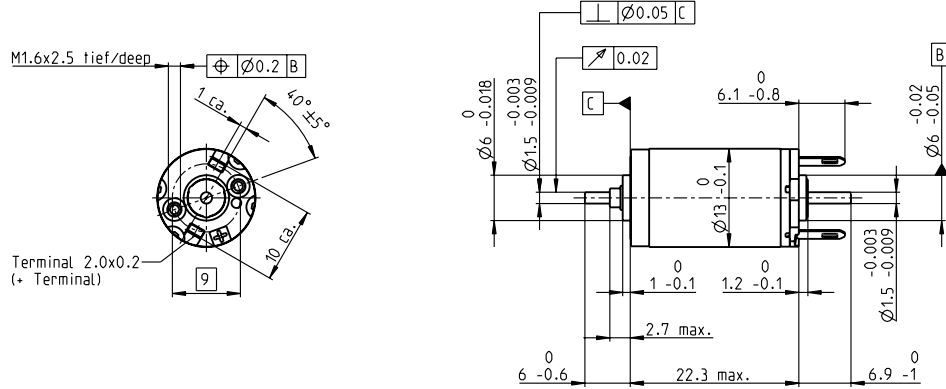


RE 13 Ø13 mm, Graphite Brushes, 1.5 Watt



M 1:1

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

Part Numbers

118555	118556	118557	118558	118559	118560	118561	118562	118563	118564	118565	118566
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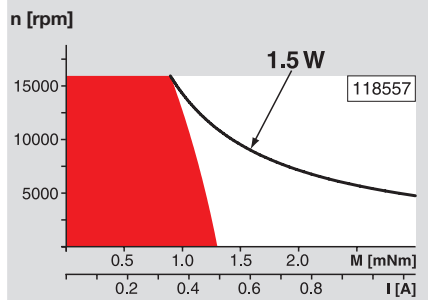
Motor Data															
Values at nominal voltage															
1 Nominal voltage	V	3	3.6	4.2	4.8	6	7.2	9	12	12	15	18	20		
2 No load speed	rpm	13200	13000	13300	12300	12700	12300	12300	13300	12300	13100	14000	13300		
3 No load current	mA	197	159	140	111	92.5	73.7	59.2	49.2	44.7	38.9	35.1	29.7		
4 Nominal speed	rpm	8520	7790	8260	7130	7480	7010	7000	8040	6940	7870	8890	8020		
5 Nominal torque (max. continuous torque)	mNm	1.06	1.23	1.27	1.28	1.25	1.26	1.25	1.21	1.22	1.21	1.2	1.19		
6 Nominal current (max. continuous current)	A	0.72	0.659	0.588	0.481	0.39	0.316	0.252	0.199	0.186	0.157	0.139	0.119		
7 Stall torque	mNm	3.19	3.3	3.56	3.26	3.25	3.16	3.12	3.28	3.01	3.23	3.51	3.22		
8 Stall current	A	1.67	1.41	1.32	0.989	0.814	0.639	0.506	0.429	0.368	0.335	0.321	0.254		
9 Max. efficiency	%	44	45	46	45	45	44	44	45	43	44	46	44		
Characteristics															
10 Terminal resistance	Ω	1.8	2.56	3.18	4.85	7.37	11.3	17.8	28	32.6	44.8	56.1	78.8		
11 Terminal inductance	mH	0.036	0.054	0.072	0.108	0.158	0.243	0.377	0.579	0.661	0.921	1.19	1.59		
12 Torque constant	mNm/A	1.91	2.35	2.69	3.3	4	4.95	6.17	7.64	8.17	9.64	10.9	12.7		
13 Speed constant	rpm/V	5000	4070	3550	2890	2390	1930	1550	1250	1170	990	872	753		
14 Speed / torque gradient	rpm/mNm	4700	4440	4190	4250	4410	4390	4460	4570	4660	4600	4470	4680		
15 Mechanical time constant	ms	14.2	14.1	14	14	14.1	14.2	14.2	14.3	14.3	14.3	14.2	14.4		
16 Rotor inertia	gcm ²	0.288	0.303	0.318	0.315	0.306	0.308	0.304	0.3	0.293	0.297	0.303	0.294		

Specifications

- Thermal data**
- 17 Thermal resistance housing-ambient 46 K/W
 - 18 Thermal resistance winding-housing 14 K/W
 - 19 Thermal time constant winding 5.38 s
 - 20 Thermal time constant motor 231 s
 - 21 Ambient temperature -20...+85°C
 - 22 Max. winding temperature +125°C
- Mechanical data (sleeve bearings)**
- 23 Max. speed 16000 rpm
 - 24 Axial play 0.05 - 0.15 mm
 - 25 Radial play 0.014 mm
 - 26 Max. axial load (dynamic) 0.8 N
 - 27 Max. force for press fits (static) (static, shaft supported) 15 N
 - 28 Max. radial load, 5 mm from flange 140 N
- Other specifications**
- 29 Number of pole pairs 1
 - 30 Number of commutator segments 7
 - 31 Weight of motor 15 g

Values listed in the table are nominal.
Explanation of the figures on page 151.

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

Recommended Electronics:

Notes Page 24

- ESCON Module 24/2 416
- ESCON 36/2 DC 416
- EPOS2 24/2 424
- EPOS2 Module 36/2 424
- MAXPOS 50/5 435

Encoder MR
16 CPT,
2 channels
Page 385

Encoder MR
64 - 256 CPT,
2 channels
Page 386/387

Encoder MEnc
Ø13 mm
16 CPT, 2 channels
Page 409