8GA50-070

Technical data

	8GA50-070hh003klmm	8GA50-070hh004klmm	8GA50-070hh005klmm	8GA50-070hh008klmm	8GA50-070hh010klmm	8GA50-070hh009klmm	8GA50-070hh012klmm	8GA50-070hh015klmm	8GA50-070hh016klmm	8GA50-070hh020klmm	8GA50-070hh025klmm	8GA50-070hh032klmm	8GA50-070hh040klmm	8GA50-070hh064klmm	8GA50-070hh100klmm
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][1]	14	19	24	18	15	33					30	33	30	18	15
Max. output torque T_{2max} [Nm][1]	22	30	38	29	24	52.8					48	52.8	48	28.8	24
Emergency stop torque T_{2estop} [Nm][2]	28	38	48	36	30	66					60	66	60	36	30
No load running torque at 20°C and 3,000 [min^{-1}] [Nm]	0.3	0.2								0.1					
Max. average input speed at 50% T_{2N} and S1 $n_{1N50\%}$ [min^{-1}]	3500	3800	4000												
Max. average input speed at 100% T_{2N} and S1 $n_{1N100\%}$ [min^{-1}]	2900	3100	3000	4000		3600	4000								
Max. input speed n_{1max} [min^{-1}]	13000														
Max. backlash j_t [arcmin]	<18					<21									
Reduced backlash j_t [arcmin]	-														
Torsional rigidity C_{t21} [Nm/arcmin]	1.5					2.5									
Tilting rigidity C_{2K} [Nm/arcmin]	-														
Max. tilting moment M_{2KMax} [Nm]	-														
Max. radial force for 30,000 h Fr_{max} [N][3]	900														
Max. radial force for 20,000 h Fr_{max} [N][3]	1050														
Max. axial force for 30,000 h Fa_{max} [N][3]	1000														
Max. axial force for 20,000 h Fa_{max} [N][3]	1350														
Running noise L_{PA} [dB(A)][4]	70														
Efficiency at full load η [%]	94					92									
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]	2.3					2.6									
Moment of inertia J_1 [$Kgcm^2$]	0.16	0.11	0.09	0.07		0.13		0.08	0.09	0.08		0.06			

[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

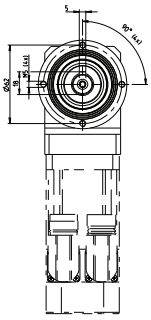
[2] Approved for 1000x

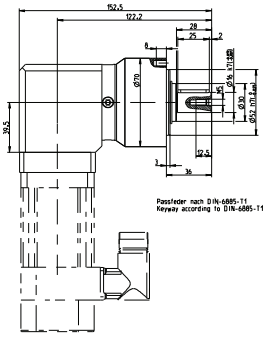
[3] With reference to the middle of the output shaft; the entries refer to an output shaft speed of n_2=100min^{-1} and application factor K_A=1 as well as S1 operating mode for electrical machines and T=30°C

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

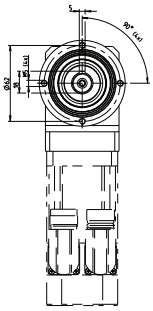
[5] With reference to the middle of the housing surface

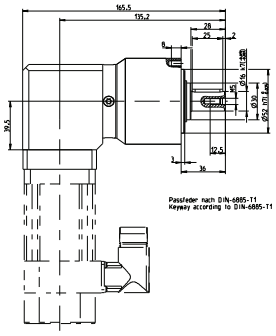
1 stage gearboxes





2 stage gearboxes





Alternative output shaft options

Smooth shaft