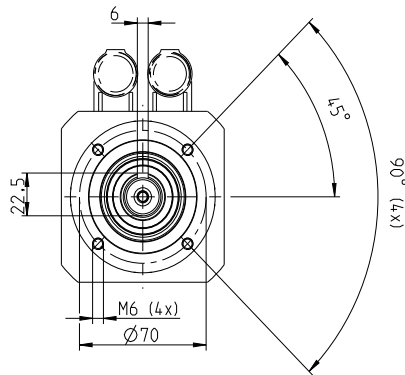
**NOTE – Axial / radial force:** With reference to the middle of the output shaft; the entries refer to an output shaft speed of  $n_2 = 100$  rpm and application factor  $K_A = 1$  as well as S1 operating mode for electrical machines and  $T = 30^\circ\text{C}$

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

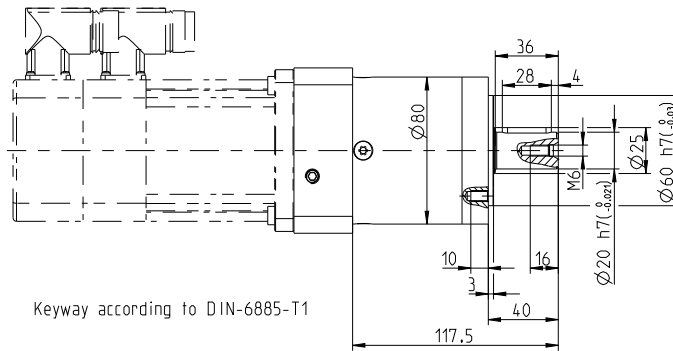
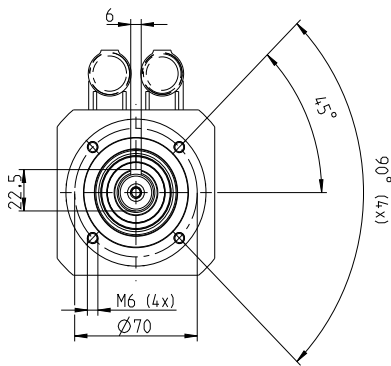
**NOTE – Operating temperature:** With reference to the middle of the housing surface

**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.

8GP30-080	8LSA3	8LSA/C4	8LVA2	8LVA 3	8JSA3	8JSA4	80MPH
Flange length L [mm]	33.5	43.5	33.5	43.5	33.5	43.5	35.5
Flange diameter Q [mm]	90	100	80	90	80	90	90