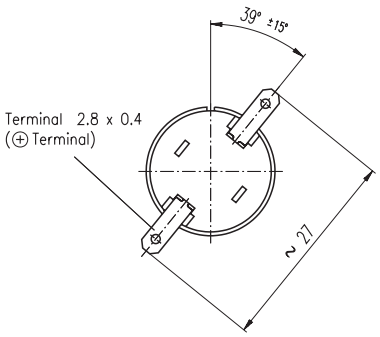
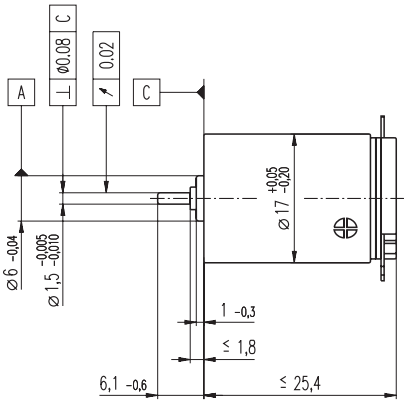
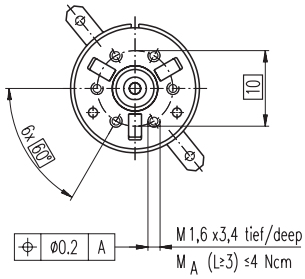
RE-max 17 ∅17 mm, Precious Metal Brushes CLL, 4 Watt







M 1:1

Stock program
Standard program
Special program (on request)

Order Number

	214895	214896	214897	214898	214899	215982	215983	215985	215986	215987
Motor Data										
Values at nominal voltage										
1 Nominal voltage V	3.0	4.5	12.0	15.0	21.0	24.0	24.0	30.0	36.0	48.0
2 No load speed rpm	12200	10500	11500	11600	12200	12000	10600	11100	11800	10400
3 No load current mA	32.6	16.9	7.38	6.02	4.66	3.94	3.26	2.79	2.57	1.56
4 Nominal speed rpm	11300	8380	8760	8870	9440	9210	7870	8300	8960	7450
5 Nominal torque (max. continuous torque) mNm	1.33	2.39	3.41	3.38	3.36	3.38	3.37	3.34	3.28	3.22
6 Nominal current (max. continuous current) A	0.600	0.600	0.350	0.281	0.209	0.180	0.160	0.132	0.115	0.0745
7 Stall torque mNm	17.1	12.1	14.4	14.3	14.9	14.7	12.9	13.3	13.7	11.5
8 Starting current A	7.32	2.95	1.45	1.17	0.910	0.772	0.604	0.518	0.473	0.262
9 Max. efficiency %	87	86	86	86	86	86	86	86	86	85
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	7.93	7.44	7.27	7.29	7.30	7.31	7.35	7.32	7.35	7.47
16 Rotor inertia gcm²	1.05	0.816	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 ... +65°C
22	Max. permissible winding temperature	+85°C

Mechanical data (sleeve bearings)

23	Max. permissible speed	19000 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
28	Max. radial loading, 5 mm from flange	1.4 N

Mechanical data (ball bearings)

23	Max. permissible speed	19000 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
28	Max. radial loading, 5 mm from flange	7.8 N

Other specifications

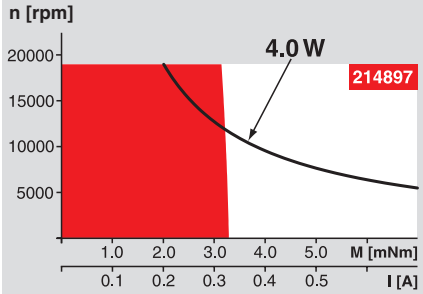
29	Number of pole pairs	1
30	Number of commutator segments	7
31	Weight of motor	26 g

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).

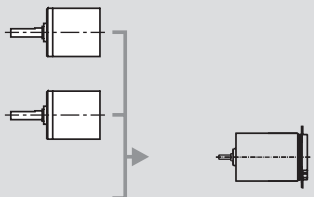
Assigned power rating

maxon Modular System

Overview on page 16 - 21

Planetary Gearhead
∅16 mm
0.06 - 0.18 Nm
Page 223

Planetary Gearhead
∅16 mm
0.1 - 0.3 Nm
Page 224



Recommended Electronics:
LSC 30/2 Page 276
Notes 18