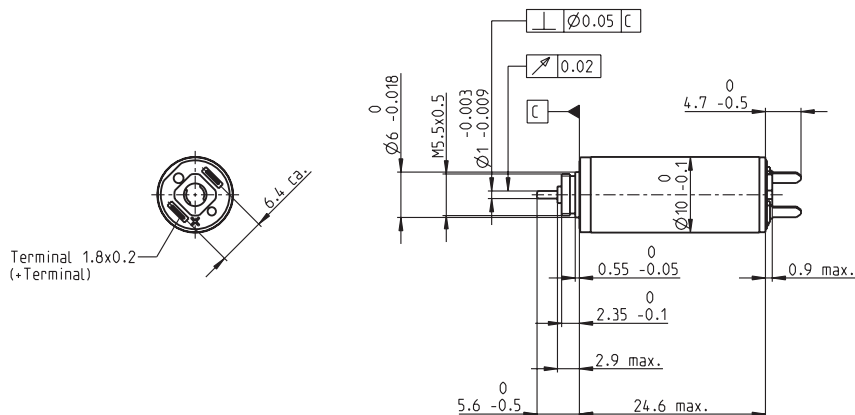


RE 10 \varnothing 10 mm, Precious Metal Brushes, 1.5 Watt, CE approved



M 1:1

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

Order Number

118392 118393 118394 118395 118396 118397 118398 118399 118400

Motor Data

Values at nominal voltage											
1	Nominal voltage	V	3.0	3.0	4.5	4.5	6.0	6.0	9.0	9.0	12.0
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	6760	4380	6500	4190	6140	3870	6070	4980	6500
5	Nominal torque (max. continuous torque)	mNm	1.48	1.47	1.48	1.47	1.50	1.57	1.53	1.54	1.54
6	Nominal current (max. continuous current)	A	0.705	0.578	0.460	0.378	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	Starting current	A	1.44	0.963	0.919	0.619	0.660	0.458	0.444	0.371	0.360
9	Max. efficiency	%	76	75	76	74	76	75	76	76	77
Characteristics											
10	Terminal resistance	Ω	2.08	3.11	4.90	7.27	9.09	13.1	20.3	24.3	33.3
11	Terminal inductance	mH	0.0173	0.0253	0.0402	0.0586	0.0766	0.120	0.178	0.215	0.299
12	Torque constant	mNm / A	2.16	2.62	3.30	3.99	4.56	5.70	6.95	7.63	9.00
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	4.60	4.58	4.57	4.57	4.55	4.54	4.56	4.54	4.53
16	Rotor inertia	gcm ²	0.103	0.101	0.102	0.0998	0.104	0.112	0.109	0.109	0.110

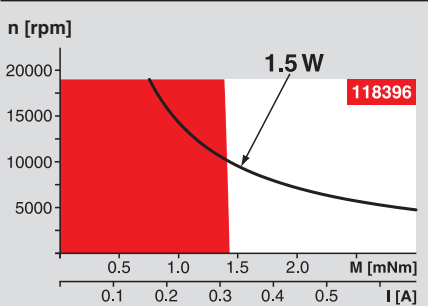
Specifications

- Thermal data**
- 17 Thermal resistance housing-ambient 37.5 K / W
 - 18 Thermal resistance winding-housing 9.0 K / W
 - 19 Thermal time constant winding 2.21 s
 - 20 Thermal time constant motor 188 s
 - 21 Ambient temperature -20 ... +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) 0.15 N
 - 27 Max. force for press fits (static) 15 N
 - 28 Max. radial loading, 4 mm from flange 0.4 N

- 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 49.

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 10 mm
0.005 - 0.1 Nm
Page 205
- Planetary Gearhead**
 \varnothing 10 mm
0.01 - 0.15 Nm
Page 206

