

# 8GP30-060

## Technical data



8GP30-060hh005klmm

8GP30-060hh010klmm

8GP30-060hh025klmm

### Gearboxes

Number of stages	1		2
Ratio i	5	10	25
Nominal output torque $T_{2N}$ [Nm] <sup>1)</sup>	30	15	30
Max. output torque $T_{2max}$ [Nm] <sup>1)</sup>	48	24	48
Emergency stop torque $T_{2estop}$ [Nm] <sup>2)</sup>	60	30	60
No load running torque at 20°C and 3,000 [min <sup>-1</sup> ] [Nm]	0.1		
Max. average input speed at 50% $T_{2N}$ and S1 $n_{1N50\%}$ [min <sup>-1</sup> ]	4500		
Max. average input speed at 100% $T_{2N}$ and S1 $n_{1N100\%}$ [min <sup>-1</sup> ]	4500		
Max. input speed $n_{1max}$ [min <sup>-1</sup> ]	13000		
Max. backlash $j_b$ [arcmin]	<12		<15
Reduced backlash $j_r$ [arcmin]	-		
Torsional rigidity $C_{21}$ [Nm/arcmin]	2.3		2.5
Tilting rigidity $C_{2K}$ [Nm/arcmin]	-		
Max. tilting moment $M_{2KMax}$ [Nm]	-		
Max. radial force for 30,000 h $F_{rmax}$ [N] <sup>3)</sup>	340		
Max. radial force for 20,000 h $F_{rmax}$ [N] <sup>3)</sup>	400		
Max. axial force for 30,000 h $F_{amax}$ [N] <sup>3)</sup>	450		
Max. axial force for 20,000 h $F_{amax}$ [N] <sup>3)</sup>	500		
Running noise $L_{PA}$ [dB(A)] <sup>4)</sup>	58		
Efficiency at full load $\eta$ [%]	96		94
Min. operating temperature $B_{Tempmin}$ [°C] <sup>5)</sup>	-25		
Max. operating temperature $B_{Tempmax}$ [°C] <sup>5)</sup>	90		
Mounting orientation	Any		
Protection class	IP 54		
Weight m [Kg]	0.9		1.1
Moment of inertia $J_1$ [Kgcmm <sup>2</sup> ]	0.2	0.18	0.19

<sup>1)</sup> 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

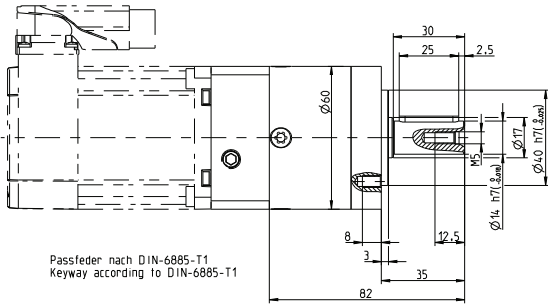
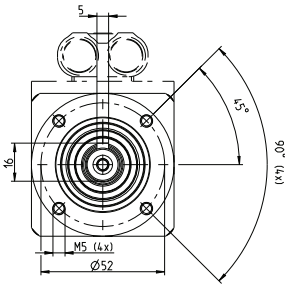
<sup>2)</sup> Approved for 1000x

<sup>3)</sup> 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  $T=30^\circ\text{C}$

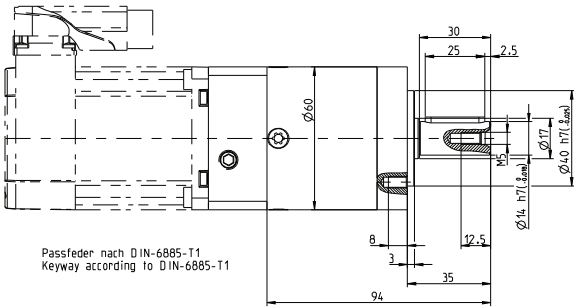
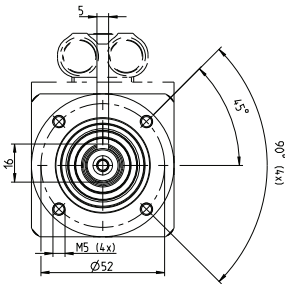
<sup>4)</sup> Noise level at a distance of 1 m; measured at a drive speed of  $n_1=3000\text{min}^{-1}$  without a load;  $i=5$

<sup>5)</sup> With reference to the middle of the housing surface

## 1 stage gearboxes



## 2 stage gearboxes



## Alternative output shaft options

Smooth shaft

