

DCmind: DC DIRECT-DRIVE BRUSH MOTORS

Ø 42 mm - 20 W

- › Silent motor
- › 12 V and 24 V built in EMC filter class B
- › Excellent efficiency
- › Long life
- › IP65
- › In accordance with UL - CE - ROHS regulations



Part numbers

	12 V	24 V	48 V
Type	89810	89810	89810
Voltage	12 V ^{DC}	24 V ^{DC}	48 V ^{DC}
References			
Option: IP65 level	89810007	89810008	89810003
Option: holding brake 0.25 Nm, 24 V ^{DC}	89810507	89810508	89810503
Option: 2 channels encoder 1000 pulses/revolution, 5 V ^{DC}	89810907	89810908	89810903
No-load characteristics			
Speed (rpm)	4200	4000	4100
Absorbed current (A)	0.26	0.11	0.07
Nominal characteristics			
Speed (rpm)	2900	2920	2980
Torque (mNm)	50	50	50
Output power (W)	15	15	16
Absorbed current (A)	2.1	1	0.53
Efficiency (%)	60	64	61
Maximum efficiency characteristics			
Speed (rpm)	3500	3300	3400
Torque (mNm)	27	30	31
Output power (W)	10	10	11
Absorbed current (A)	1.26	0.6	0.35
Efficiency (%)	65	72	65
General characteristics			
Insulation conforming to IEC60085	Class E	Class E	Class E
Noise level (dBA)	35	35	35
Max. output power (W)	17	20	19
Starting torque (mNm)	158	190	180
Starting current (A)	6.1	3.3	1.7
Resistance (Ω)	2	7.3	28
Inductance (mH)	1.3	6	22
Torque constant (mNm/A)	27	56	109
Electrical time constant (ms)	0.7	0.8	0.8
Mechanical time constant (ms)	20	17	18
Inertia (g.cm ²)	75	75	75
Weight (g)	340	340	340
Commutator segments	8	8	8
Service life (h)	4000	4000	4000
Wires length (mm)	200	200	200
Ball bearing	✓	✓	✓
Comments			
IP65 level except for the output shaft. Encoder and brake options are IP20.			

Product adaptations, contact us

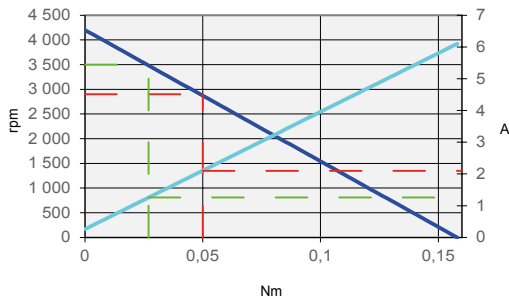


- › Special output shaft
- › Shaft with pinion, pulley, worm gear
- › Special supply voltage
- › Other wire length
- › Optical or Hall effect encoder - 1 or 2 channels
- › Specific motor mounting flange
- › Special motor connectors
- › IP67, IP69K

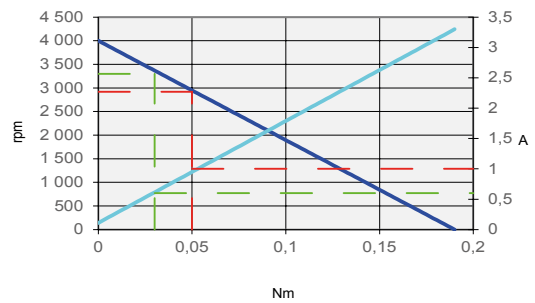
Product made to order

Curves

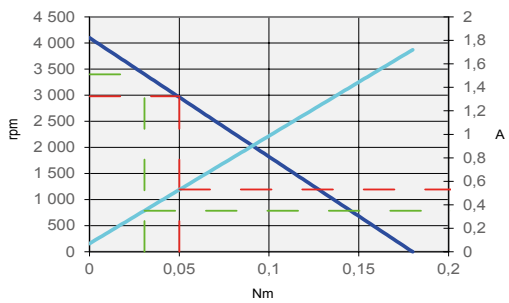
89810007 - 89810507 - 89810907



89810008 - 89810508 - 89810908

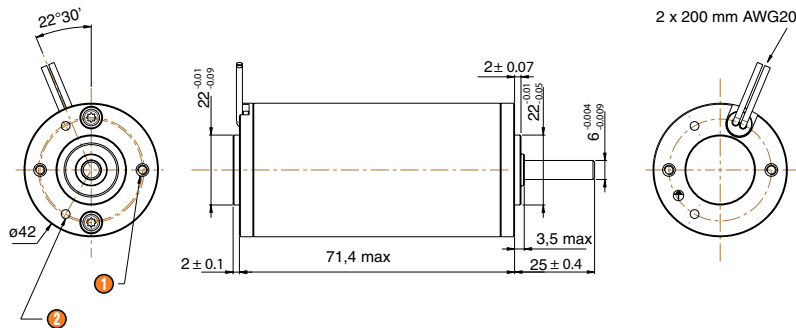


89810003 - 89810503 - 89810903



- Speed (rpm)
- Current (A)
- Torque at nominal
- Torque at maximum efficiency

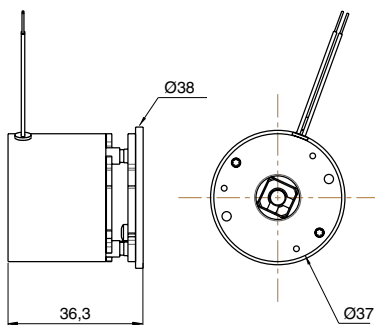
Dimensions (mm)



- ① 2 x M3 at 180° depth 5 over Ø 32
- ② 2 x Ø 2.75 at 120° depth 5 over Ø 32

Options

Holding brake 0.25 Nm



Encoder

