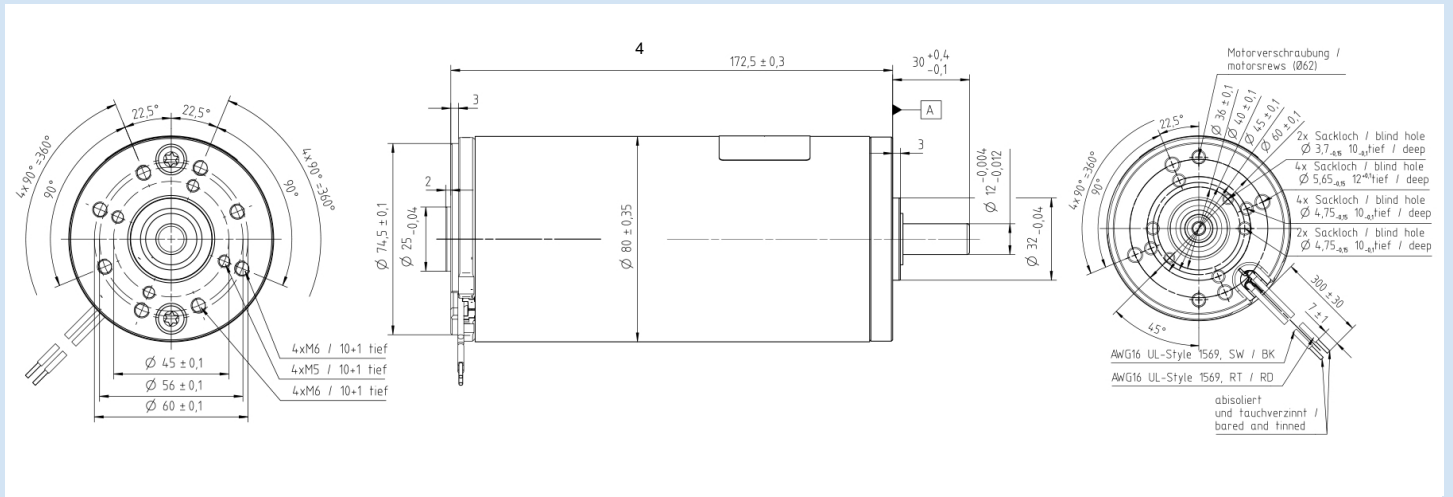
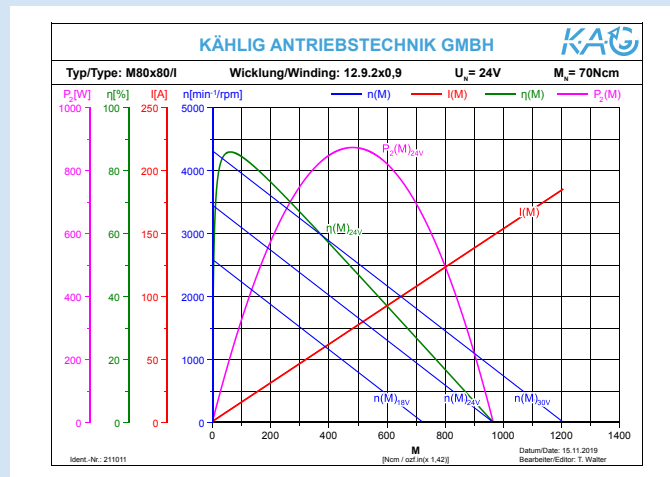


DC motor M80x80/ ID no. 222335 (24V)

- Brushed DC motor with permanent magnets
- Ball bearings
- Lead wires
- Chromatised housing with zinc-die-cast bearing flanges
- Direction of rotation CW / CCW
- Multiple combination possibilities with gears, encoders, brakes and control electronics



