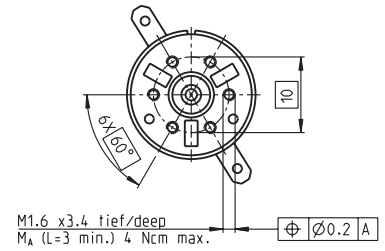
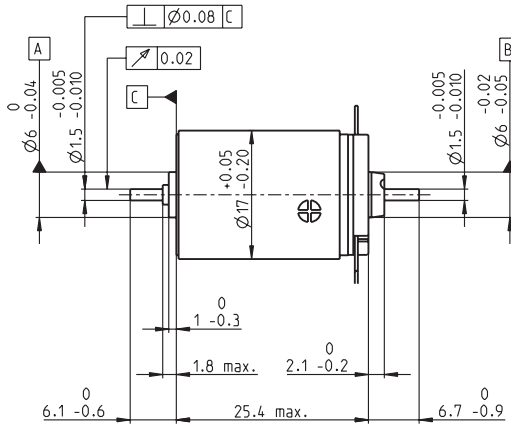
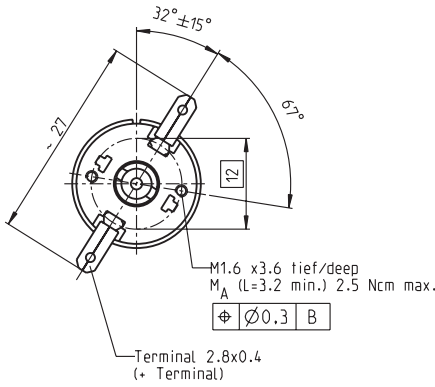


RE-max 17 $\varnothing 17$ mm, Precious Metal Brushes CLL, 2.5 Watt



M 1:1

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

Order Number

215988 215989 **215990** 215991 215992 215993 215994 215995 **215996** 215997

Motor Data

Values at nominal voltage		215988	215989	215990	215991	215992	215993	215994	215995	215996	215997	
1	Nominal voltage	V	2.0	3.0	7.2	9.0	12.0	15.0	18.0	21.0	24.0	36.0
2	No load speed	rpm	8100	6920	6840	6920	6920	7420	7940	7720	7810	7720
3	No load current	mA	47.6	25.8	10.6	8.60	6.45	5.65	5.15	4.25	3.78	2.48
4	Nominal speed	rpm	7170	4870	4130	4190	4180	4690	5200	4950	5010	4850
5	Nominal torque (max. continuous torque)	mNm	1.29	2.36	3.39	3.36	3.34	3.35	3.32	3.31	3.25	3.18
6	Nominal current (max. continuous current)	A	0.600	0.600	0.351	0.282	0.210	0.181	0.160	0.132	0.115	0.0745
7	Stall torque	mNm	11.4	8.05	8.61	8.60	8.50	9.20	9.70	9.31	9.13	8.63
8	Starting current	A	4.88	1.97	0.868	0.702	0.520	0.482	0.453	0.362	0.315	0.196
9	Max. efficiency	%	81	79	79	79	79	80	80	80	80	79
Characteristics												
10	Terminal resistance	Ω	0.410	1.52	8.30	12.8	23.1	31.1	39.7	57.9	76.2	183
11	Terminal inductance	mH	0.0114	0.0349	0.206	0.314	0.558	0.759	0.956	1.38	1.75	4.04
12	Torque constant	mNm / A	2.34	4.09	9.92	12.3	16.3	19.1	21.4	25.7	29.0	44.0
13	Speed constant	rpm / V	4090	2340	962	779	584	501	446	372	329	217
14	Speed / torque gradient	rpm / mNm	718	871	804	815	825	817	828	839	865	906
15	Mechanical time constant	ms	7.91	7.43	7.26	7.27	7.28	7.29	7.33	7.30	7.33	7.46
16	Rotor inertia	gcm ²	1.05	0.814	0.862	0.852	0.842	0.852	0.846	0.832	0.809	0.786

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	472 s
21	Ambient temperature	-30 ... +65°C
22	Max. permissible winding temperature	+85°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)	0.8 N
27	Max. force for press fits (static)	35 N
	(static, shaft supported)	280 N
28	Max. radial loading, 5 mm from flange	1.4 N

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)	2.2 N
27	Max. force for press fits (static)	30 N
	(static, shaft supported)	280 N
28	Max. radial loading, 5 mm from flange	7.8 N

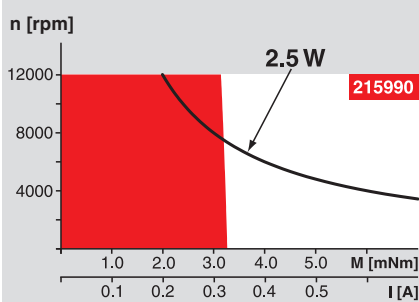
Other specifications		
29	Number of pole pairs	1
30	Number of commutator segments	7
31	Weight of motor	27 g
CLL = Capacitor Long Life		

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
- Without CLL

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).

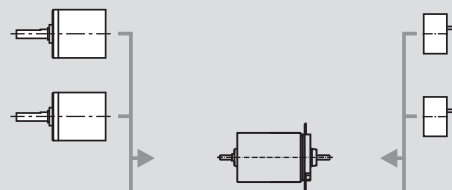
— Assigned power rating

maxon Modular System

Overview on page 16 - 21

Planetary Gearhead
 $\varnothing 16$ mm
0.06 - 0.18 Nm
Page 215

Planetary Gearhead
 $\varnothing 16$ mm
0.1 - 0.3 Nm
Page 216



Encoder MR
32 Imp.,
2 / 3 channels
Page 258

Encoder MR
128 / 256 / 512 Imp.,
2 / 3 channels
Page 260

Recommended Electronics:
LSC 30/2 Page 282
EPOS2 Module 36/2 304
Notes **18**