

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 $\overline{=}$ | 24 V $\overline{=}$ | 48 V $\overline{=}$ |
| References | | | |
| Option: IP65 level | 89810007 | 89810008 | 89810003 |
| Option: holding brake 0.25 Nm, 24 V $\overline{=}$ | 89810507 | 89810508 | 89810503 |
| Option: 2 channels encoder 1000 pulses/revolution, 5 V $\overline{=}$ | 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. | | | |

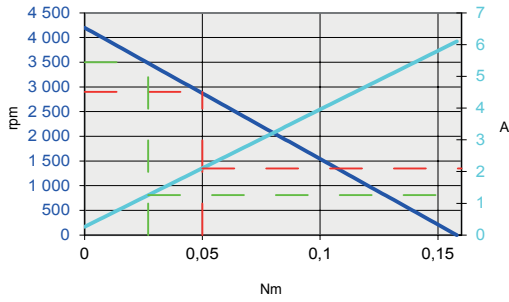
Product adaptations, contact us



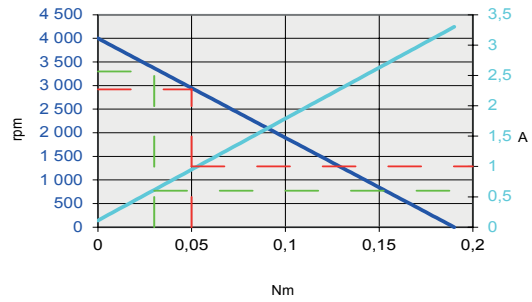
- Special output shaft
- Shaft with pinion, pulley, worm gear
- Special supply voltage
- Other wire length
- Optical or Hall effect encoder - 1 or 2 channels
- Specific motor mounting flange
- Special motor connectors
- IP67, IP69K

Curves

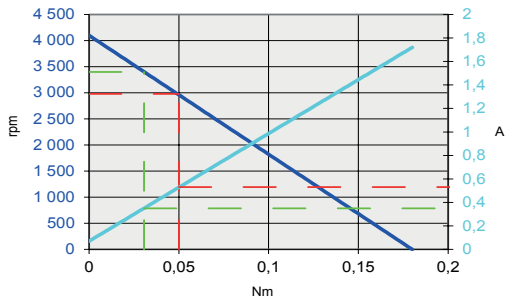
89810007 - 89810507 - 89810907



89810008 - 89810508 - 89810908

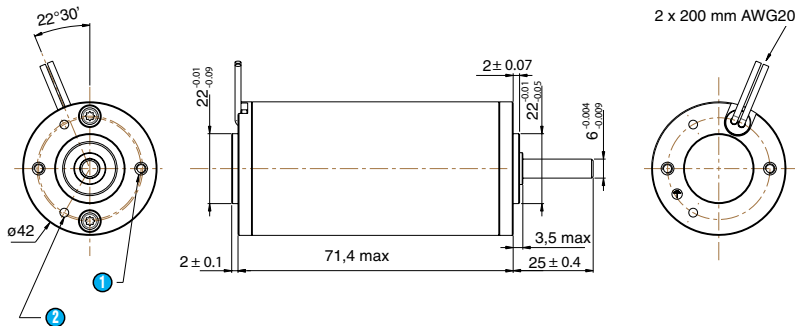


89810003 - 89810503 - 89810903



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

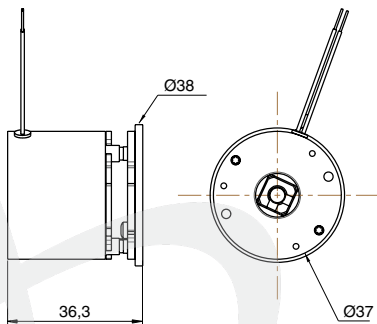
Dimensions (mm)



- 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

