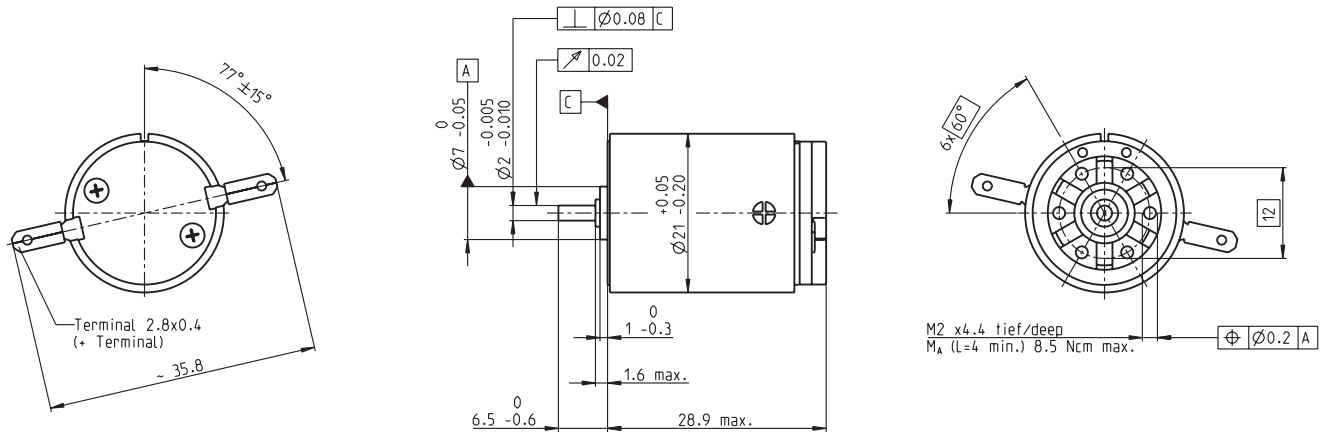


RE-max 21 Ø21 mm, Precious Metal Brushes CLL, 5 Watt



M 1:1

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

Order Number

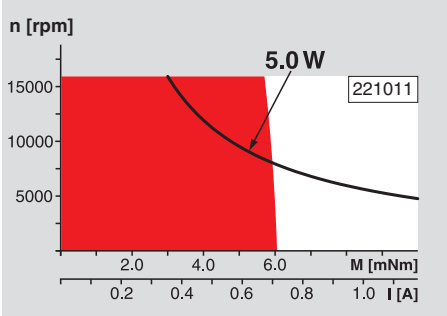
221009	221010	221011	221012	221013	221015	221016	221017	221019		

Motor Data																				
Values at nominal voltage																				
1	Nominal voltage	V	3.0	6.0	9.0	12.0	18.0	21.0	24.0	36.0	48.0									
2	No load speed	rpm	8860	9960	10400	8610	10200	9960	9110	10300	9800									
3	No load current	mA	43.6	26.6	19.1	10.4	9.20	7.61	5.71	4.69	3.24									
4	Nominal speed	rpm	8090	8400	8480	6660	8250	8000	7130	8300	7770									
5	Nominal torque (max. continuous torque)	mNm	2.57	4.67	6.21	6.22	6.22	6.10	6.11	6.03	5.90									
6	Nominal current (max. continuous current)	A	0.840	0.840	0.771	0.479	0.378	0.311	0.249	0.185	0.130									
7	Stall torque	mNm	29.7	29.9	33.6	27.5	33.0	31.0	28.3	31.4	28.5									
8	Starting current	A	9.23	5.22	4.09	2.08	1.96	1.55	1.13	0.943	0.614									
9	Max. efficiency	%	87	87	87	87	87	87	87	87	86									
Characteristics																				
10	Terminal resistance	Ω	0.325	1.15	2.20	5.77	9.17	13.6	21.3	38.2	78.2									
11	Terminal inductance	mH	0.0130	0.041	0.0846	0.219	0.353	0.502	0.784	1.38	2.70									
12	Torque constant	mNm / A	3.22	5.72	8.23	13.2	16.8	20.0	25.0	33.3	46.5									
13	Speed constant	rpm / V	2970	1670	1160	721	568	477	381	287	205									
14	Speed / torque gradient	rpm / mNm	299	335	311	315	310	323	324	329	345									
15	Mechanical time constant	ms	7.94	7.26	7.08	7.04	7.00	7.05	7.06	7.08	7.17									
16	Rotor inertia	gcm ²	2.53	2.07	2.18	2.14	2.16	2.08	2.08	2.05	1.98									

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 8.77 s
 - 20 Thermal time constant motor 588 s
 - 21 Ambient temperature -30 ... +65°C
 - 22 Max. permissible winding temperature +85°C
- Mechanical data (sleeve bearings)**
- 23 Max. permissible speed 16000 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) 80 N
 - 28 Max. radial loading, 5 mm from flange 2.7 N

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

- Mechanical data (ball bearings)**
- 23 Max. permissible speed 16000 rpm
 - 24 Axial play 0.05 - 0.15 mm
 - 25 Radial play 0.012 mm
 - 26 Max. axial load (dynamic) 3.3 N
 - 27 Max. force for press fits (static) 45 N
 - 28 Max. radial loading, 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
- CLL = Capacitor Long Life

Planetary Gearhead
Ø22 mm
0.5 - 1.0 Nm
Page 222

Planetary Gearhead
Ø22 mm
0.5 - 2.0 Nm
Page 223

Spur Gearhead
Ø38 mm
0.1 - 0.6 Nm
Page 237

Spindle Drive
Ø22 mm
Page 247 / 248

Recommended Electronics:
LSC 30/2 Page 282
Notes 18

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