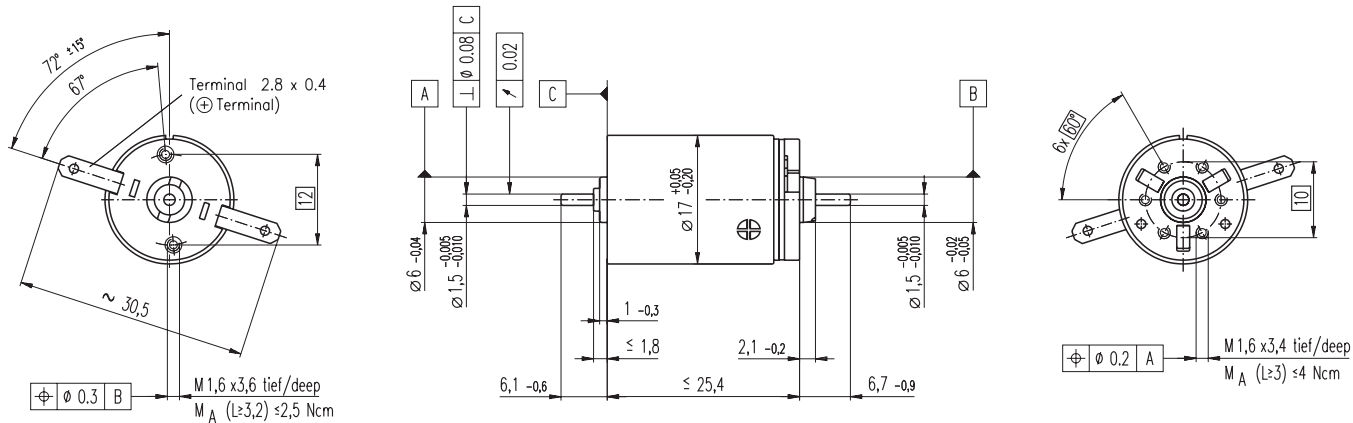


RE-max 17 $\varnothing 17$ mm, Graphite Brushes, 4.5 Watt



M 1:1

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

Order Number

216008	216009	269571	216010	216011	216012	216013	216014	216015	216016	216017
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Motor Data

		216008	216009	269571	216010	216011	216012	216013	216014	216015	216016	216017	
Values at nominal voltage													
1	Nominal voltage	V	3.0	4.8	9.0	12.0	15.0	21.0	24.0	24.0	30.0	36.0	48.0
2	No load speed	rpm	11900	10800	11300	11200	11300	11900	11600	10400	10800	11500	10100
3	No load current	mA	116	65.4	36.4	27.1	22.0	16.6	14.2	12.4	10.4	9.31	6.0
4	Nominal speed	rpm	10900	8510	8190	8120	8240	8810	8570	7230	7660	8310	6790
5	Nominal torque (max. continuous torque)	mNm	1.43	2.72	3.90	3.91	3.88	3.84	3.87	3.88	3.84	3.76	3.71
6	Nominal current (max. continuous current)	A	0.720	0.720	0.555	0.414	0.333	0.248	0.214	0.191	0.157	0.137	0.089
7	Stall torque	mNm	18.2	13.1	14.6	14.5	14.5	15.1	14.9	13.1	13.5	13.9	11.7
8	Starting current	A	7.70	3.17	1.95	1.45	1.17	0.909	0.771	0.604	0.517	0.472	0.262
9	Max. efficiency	%	76	73	75	75	75	75	75	74	74	74	72
Characteristics													
10	Terminal resistance	Ω	0.390	1.52	4.61	8.30	12.8	23.1	31.1	39.7	58.0	76.2	183
11	Terminal inductance	mH	0.0114	0.0349	0.114	0.206	0.314	0.558	0.759	0.956	1.38	1.75	4.04
12	Torque constant	mNm / A	2.37	4.14	7.49	10.1	12.4	16.6	19.3	21.7	26.0	29.4	44.5
13	Speed constant	rpm / V	4040	2310	1270	950	769	577	494	440	367	325	214
14	Speed / torque gradient	rpm / mNm	665	844	785	784	795	805	797	807	818	844	883
15	Mechanical time constant	ms	7.34	7.21	7.10	7.09	7.11	7.12	7.13	7.16	7.14	7.17	7.29
16	Rotor inertia	gcm ²	1.05	0.816	0.864	0.864	0.854	0.844	0.854	0.848	0.834	0.811	0.788

Specifications

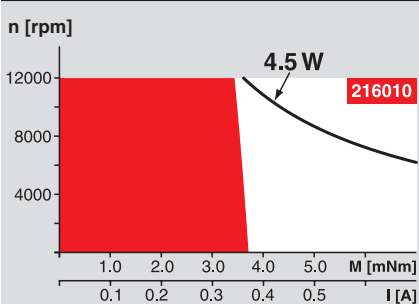
Thermal data		
17	Thermal resistance housing-ambient	35 K / W
18	Thermal resistance winding-housing	12 K / W
19	Thermal time constant winding	7.7 s
20	Thermal time constant motor	455 s
21	Ambient temperature	-30 ... +85°C
22	Max. permissible winding temperature	+125°C
Mechanical data (sleeve bearings)		
23	Max. permissible speed	11900 rpm
24	Axial play	0.05 - 0.15 mm
25	Radial play	0.012 mm
26	Max. axial load (dynamic)	0.8 N
27	Max. force for press fits (static) (static, shaft supported)	35 N / 280 N
28	Max. radial loading, 5 mm from flange	1.4 N
Mechanical data (ball bearings)		
23	Max. permissible speed	11900 rpm
24	Axial play	0.05 - 0.15 mm
25	Radial play	0.025 mm
26	Max. axial load (dynamic)	2.2 N
27	Max. force for press fits (static) (static, shaft supported)	30 N / 280 N
28	Max. radial loading, 5 mm from flange	7.8 N
Other specifications		
29	Number of pole pairs	1
30	Number of commutator segments	7
31	Weight of motor	26 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

Operating Range



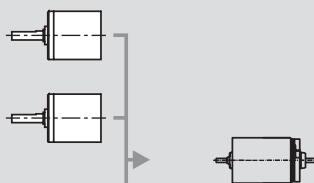
Comments

- 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

Planetary Gearhead
 $\varnothing 16$ mm
0.06 - 0.18 Nm
Page 223

Planetary Gearhead
 $\varnothing 16$ mm
0.1 - 0.3 Nm
Page 224



Overview on page 16 - 21

Encoder MR
32 CPT,
2 / 3 channels
Page 255

Encoder MR
128 / 256 / 512 CPT,
2 / 3 channels
Page 256

Recommended Electronics:
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EPOS 24/1 Page 294
Notes 18