Application on request



Status: 30. Mai 2024 – changes reserved

Performance data

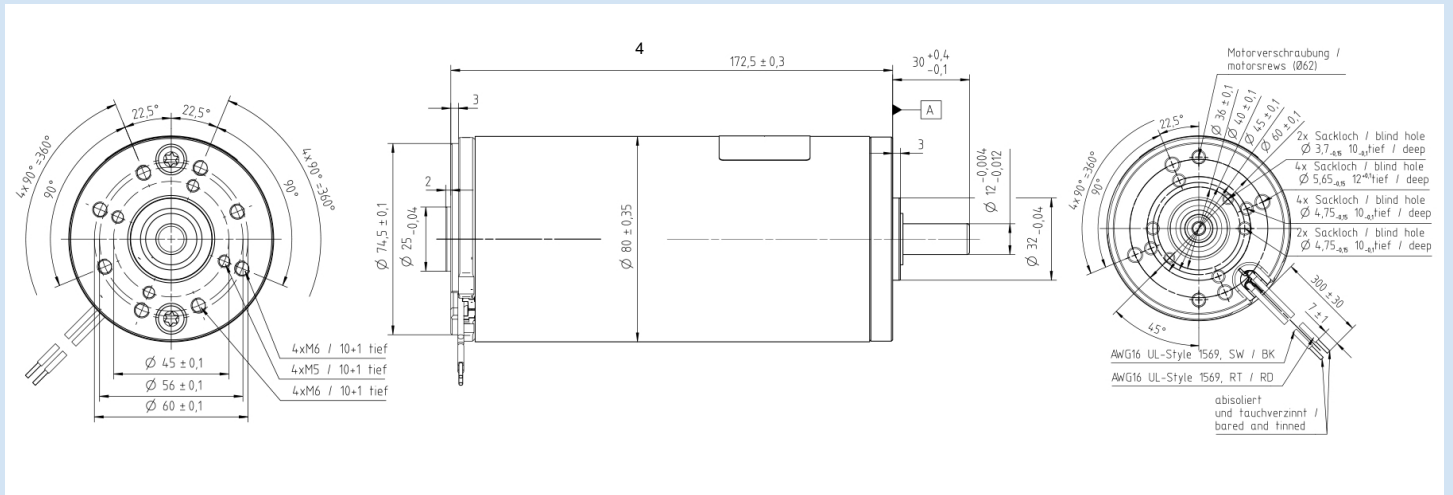
	Sign	Unit	Value 24V	Tolerances
Rated Voltage	U_N	V	24	
Rated torque ¹⁾	M_N	Ncm	70	
Rated speed ¹⁾	n_N	min ⁻¹	3200	±10%
Rated current ¹⁾	I_N	A	11,4	±20%
No load speed ¹⁾	n_0	min ⁻¹	3450	±15%
No load current ¹⁾	I_0	A	0,7	±50%
Rated power output ¹⁾	P_{2N}	W	234,6	
Rated power input ¹⁾	P_{1N}	W	273,6	
Rated efficiency ¹⁾	η_N	%	85,7	
Maximum power output ²⁾³⁾	P_{2max}	W	872,6	
Maximum continuous torque ²⁾³⁾	M_{max}	Ncm	70	
Maximum continuous current ²⁾³⁾	I_{max}	A	11,4	
Maximum speed ¹⁾³⁾	n_{max}	min ⁻¹	6000	
Stall torque ¹⁾	M_H	Ncm	966	
Stall current ¹⁾	I_H	A	148,4	
Demagnetization current ¹⁾	I_E	A	64,9	
Connecting resistance	R	Ω	0,16	
Armature resistance ¹⁾	R_A	Ω	0,1	±5%
Armature inductance [1 kHz] ¹⁾	L_A	mH	0,33	
Rise of speed-characteristic ¹⁾	k_D	Ncm/min	- 3,6	
Torque constant ¹⁾	k_M	Ncm/A	6,5	
Voltage constant ¹⁾	k_E	V/10 ³ min ⁻¹	6,9	
Friction torque ¹⁾	M_R	Ncm	- 4,6	
Mechanical time constant ¹⁾	T_M	ms	7,5	
Electrical time constant ¹⁾	T_e	ms	2	
Rotor inertia	J_R	gcm ²	3300	
Maximum case temperature ²⁾	ϑ_G	°C	80	
Starting voltage ¹⁾	U_A	V	2	
Permissible axial shaft loads ³⁾	F_{axial}	N	180	
Permissible radial shaft loads ³⁾	F_{radial}	N	350	
Protection class DIN VDE 0530			IP40	
Duty cycle DIN VDE 0530			S1	
Insulation class DIN VDE 0530			E	
Lifetime at rated torque _N				
Ambient temperature			-30°C to +40°C	
Bearing			2 ball bearings	
Interference suppression			feasible	

