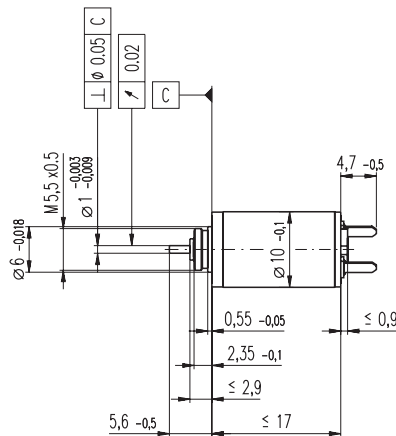
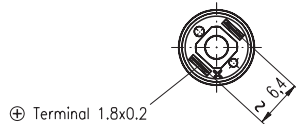


RE 10 \varnothing 10 mm, Precious Metal Brushes, 0.75 Watt, CE approved



M 1:1

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

Order Number

118382 118383 118384 118385 118386 118387 118388 118389 118390 118391

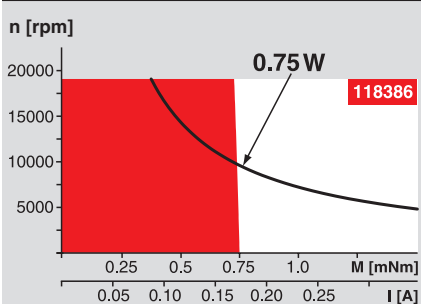
Motor Data

Values at nominal voltage		118382	118383	118384	118385	118386	118387	118388	118389	118390	118391	
1	Nominal voltage	V	2.4	3.0	3.6	4.5	6.0	6.0	7.2	7.2	9.0	12.0
2	No load speed	rpm	10300	10400	9930	11300	13000	11400	11700	10600	10700	11600
3	No load current	mA	16.0	12.8	10.1	9.51	8.5	7.18	6.21	5.46	4.44	3.68
4	Nominal speed	rpm	1630	1990	1500	2950	4670	3150	3340	2300	2000	2790
5	Nominal torque (max. continuous torque)	mNm	0.757	0.789	0.784	0.787	0.784	0.800	0.784	0.718	0.757	0.746
6	Nominal current (max. continuous current)	A	0.367	0.306	0.243	0.222	0.190	0.170	0.143	0.119	0.101	0.081
7	Stall torque	mNm	0.924	1.00	0.949	1.09	1.25	1.13	1.12	0.944	0.957	1.01
8	Starting current	A	0.432	0.375	0.284	0.297	0.292	0.232	0.198	0.150	0.123	0.106
9	Max. efficiency	%	66	67	66	68	69	68	68	66	66	67
Characteristics			118382	118383	118384	118385	118386	118387	118388	118389	118390	118391
10	Terminal resistance	Ω	5.55	8.00	12.7	15.2	20.6	25.8	36.4	47.9	72.9	114
11	Terminal inductance	mH	0.0461	0.0720	0.112	0.136	0.184	0.240	0.325	0.398	0.605	0.920
12	Torque constant	mNm / A	2.14	2.67	3.34	3.67	4.27	4.87	5.68	6.28	7.75	9.55
13	Speed constant	rpm / V	4470	3570	2860	2600	2230	1960	1680	1520	1230	1000
14	Speed / torque gradient	rpm / mNm	11600	10700	10800	10700	10700	10400	10800	11600	11600	11900
15	Mechanical time constant	ms	7.97	7.92	7.95	7.90	7.90	7.85	7.93	8.04	8.04	8.11
16	Rotor inertia	gcm ²	0.0656	0.0707	0.0700	0.0702	0.0702	0.0722	0.0701	0.0662	0.0662	0.0651

Specifications

- Thermal data**
- 17 Thermal resistance housing-ambient 45.5 K / W
 - 18 Thermal resistance winding-housing 19.5 K / W
 - 19 Thermal time constant winding 3.14 s
 - 20 Thermal time constant motor 108 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

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**

Other specifications

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

Values listed in the table are nominal.
Explanation of the figures on page 49.

maxon Modular System

Overview on page 16 - 21

Planetary Gearhead
 \varnothing 10 mm
0.005 - 0.1 Nm
Page 214

Planetary Gearhead
 \varnothing 10 mm
0.01 - 0.15 Nm
Page 215

