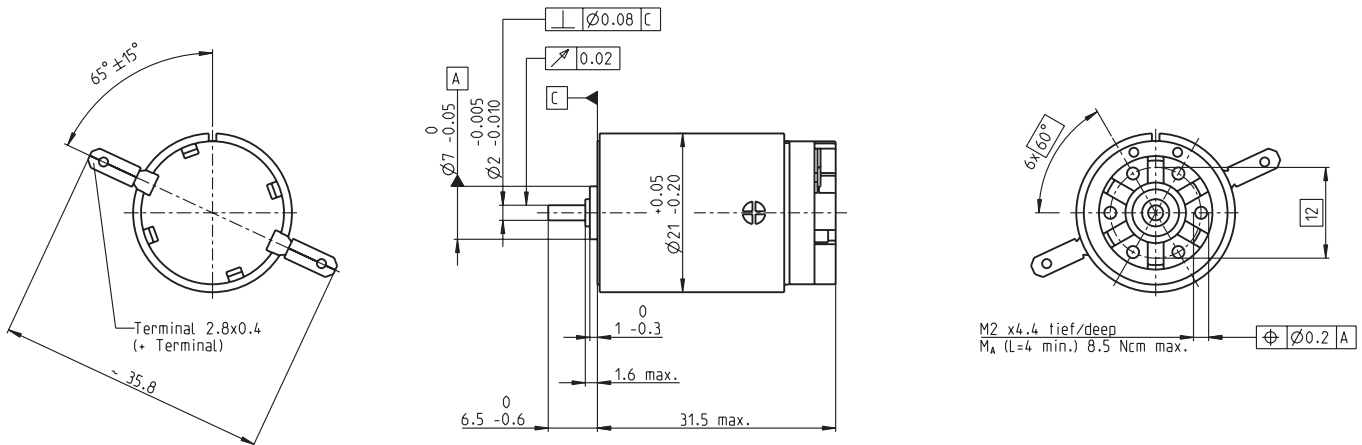


RE-max 21 Ø21 mm, Graphite Brushes, 6 Watt



M 1:1

- Stock program
- Standard program
- Special program (on request)

Order Number

250000 250001 250002 250003 250004 250005 250006 250007 250008

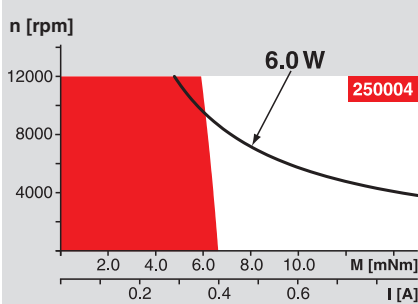
Motor Data (provisional)

Values at nominal voltage		250000	250001	250002	250003	250004	250005	250006	250007	250008	
1	Nominal voltage	V	4.0	6.0	9.0	15.0	18.0	21.0	24.0	36.0	48.0
2	No load speed	rpm	11400	9680	10200	10600	9980	9760	8920	10100	9600
3	No load current	mA	155	83.9	59.0	37.0	28.8	24.0	18.9	14.6	10.3
4	Nominal speed	rpm	9890	7890	8070	8320	7770	7530	6670	7860	7330
5	Nominal torque (max. continuous torque)	mNm	1.85	3.69	5.51	6.64	6.85	6.78	6.89	6.78	6.68
6	Nominal current (max. continuous current)	A	0.720	0.720	0.720	0.532	0.431	0.359	0.291	0.216	0.152
7	Stall torque	mNm	14.7	20.3	27.1	31.6	31.4	30.0	27.8	31.2	28.6
8	Starting current	A	4.53	3.51	3.26	2.37	1.85	1.49	1.10	0.930	0.609
9	Max. efficiency	%	67	72	75	77	77	76	76	77	76
Characteristics											
10	Terminal resistance	Ω	0.883	1.71	2.76	6.33	9.72	14.1	21.8	38.7	78.8
11	Terminal inductance	mH	0.0130	0.0410	0.0846	0.219	0.353	0.502	0.784	1.38	2.70
12	Torque constant	mNm / A	3.25	5.77	8.30	13.4	17.0	20.2	25.3	33.6	46.9
13	Speed constant	rpm / V	2940	1650	1150	715	563	472	378	284	204
14	Speed / torque gradient	rpm / mNm	799	489	382	339	323	330	326	328	342
15	Mechanical time constant	ms	21.5	10.7	8.83	7.69	7.40	7.32	7.23	7.16	7.20
16	Rotor inertia	gcm ²	2.56	2.10	2.21	2.17	2.19	2.11	2.11	2.08	2.01

Specifications

- Thermal data**
- 17 Thermal resistance housing-ambient 28 K / W
 - 18 Thermal resistance winding-housing 8.0 K / W
 - 19 Thermal time constant winding 8.77 s
 - 20 Thermal time constant motor 588 s
 - 21 Ambient temperature -30 ... +85°C
 - 22 Max. permissible winding temperature +125°C
- Mechanical data (sleeve bearings)**
- 23 Max. permissible speed 12000 rpm
 - 24 Axial play 0.05 - 0.15 mm
 - 25 Radial play 0.012 mm
 - 26 Max. axial load (dynamic) 1 N
 - 27 Max. force for press fits (static) 80 N
 - 28 Max. radial loading, 5 mm from flange 2.7 N

Operating Range



Comments

- Continuous operation**
In observation of above listed thermal resistance (lines 17 and 18) the maximum permissible winding temperature will be reached during continuous operation at 25°C ambient.
= Thermal limit.
- Short term operation**
The motor may be briefly overloaded (recurring).
- Assigned power rating**

Mechanical data (ball bearings)

- 23 Max. permissible speed 12000 rpm
- 24 Axial play 0.05 - 0.15 mm
- 25 Radial play 0.025 mm
- 26 Max. axial load (dynamic) 3.3 N
- 27 Max. force for press fits (static) 45 N
- 28 Max. radial loading, 5 mm from flange 11.9 N

Other specifications

- 29 Number of pole pairs 1
- 30 Number of commutator segments 9
- 31 Weight of motor 42 g

Values listed in the table are nominal.
Explanation of the figures on page 49.

Option

- Ball bearings in place of sleeve bearings
- Pigtails in place of terminals

maxon Modular System

Overview on page 16 - 21

Planetary Gearhead

Ø22 mm
0.5 - 1.0 Nm
Page 222

Planetary Gearhead

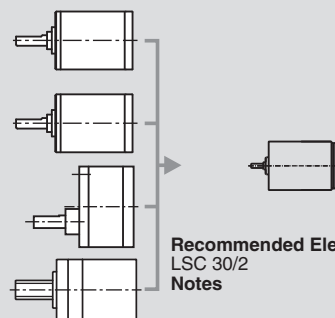
Ø22 mm
0.5 - 2.0 Nm
Page 223

Spur Gearhead

Ø38 mm
0.1 - 0.6 Nm
Page 237

Spindle Drive

Ø22 mm
Page 247 / 248



Recommended Electronics:
LSC 30/2 Page 282
Notes 18