

# 8GP55-080

## Technical data



8GP55-080hh003klmm  
8GP55-080hh004klmm  
8GP55-080hh005klmm  
8GP55-080hh008klmm  
8GP55-080hh010klmm  
8GP55-080hh009klmm  
8GP55-080hh012klmm  
8GP55-080hh015klmm  
8GP55-080hh016klmm  
8GP55-080hh020klmm  
8GP55-080hh025klmm  
8GP55-080hh032klmm  
8GP55-080hh040klmm  
8GP55-080hh064klmm  
8GP55-080hh100klmm

### Gearboxes

Number of stages			1					2							
Ratio i	3	4	5	8	10	9	12	15	16	20	25	32	40	64	100
Nominal output torque $T_{2N}$ [Nm] <sup>1)</sup>	85	115	110	50	38	130	120	110	120		110	120	110	50	38
Max. output torque $T_{2max}$ [Nm] <sup>1)</sup>	136	184	176	80	61	208	192	176	192		176	192	176	80	61
Emergency stop torque $T_{2estop}$ [Nm] <sup>2)</sup>	170	230	220	100	76	260	240	220	240		220	240	220	100	76
No load running torque at 20°C and 3,000 [min <sup>-1</sup> ] [Nm]	0.5	0.4	0.3			0.2									
Max. average input speed at 50% $T_{2N}$ and S1 $n_{1N50\%}$ [min <sup>-1</sup> ]	3300			4000											
Max. average input speed at 100% $T_{2N}$ and S1 $n_{1N100\%}$ [min <sup>-1</sup> ]	2300	2100	2600	4000		2900	3700	4000							
Max. input speed $n_{1max}$ [min <sup>-1</sup> ]	7000														
Max. backlash $j_t$ [arcmin]	<8					<12									
Reduced backlash $j_r$ [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] <sup>3)</sup>									4800						
Max. radial force for 20,000 h $Fr_{max}$ [N] <sup>3)</sup>									5500						
Max. axial force for 30,000 h $Fa_{max}$ [N] <sup>3)</sup>									5700						
Max. axial force for 20,000 h $Fa_{max}$ [N] <sup>3)</sup>									6400						
Running noise $L_{PA}$ [dB(A)] <sup>4)</sup>									60						
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 65						
Weight m [Kg]	2.7					3.4									
Moment of inertia $J_1$ [Kgcm <sup>2</sup> ]	0.8	0.54	0.46	0.4	0.39	0.74	0.72	0.71	0.5	0.44	0.39				

<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

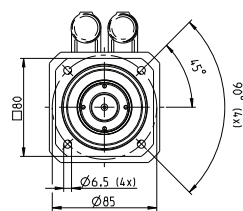
<sup>2)</sup> Approved for 1000x

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

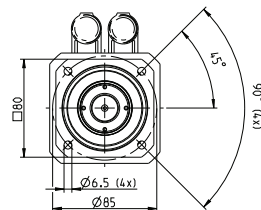
<sup>4)</sup> Noise level at a distance of 1 m; measured at a drive speed of  $n_1=3000\text{min}^{-1}$  without a load;  $i=5$

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

1 stage gearboxes

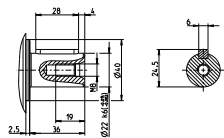


2 stage gearboxes



Alternative output shaft options

Shaft keys according to DIN 6885 form A



Spline shaft according to DIN 5480 - W 22 x 0.8 x 30 x 26 x 7 m

