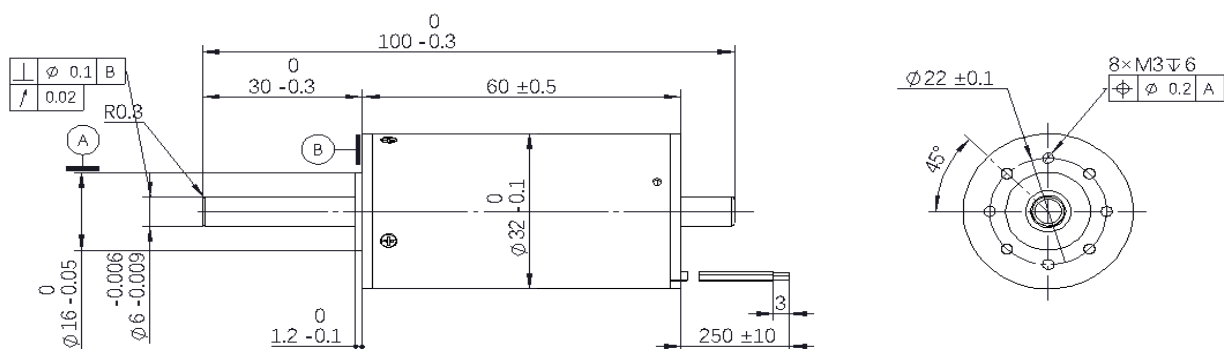


Motor Data		106006002						
Values at nominal voltage								
1	Nominal voltage	U_N	24					V
2	No load speed	n_0	14300					rpm
3	No load current	I_0	0.5					A
4	Stall torque	M_H	818.4					mNm
5	Stall current	M_I	51.1					A
6	Max. efficiency	η_{max}	88					%
7	Nominal power	W_N	105.2					W
8	Nominal speed	n_N	12872					rpm
9	Nominal torque (max.continuous torque)	M_N	81.73					mNm
10	Nominal current (max.continuous current)	I_N	5.1					A
Characteristics								
11	Terminal resistance phase to phase	R	0.47					Ω
12	Terminal inductance phase to phase	L	105					uH
13	Back-EMF constant	K_E	1.68					mV/rpm
14	Torque constant	K_M	16.03					mNm/A
15	Speed constant	K_n	596					rpm/V
16	Current constant	K_I	0.062					A/mNm
17	Speed / torque gradient	$\Delta n/\Delta M$	17.47					rpm/mNm
18	Mechanical time constant	τ_m	3.2					ms
19	Rotor inertia	J	17.6					gcm ²
Specifications								
20	Operating temperature range:							
	-Motor						-20.....+100	°C
	-winding, max permissible						+125	°C
21	Housing material						aluminium, black anodized	
22	Direction of rotation						electronically reversible	
23	Max. speed	n_{max}					18000	rpm
24	Number of pole pairs						1	
25	Number of phases						3	
26	Magnet material						NdFeB	
27	Hall sensors						digital	
Mechanical data								
28	Bearing type						ball bearings, preloaded	
29	Axial play						0 - 0.3	mm
30	Max. axial load (dynamic)						6	N
31	Max. force for press fits (static) (static, shaft supported)						90 1200	N N
32	Max. radial loading, 5 mm from flange						28	N
Product								
33	Weight of motor		258					g

Dimensional drawing



Option, cable and connection information

Connection Motor (Cable AWG20)

Motor winding A	red
Motor winding B	black
Motor winding C	yellow

Connection sensors (Cable AWG26)

V_{hall} 4.5V.....24V	red
GND	black
Hall sensors A	blue
Hall sensors B	green
Hall sensors C	white