8GP30-080

Technical data

	8GP30-080hh005klmm	8GP30-080hh010klmm	8GP30-080hh025klmm
Gearboxes			
Number of stages	1		2
Ratio i	5	10	25
Nominal output torque T_{2N} [Nm][1)]	82	38	82
Max. output torque T_{2max} [Nm][1)]	131.2	60.8	131.2
Emergency stop torque T_{2estop} [Nm][2)]	164	76	164
No load running torque at 20°C and 3,000 [min^{-1}] [Nm]		0.2	
Max. average input speed at 50% T_{2N} and S1 $n_{1N50\%}$ [min^{-1}]		4000	
Max. average input speed at 100% T_{2N} and S1 $n_{1N100\%}$ [min^{-1}]	2650	4000	
Max. input speed n_{1max} [min^{-1}]		7000	
Max. backlash j_t [arcmin]	<8		<12
Reduced backlash j_t [arcmin]		-	
Torsional rigidity C_{t21} [Nm/arcmin]	6		6.5
Tilting rigidity C_{2K} [Nm/arcmin]		-	
Max. tilting moment M_{2KMax} [Nm]		-	
Max. radial force for 30,000 h Fr_{max} [N][3)]		650	
Max. radial force for 20,000 h Fr_{max} [N][3)]		750	
Max. axial force for 30,000 h Fa_{max} [N][3)]		900	
Max. axial force for 20,000 h Fa_{max} [N][3)]		1000	
Running noise L_{PA} [dB(A)][4)]		60	
Efficiency at full load ŋ [%]	96		94
Min. operating temperature $B_{Tempmin}$ [°C][5)]		-25	
Max. operating temperature $B_{Tempmax}$ [°C][5)]		90	
Mounting orientation		Any	
Protection class		IP 54	
Weight m [Kg]	2.1		2.6
Moment of inertia J_1 [$Kgcm^2$]	0.9	0.82	0.86

[1)] The entries refer to an output shaft speed of n_2=100min^{-1} and application factor K_A=1 as well as S1 operating mode for electrical machines and T=30°C; depending on the respective motor shaft diameter

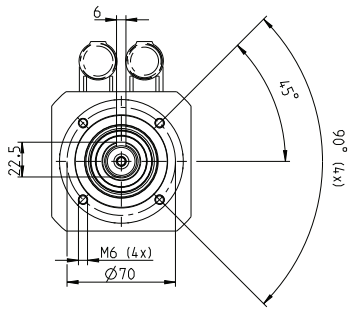
[2)] Approved for 1000x

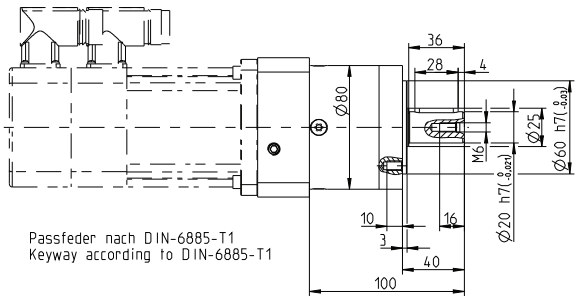
[3)] With reference to the middle of the output shaft; the entries refer to an output shaft speed of n_2=100min^{-1} and application factor K_A=1 as well as S1 operating mode for electrical machines and T=30°C

[4)] Noise level at a distance of 1 m; measured at a drive speed of n_1=3000min^{-1} without a load; i=5

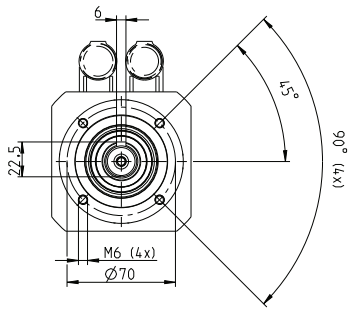
[5)] With reference to the middle of the housing surface

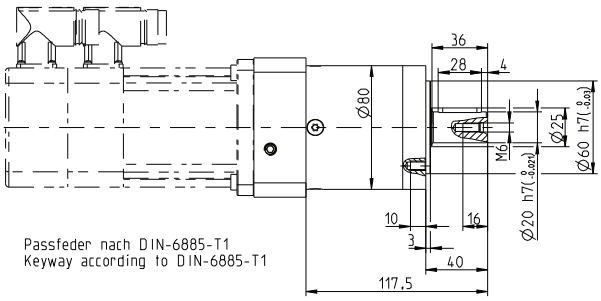
1 stage gearboxes





2 stage gearboxes





Alternative output shaft options

Smooth shaft