

8GA60-142

Technical data



8GA60-142hh016klmm

8GA60-142hh020klmm

8GA60-142hh025klmm

8GA60-142hh032klmm

8GA60-142hh040klmm

8GA60-142hh064klmm

8GA60-142hh100klmm

Gearboxes

Number of stages	2						
Ratio i	16	20	25	32	40	64	100
Nominal output torque T_{2N} [Nm] ¹⁾	640	800	700	360	450		305
Max. output torque T_{2max} [Nm] ¹⁾	1024	1280	1120	576	720		488
Emergency stop torque T_{2estop} [Nm] ²⁾	1280	1600	1400	720	900		610
No load running torque at 20°C and 3,000 [min ⁻¹] [Nm]	2.3		2.1	1.9			1.8
Max. average input speed at 50% T_{2N} and S1 $n_{1N50\%}$ [min ⁻¹]	1550	1600	1750	2150	2200	2400	2650
Max. average input speed at 100% T_{2N} and S1 $n_{1N100\%}$ [min ⁻¹]	1100		1350	1800	1850	2150	2450
Max. input speed n_{1max} [min ⁻¹]	9500						
Max. backlash j_k [arcmin]	<7						
Reduced backlash j_t [arcmin]	-						
Torsional rigidity C_{t21} [Nm/arcmin]	58						
Tilting rigidity C_{2K} [Nm/arcmin]	-						
Max. tilting moment M_{2KMax} [Nm]	-						
Max. radial force for 30,000 h Fr_{max} [N] ³⁾	11400						
Max. radial force for 20,000 h Fr_{max} [N] ³⁾	12500						
Max. axial force for 30,000 h Fa_{max} [N] ³⁾	13200						
Max. axial force for 20,000 h Fa_{max} [N] ³⁾	15000						
Running noise L_{PA} [dB(A)] ⁴⁾	70						
Efficiency at full load η [%]	94						
Min. operating temperature $B_{Tempmin}$ [°C] ⁵⁾	-25						
Max. operating temperature $B_{Tempmax}$ [°C] ⁵⁾	90						
Mounting orientation	Any						
Protection class	IP 65						
Weight m [Kg]	21.5						
Moment of inertia J_1 [Kgcmm ²]	6.08	6.02	5.5	5.03	5.01	5	4.89

¹⁾ 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

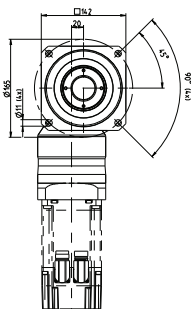
²⁾ Approved for 1000x

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

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

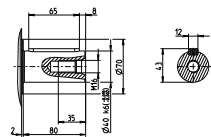
⁵⁾ With reference to the middle of the housing surface

2 stage gearboxes



Alternative output shaft options

Shaft keys according to DIN 6885 form A



Spline shaft according to DIN 5480 - W 40 x 1.25 x 30 x 30 x 7 m

