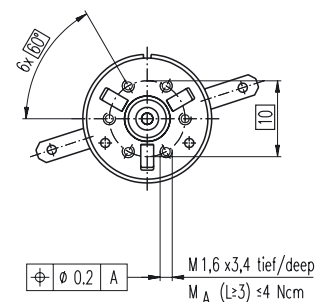
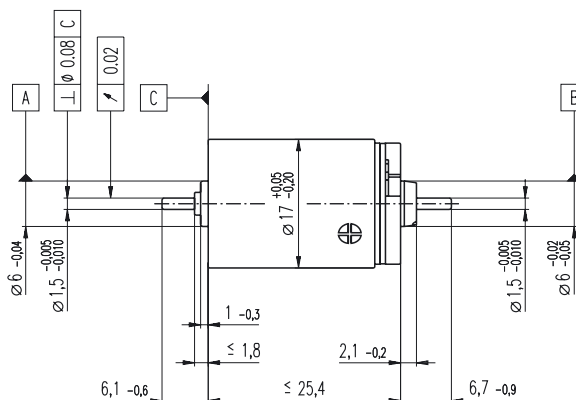
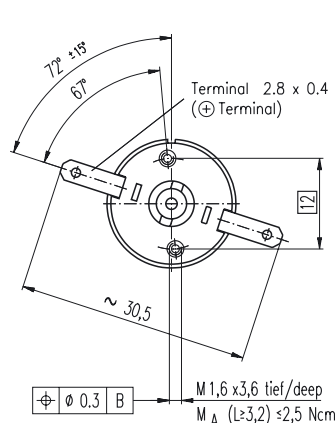


RE-max 17 Ø17 mm, Graphite Brushes, 4.5 Watt



M 1:1

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

Order Number

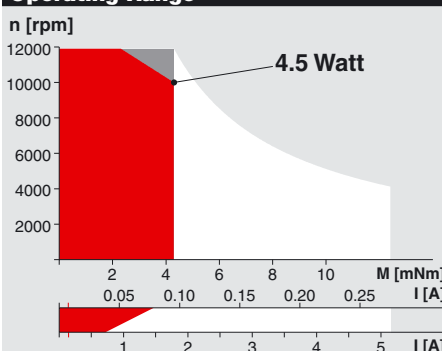
Motor Data

		216008	216009	269571	216010	216011	216012	216013	216014	216015	216016	216017						
1 Assigned power rating	W	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5						
2 Nominal voltage	Volt	3.0	4.8	9.0	12.0	15.0	21.0	24.0	24.0	30.0	36.0	48.0						
3 No load speed	rpm	11900	10800	11300	11200	11300	11900	11600	10400	10800	11500	10100						
4 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						
5 Speed / torque gradient	rpm / mNm	665	844	785	784	795	805	797	807	818	844	883						
6 No load current	mA	116	65	36	27	22	17	14	12	10	9	6						
7 Starting current	mA	7700	3170	1950	1450	1170	909	771	604	517	472	262						
8 Terminal resistance	Ohm	0.390	1.52	4.61	8.30	12.8	23.1	31.1	39.7	58.0	76.2	183						
9 Max. permissible speed	rpm	11900	11900	11900	11900	11900	11900	11900	11900	11900	11900	11900						
10 Max. continuous current	mA	720	72	568	424	341	254	219	194	160	140	90.2						
11 Max. continuous torque	mNm	1.33	2.49	3.65	3.65	3.63	3.6	3.62	3.6	3.57	3.52	3.43						
12 Max. power output at nominal voltage	mW	5490	3630	4230	4180	4230	4610	4470	3490	3740	4100	3010						
13 Max. efficiency	%	76	73	75	75	75	75	75	74	74	74	72						
14 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						
15 Speed constant	rpm / mA	4040	2310	1270	950	769	577	494	440	367	325	214						
16 Mechanical time constant	ms	7	7	7	7	7	7	7	7	7	7	7						
17 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						
18 Terminal inductance	mH	0.01	0.03	0.11	0.21	0.31	0.56	0.76	0.96	1.38	1.75	4.04						
19 Thermal resistance housing-ambient	K / W	35	35	35	35	35	35	35	35	35	35	35						
20 Thermal resistance rotor-housing	K / W	12	12	12	12	12	12	12	12	12	12	12						
21 Thermal time constant winding	s	10	7	8	8	8	8	8	8	7	7	7						

Specifications

- Axial play 0.05 - 0.15 mm
- Max. **sleeve bearing** loads
 - axial (dynamic) 0.8 N
 - radial (5 mm from flange) 1.4 N
 - Force for press fits (static) 35 N
 - (static, shaft supported) 280 N
- Max. **ball bearing** loads
 - axial (dynamic) 2.2 N
 - radial (5 mm from flange) 7.8 N
 - Force for press fits (static) 30 N
 - (static, shaft supported) 280 N
- Radial play **sleeve bearing** 0.012 mm
- Radial play **ball bearing** 0.025 mm
- Ambient temperature range -30 ... +85°C
- Max. rotor temperature +125°C
- Number of commutator segments 7
- Weight of motor 27 g
- 2 pole permanent magnet
- Values listed in the table are nominal. For applicable tolerances see page 43. For additional details please use the maxon selection program on the enclosed CD-ROM.

Operating Range



Comments

- Recommended operating range**
- Continuous operation**
In observation of above listed thermal resistances (lines 19 and 20) the maximum permissible rotor temperature will be reached during continuous operation at 25°C ambient.
= Thermal limit.
- Short term operation**
The motor may be briefly overloaded (recurring).
- 216017 Motor with high resistance winding
- 216008 Motor with low resistance winding

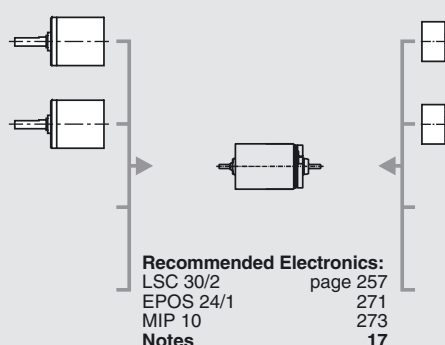
maxon Modular System

Planetary Gearhead

Ø16 mm
0.1 - 0.3 Nm
Details page 205

Planetary Gearhead

Ø16 mm
0.06 - 0.18 Nm
Details page 206



Overview on page 17 - 21

Encoder MR

32 CPT,
2 / 3 channels
Details page 235

Encoder MR

128 / 256 / 512 CPT,
2 / 3 channels
Details page 236