1) ϑ_w Winding temperature ≈ 20°C 2) $\Delta\vartheta_w$ allowable = 100K
 3) The operating at maximum levels reduces the lifespan

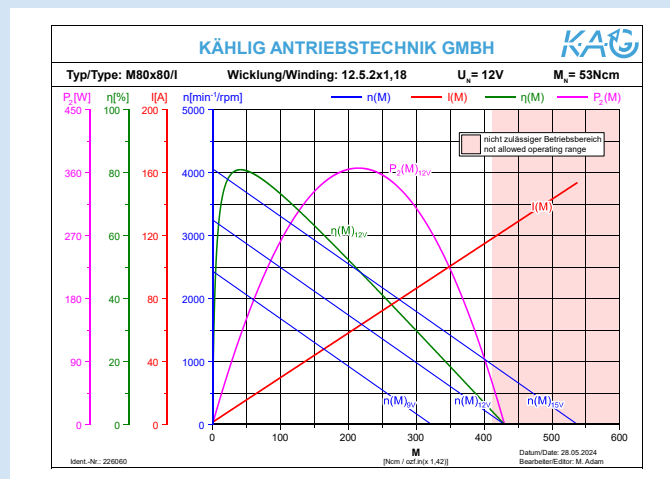
DC motor M80x80/I

ID no. 226060 (12V)

- Brushed DC motor with permanent magnets
- Ball bearings
- Lead wires
- Chromatised housing with zinc-die-cast bearing flanges
- Direction of rotation CW / CCW
- Multiple combination possibilities with gears, encoders, brakes and control electronics



Application on request



DC motor M80x80/I

ID no. 226060 (12V)

Performance data

	Sign	Unit	Value 24V	Tolerances
Rated Voltage	U_N	V	12	
Rated torque ¹⁾	M_N	Ncm	53	
Rated speed ¹⁾	n_N	min ⁻¹	2850	±10%
Rated current ¹⁾	I_N	A	16,4	±20%
No load speed ¹⁾	n_0	min ⁻¹	3250	±15%
No load current ¹⁾	I_0	A	1,4	±50%
Rated power output ¹⁾	P_{2N}	W	158,2	
Rated power input ¹⁾	P_{1N}	W	196,8	
Rated efficiency ¹⁾	η_N	%	80,4	
Maximum power output ²⁾³⁾	P_{2max}	W	366,4	
Maximum continuous torque ²⁾³⁾	M_{max}	Ncm	53	
Maximum continuous current ²⁾³⁾	I_{max}	A	16,4	
Maximum speed ¹⁾³⁾	n_{max}	min ⁻¹	6000	
Stall torque ¹⁾	M_H	Ncm	431	
Stall current ¹⁾	I_H	A	123,3	
Demagnetization current ¹⁾	I_E	A	116,7	
Connecting resistance	R	Ω	0,1	
Armature resistance ¹⁾	R_A	Ω	0,0335	±5%
Armature inductance [1 kHz] ¹⁾	L_A	mH	0,1	
Rise of speed-characteristic ¹⁾	k_D	Ncm/min	-7,5	
Torque constant ¹⁾	k_M	Ncm/A	3,5	
Voltage constant ¹⁾	k_E	V/10 ³ min ⁻¹	3,7	
Friction torque ¹⁾	M_R	Ncm	- 4,9	
Mechanical time constant ¹⁾	T_M	ms	8,9	
Electrical time constant ¹⁾	T_e	ms	1	
Rotor inertia	J_R	gcm ²	3300	
Maximum case temperature ²⁾	ϑ_G	°C	80	
Starting voltage ¹⁾	U_A	V	2	
Permissible axial shaft loads ³⁾	F_{axial}	N	180	
Permissible radial shaft loads ³⁾	F_{radial}	N	350	
Protection class DIN VDE 0530			IP40	
Duty cycle DIN VDE 0530			S1	
Insulation class DIN VDE 0530			E	
Lifetime at rated torque _N				
Ambient temperature			-30°C to +40°C	
Bearing			2 ball bearings	
Interference suppression			feasible	

1) ϑ_w Winding temperature ≈ 20°C 2) $\Delta\vartheta_w$ allowable = 100K
 3) The operating at maximum levels reduces the lifespan