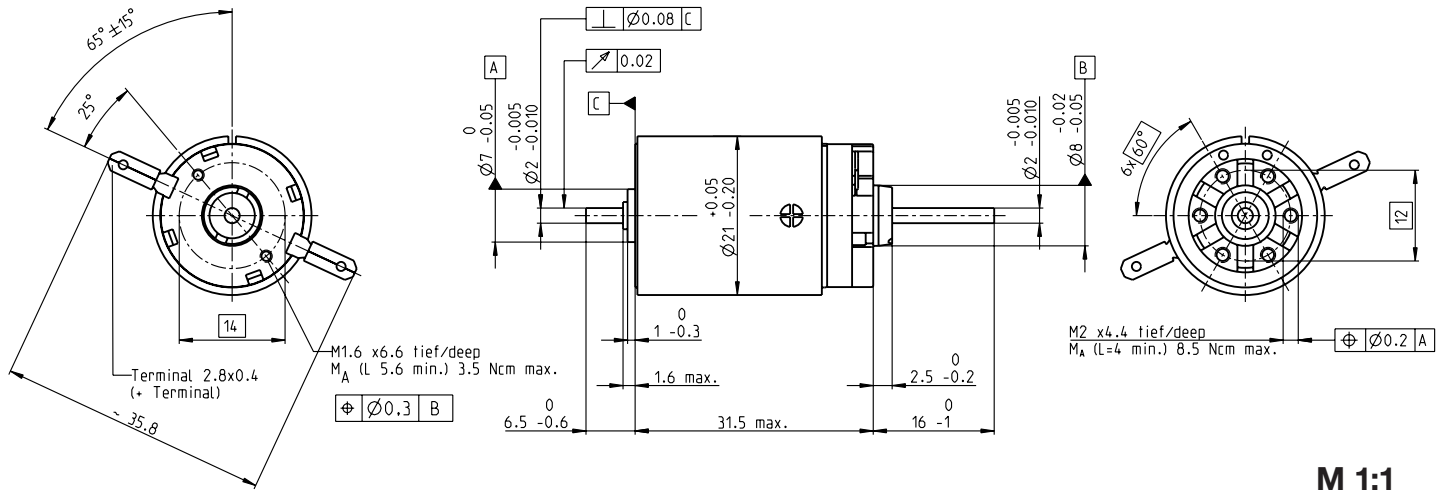


RE-max 21 Ø21 mm, Graphite Brushes, 6 Watt



M 1:1

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

Part Numbers

250020	250021	250022	250023	250024	250025	250026	250027	250028
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Motor Data										
Values at nominal voltage										
1 Nominal voltage	V	4	6	9	15	18	21	24	36	48
2 No load speed	rpm	11200	9440	9880	10200	9680	9470	8650	9780	9320
3 No load current	mA	150	81	56.9	35.7	27.7	23.2	18.2	14	9.95
4 Nominal speed	rpm	10700	8230	8230	8140	7580	7320	6480	7580	7090
5 Nominal torque (max. continuous torque)	mNm	1.91	3.81	5.69	7.13	7.23	7.09	7.14	6.9	6.86
6 Nominal current (max. continuous current)	A	0.72	0.72	0.72	0.552	0.44	0.362	0.292	0.213	0.151
7 Stall torque	mNm	45.4	30.9	34.8	35.2	33.7	31.6	28.8	31.1	29.1
8 Stall current	A	13.6	5.19	4.07	2.56	1.93	1.52	1.11	0.9	0.602
9 Max. efficiency	%	79	76	78	78	78	77	76	77	76
Characteristics										
10 Terminal resistance	Ω	0.295	1.16	2.21	5.86	9.32	13.8	21.7	40	79.7
11 Terminal inductance	mH	0.013	0.041	0.085	0.22	0.354	0.503	0.786	1.39	2.71
12 Torque constant	mNm/A	3.35	5.95	8.55	13.8	17.5	20.8	26	34.6	48.3
13 Speed constant	rpm/V	2850	1600	1120	694	546	459	367	276	198
14 Speed / torque gradient	rpm/mNm	252	312	289	295	291	305	305	319	326
15 Mechanical time constant	ms	6.69	6.77	6.59	6.62	6.6	6.66	6.68	6.88	6.77
16 Rotor inertia	gcm ²	2.54	2.07	2.18	2.14	2.16	2.09	2.09	2.06	1.99

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	8.75 s
20 Thermal time constant motor	502 s
21 Ambient temperature	-30...+85°C
22 Max. winding temperature	+125°C

Mechanical data (sleeve bearings)	
23 Max. 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) (static, shaft supported)	80 N / 420 N
28 Max. radial load, 5 mm from flange	2.7 N

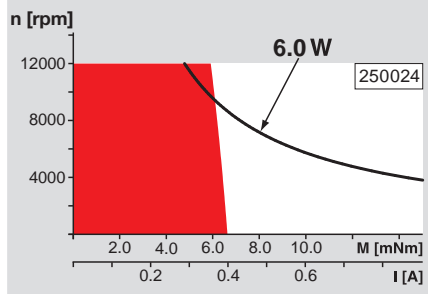
Mechanical data (ball bearings)	
23 Max. speed	12000 rpm
24 Axial play	0.05 - 0.15 mm
25 Radial play	0.025 mm
26 Max. axial load (dynamic)	3.3 N
27 Max. force for press fits (static) (static, shaft supported)	45 N / 420 N
28 Max. radial load, 5 mm from flange	11.9 N

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 151.

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

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**

maxon Modular System

<p>Planetary Gearhead Ø22 mm 0.5 - 1.0 Nm Page 329</p> <p>Planetary Gearhead Ø22 mm 0.5 - 2.0 Nm Page 331</p> <p>Spur Gearhead Ø38 mm 0.1 - 0.6 Nm Page 348</p> <p>Spindle Drive Ø22 mm Page 368/369</p>		<p style="text-align: right;">Encoder MR 32 CPT, 2 / 3 channels Page 389</p> <p style="text-align: right;">Encoder MR 128 / 256 / 512 CPT, 2 / 3 channels Page 391</p> <p style="text-align: right;">Recommended Electronics: Page 24</p> <p>ESCON Module 24/2 416</p> <p>ESCON 36/2 DC 416</p> <p>ESCON Module 50/5 417</p> <p>ESCON 50/5 418</p> <p>EPOS2 24/2 424</p> <p>EPOS2 Module 36/2 424</p> <p>EPOS2 50/5 425</p> <p>MAXPOS 50/5 435</p>
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