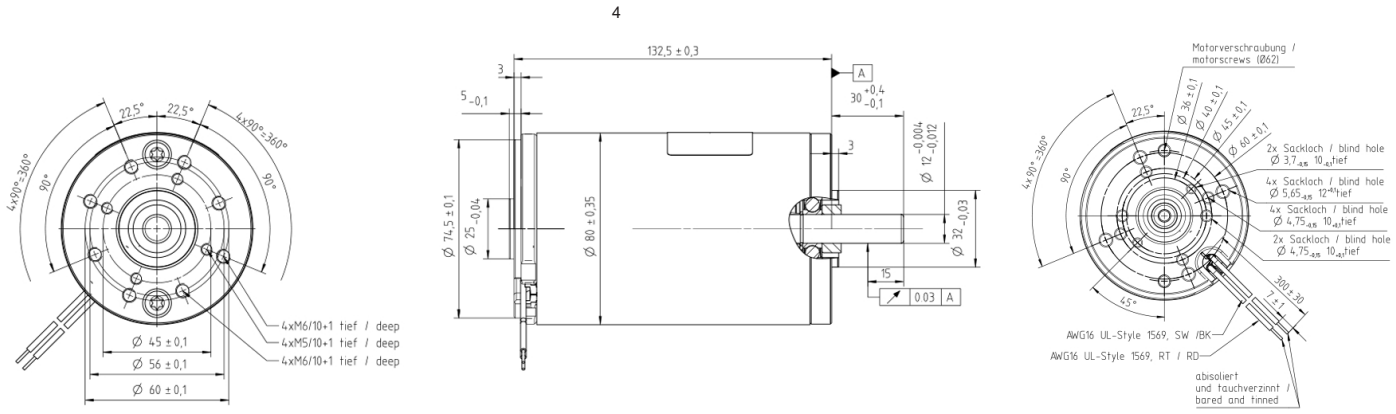
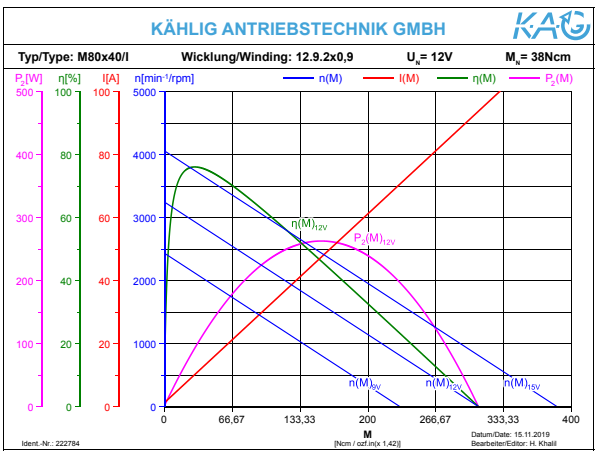
DC motor M80x40/I
ID no. 222784 (12V) 222334 (24V)

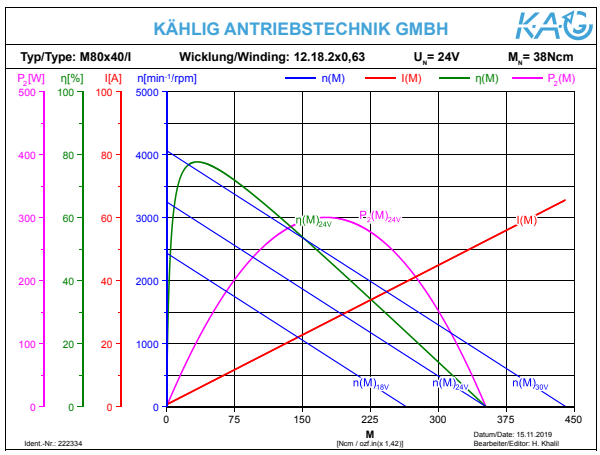
excellent drives

- Brushed DC motor with permanent magnets
- Ball earings
- 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





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KAG excellent drives

Performance data

	Sign	Unit	Value 12V	Value 24V	Tolerances
Rated Voltage	U_N	V	12	24	
Rated torque [1]	M_N	Ncm	38	38	
Rated speed [1]	n_N	min^{-1}	2850	2900	±10%
Rated current [1]	I_N	A	12,5	6,2	±20%
No load speed [1]	n_0	min^{-1}	3250	3250	±15%
No load current [1]	I_0	A	1,1	0,6	±50%
Rated power output [1]	P_{2N}	W	113,4	115,4	
Rated power input [1]	P_{1N}	W	150	148,8	
Rated efficiency [1]	η_N	%	75,6	77,6	
Maximum power output [2)3)]	P_{2max}	W	262,7	300,2	
Maximum continous torque [2)3)]	M_{max}	Ncm	38	38	
Maximum continous current [2)3)]	I_{max}	A	12,5	6,2	
Maximum speed [1)3)]	n_{max}	min^{-1}	6000	6000	
Stall torque [1]	M_H	Ncm	308,8	352,9	
Stall current [1]	I_H	A	93,7	52,3	
Demagnetization current [1]	I_E	A	64,9	32,4	
Connecting resistance	R	Ω	0,13	0,46	
Armature resistance [1]	R_A	Ω	0,065	0,268	±5%
Armature inductance [1 kHz] [1]	L_A	mH	0,21	0,9	
Rise of speed-characteristic [1]	k_D	Ncm/min	- 10,5	- 9,2	
Torque constant [1]	k_M	Ncm/A	3,3	6,8	
Voltage constant [1]	k_E	$V/10^3 min^{-1}$	3,6	7,3	
Friction torque [1]	M_R	Ncm	- 3,7	- 4,1	
Mechanical time constant [1]	τ_M	ms	9,9	10,2	
Electrical time constant [1]	τ_e	ms	1,6	2	
Rotor inertia	J_R	gcm^2	1900	1900	
Maximum case temperature[2]	ϑ_G	°C	80	80	
Starting voltage [1]	U_A	V	2	2	
Permissible axial shaft loads [3)]	F_{axial}	N	180	180	
Permissible radial shaft loads [3)]	F_{radial}	N	350	350	
Protection class DIN VDE 0530	IP40				
Duty cycle DIN VDE 0530	S1				
Insulation class DIN VDE 0530	E				
Lifetime at rated torque$_N$	≥ 3000 h				
Ambient temperature	-30°C to +40°C				
Bearing	2 ball bearings				
Interference suppression	2 x L(3,0µH)				

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

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