

8GA75-142 premium

Technical data



8GA75-142hh004klmm

8GA75-142hh005klmm

8GA75-142hh008klmm

8GA75-142hh010klmm

Gearbox

	8GA75-142hh004klmm	8GA75-142hh005klmm	8GA75-142hh008klmm	8GA75-142hh010klmm
Number of gear stages			1	
Gear ratio i	4	5	8	10
Nominal output torque T_{2N} [Nm]	320	280	180	160
Max. output torque T_{2max} [Nm]	512	448	288	256
E-stop torque T_{2stop} [Nm]	800	800	700	700
Idle torque [Nm] at 20°C and 3000 rpm			16.1	
Max. average drive speed $n_{1N50\%}$ [rpm] at 50% T_{2N} and S1	950	950	1050	1050
Max. average drive speed $n_{1N100\%}$ [rpm] at 100% T_{2N} and S1	750	800	900	950
Max. drive speed n_{1max} [rpm]			8000	
Max. backlash J_1 [arcmin]			5	
Reduced backlash J_1 [arcmin] less than			0	
Torsional rigidity C_{t21} [Nm/arcmin]	33	35.5	35.5	35.5
Tilting rigidity C_{2K} [Nm/arcmin]			0	
Max. breakdown torque M_{2Kmax} [Nm]			0	
Max. radial force F_{rmax} [N] for 30,000 h			10000	
Max. radial force F_{rmax} [N] for 20,000 h			10000	
Max. axial force F_{amax} [N] for 30,000 h			12000	
Max. axial force F_{amax} [N] for 20,000 h			14500	
Operating noise L_{pA} [dB(A)]			70	
Efficiency at full load η [%]			96	
Min. operating temperature $B_{Tempmin}$ [°C]			-25	
Max. operating temperature $B_{Tempmax}$ [°C]			90	
Mounting orientation			Any	
Protection			IP65	
Weight m [kg]			25	
Moment of inertia J_1 [kgcm ²]	22.302	19.904	17.66	17.016

NOTE – Output torque / Max. output torque: This refers to an output shaft speed of $n_2 = 100$ rpm and application factor $K_A = 1$ as well as S1 operating mode for electrical machines and $T = 30^\circ\text{C}$, depending on the diameter of the motor shaft. The maximum output torque is only permissible for 30,000 revolutions!

NOTE – E-stop torque: Approved for 1000x

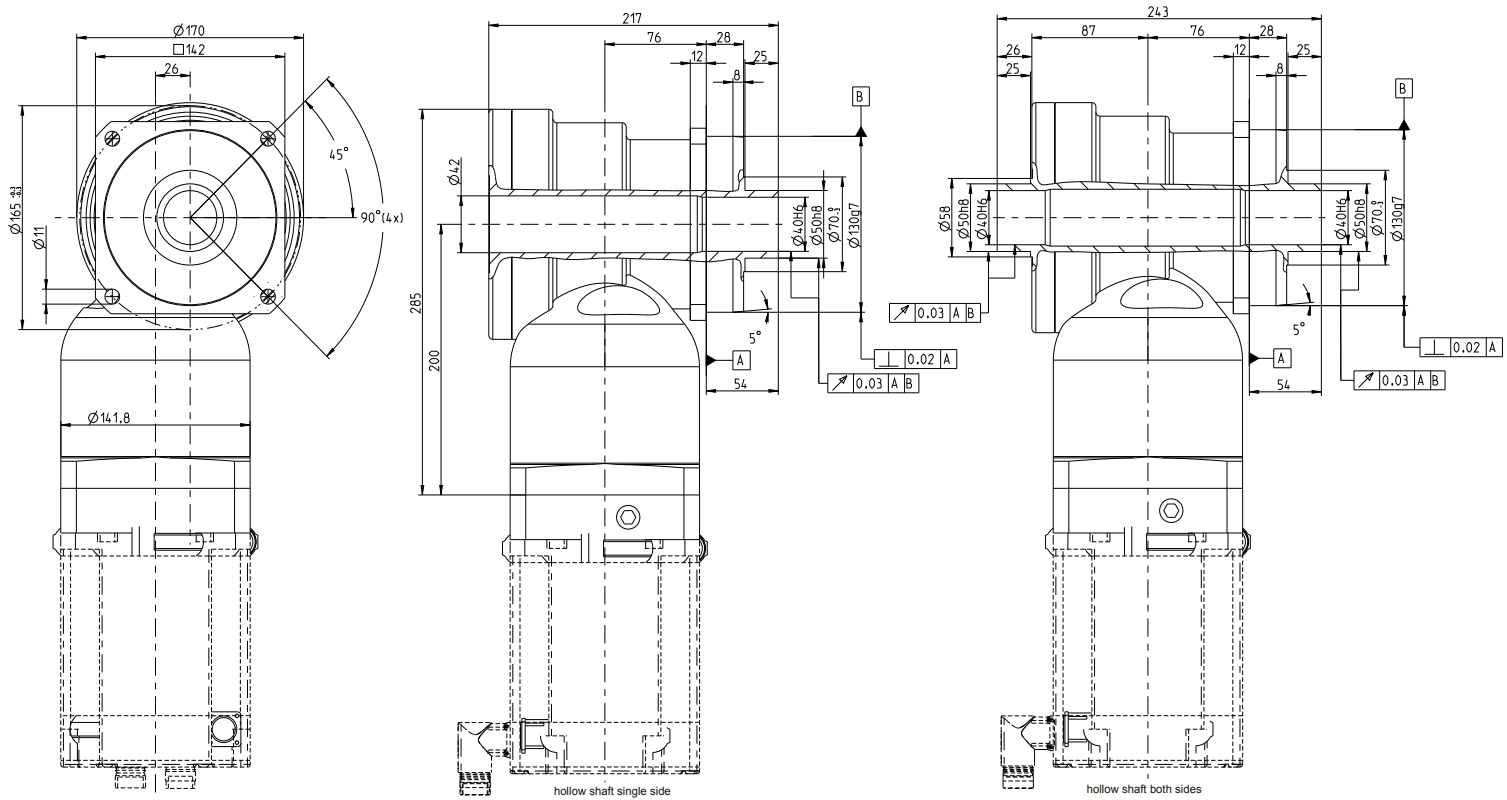
NOTE – Axial / radial force: With reference to the middle of the output shaft; the entries refer to an output shaft speed of $n_2 = 100$ rpm and application factor $K_A = 1$ as well as S1 operating mode for electrical machines and $T = 30^\circ\text{C}$

NOTE – Running noise: Noise level at a distance of 1 m; at an output speed of $n_1 = 3000$ rpm without a load; $i = 5$

NOTE – Operating temperature: With reference to the middle of the housing surface

NOTE – Weight: Planetary gearbox including universal flange (specific weight upon request)

1-stage gear



Adapter flange - Overview of dimensions

The flange length L completes the diagram for determining the gearbox length.

8GA75-142	8LSA4	8LSA/C5	8LSA/C6	8LSA/ C7(3-5)	8LSA/ C7(6-8)	8JSA5	8JSA6	8JSA7	8LSN 4	8LSN5
Flange length L[mm]	33	56.5	33	43	69.5	33	43	69.5	33	33
Flange diameter Q [mm]	142	142	190	190	190	142	142	190	142	142

Accessories

Shrink disc

Model number	D34	D35	L32	L33	Size
8GA75-142-ZSR50-0	90 mm	50 mm	31.3 mm	26 mm	8GA75-142

