

# 8GP55-060

## Technical data



8GP55-060hh003klmm

8GP55-060hh004klmm

8GP55-060hh005klmm

8GP55-060hh008klmm

8GP55-060hh010klmm

8GP55-060hh009klmm

8GP55-060hh012klmm

8GP55-060hh015klmm

8GP55-060hh016klmm

8GP55-060hh020klmm

8GP55-060hh025klmm

8GP55-060hh032klmm

8GP55-060hh040klmm

8GP55-060hh064klmm

8GP55-060hh100klmm

### 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 <sub>2N</sub> [Nm] <sup>1)</sup>	28	38	40	18	15	44					40	44	40	18	15
Max. output torque T <sub>2max</sub> [Nm] <sup>1)</sup>	45	61	64	29	24	70					64	70	64	29	24
Emergency stop torque T <sub>2estop</sub> [Nm] <sup>2)</sup>	56	76	80	36	30	88					80	88	80	36	30
No load running torque at 20°C and 3,000 [min <sup>-1</sup> ] [Nm]	0.3	0.2		0.1											
Max. average input speed at 50% T <sub>2N</sub> and S1 n <sub>1N50%</sub> [min <sup>-1</sup> ]	4400	4500													
Max. average input speed at 100% T <sub>2N</sub> and S1 n <sub>1N100%</sub> [min <sup>-1</sup> ]	3400	3600	4100	4500											
Max. input speed n <sub>1max</sub> [min <sup>-1</sup> ]	13000														
Max. backlash j <sub>lt</sub> [arcmin]	<12					<15									
Reduced backlash j <sub>lt</sub> [arcmin]						-									
Torsional rigidity C <sub>t21</sub> [Nm/arcmin]	2.3					2.5									
Tilting rigidity C <sub>2K</sub> [Nm/arcmin]						-									
Max. tilting moment M <sub>2KMax</sub> [Nm]						-									
Max. radial force for 30,000 h Fr <sub>max</sub> [N] <sup>3)</sup>						3200									
Max. radial force for 20,000 h Fr <sub>max</sub> [N] <sup>3)</sup>						3200									
Max. axial force for 30,000 h Fa <sub>max</sub> [N] <sup>3)</sup>						3900									
Max. axial force for 20,000 h Fa <sub>max</sub> [N] <sup>3)</sup>						4400									
Running noise L <sub>PA</sub> [dB(A)] <sup>4)</sup>						58									
Efficiency at full load η [%]	96					94									
Min. operating temperature B <sub>Tempmin</sub> [°C] <sup>5)</sup>						-25									
Max. operating temperature B <sub>Tempmax</sub> [°C] <sup>5)</sup>						90									
Mounting orientation						Any									
Protection class						IP 65									
Weight m [Kg]	1.4					1.6									
Moment of inertia J <sub>1</sub> [Kgcm <sup>2</sup> ]	0.15	0.1	0.08	0.07		0.13	0.08	0.09		0.08	0.06				

<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

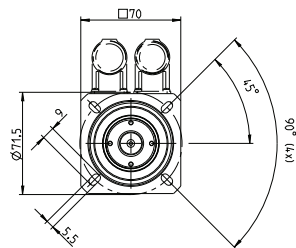
<sup>2)</sup> Approved for 1000x

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

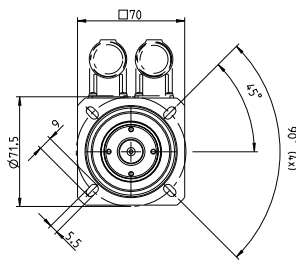
<sup>4)</sup> Noise level at a distance of 1 m; measured at a drive speed of  $n_1=3000\text{min}^{-1}$  without a load;  $i=5$

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

# 1 stage gearboxes

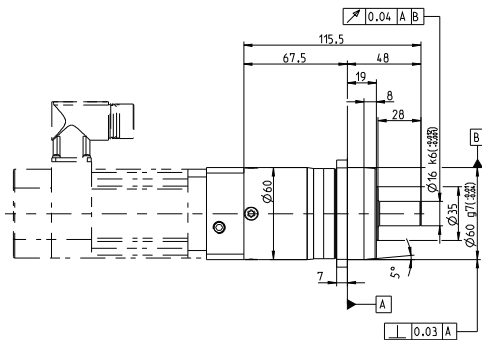
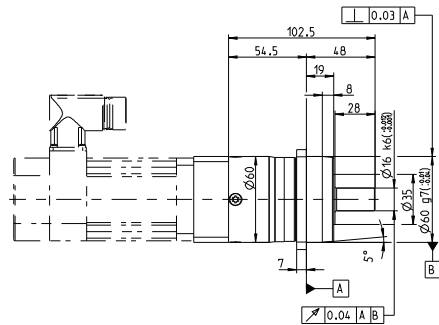
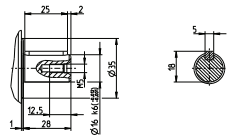


# 2 stage gearboxes



# Alternative output shaft options

Shaft keys according to DIN 6885 form A



Spline shaft according to DIN 5480 - W 16 x 0.8 x 30 x 18 x 7 m

