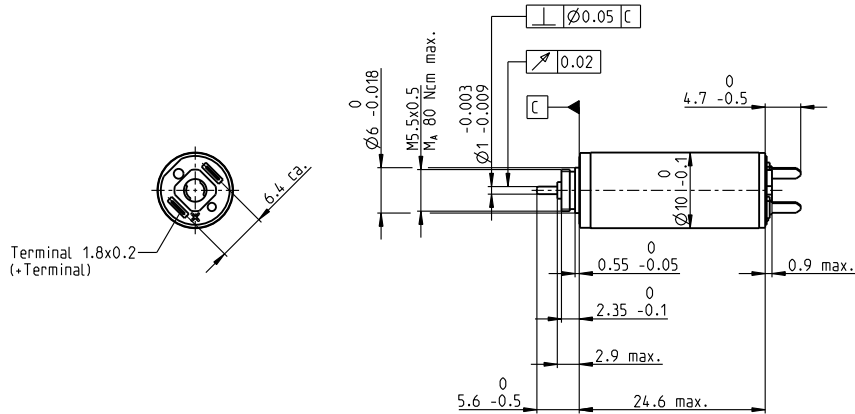


# RE 10 Ø10 mm, Precious Metal Brushes, 1.5 Watt



M 1:1

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

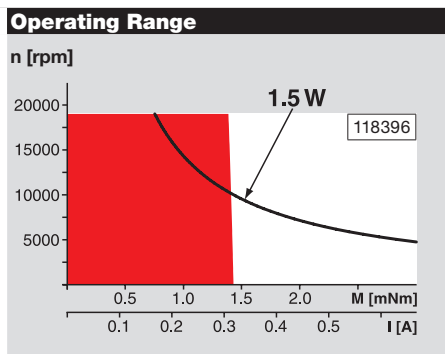
## Part Numbers

118392	118393	118394	118395	118396	118397	118398	118399	118400
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Motor Data		118392	118393	118394	118395	118396	118397	118398	118399	118400
<b>Values at nominal voltage</b>										
1 Nominal voltage	V	3	3	4.5	4.5	6	6	9	9	12
2 No load speed	rpm	13000	10700	12800	10600	12400	9880	12200	11100	12500
3 No load current	mA	23.9	18.5	15.5	12.1	11.1	8.33	7.27	6.42	5.67
4 Nominal speed	rpm	6840	4430	6530	4210	6160	3880	6080	4990	6510
5 Nominal torque (max. continuous torque)	mNm	1.5	1.49	1.48	1.47	1.5	1.57	1.53	1.54	1.54
6 Nominal current (max. continuous current)	A	0.713	0.582	0.462	0.379	0.338	0.282	0.226	0.207	0.176
7 Stall torque	mNm	3.12	2.52	3.04	2.47	3.01	2.61	3.08	2.83	3.24
8 Stall current	A	1.44	0.963	0.919	0.619	0.66	0.458	0.444	0.371	0.36
9 Max. efficiency	%	76	74	76	74	76	75	76	76	77
<b>Characteristics</b>										
10 Terminal resistance	Ω	2.08	3.11	4.9	7.27	9.09	13.1	20.3	24.3	33.3
11 Terminal inductance	mH	0.017	0.025	0.04	0.059	0.077	0.12	0.178	0.215	0.299
12 Torque constant	mNm/A	2.16	2.62	3.3	3.99	4.56	5.7	6.95	7.63	9
13 Speed constant	rpm/V	4410	3640	2890	2400	2100	1680	1370	1250	1060
14 Speed / torque gradient	rpm/mNm	4240	4330	4280	4370	4180	3860	4010	3980	3930
15 Mechanical time constant	ms	4.62	4.61	4.6	4.59	4.58	4.56	4.59	4.56	4.56
16 Rotor inertia	gcm <sup>2</sup>	0.104	0.102	0.102	0.1	0.105	0.113	0.109	0.11	0.111

### Specifications

<b>Thermal data</b>	
17 Thermal resistance housing-ambient	37.5 K/W
18 Thermal resistance winding-housing	9.0 K/W
19 Thermal time constant winding	2.22 s
20 Thermal time constant motor	135 s
21 Ambient temperature	-20...+65°C
22 Max. winding temperature	+85°C
<b>Mechanical data (sleeve bearings)</b>	
23 Max. speed	19000 rpm
24 Axial play	0.05 - 0.15 mm
25 Radial play	0.012 mm
26 Max. axial load (dynamic)	0.15 N
27 Max. force for press fits (static)	15 N
28 Max. radial load, 4 mm from flange	0.4 N



### 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**

### Other specifications

29 Number of pole pairs	1
30 Number of commutator segments	7
31 Weight of motor	10 g

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

## maxon Modular System Overview on page 20-27

**Planetary Gearhead**  
Ø10 mm  
0.005 - 0.1 Nm  
Page 313

**Planetary Gearhead**  
Ø10 mm  
0.01 - 0.15 Nm  
Page 314

