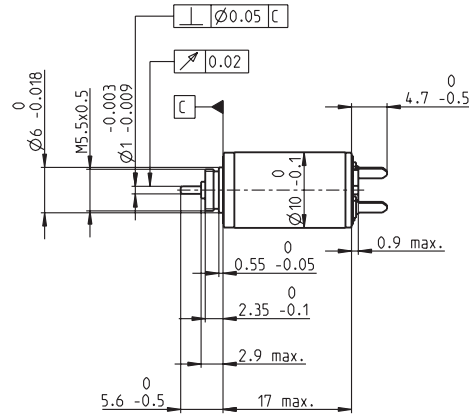
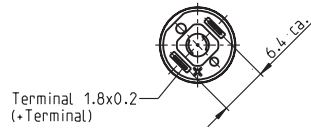


# RE 10 Ø10 mm, Precious Metal Brushes, 0.75 Watt



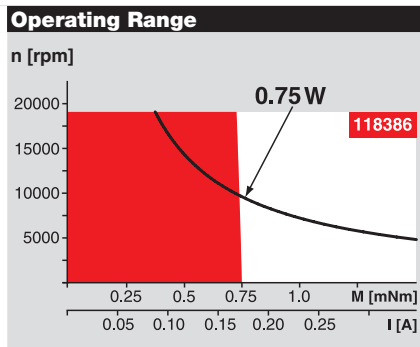
M 1:1

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

Part Numbers											
118382	118383	118384	118385	118386	118387	118388	118389	118390	118391		

Motor Data													
<b>Values at nominal voltage</b>													
1 Nominal voltage	V	2.4	3	3.6	4.5	6	6	7.2	7.2	9	12		
2 No load speed	rpm	10300	10400	9930	11300	13000	11400	11700	10600	10700	11600		
3 No load current	mA	16	12.8	10.1	9.52	8.51	7.18	6.22	5.47	4.45	3.68		
4 Nominal speed	rpm	1670	2010	1520	2970	4680	3160	3350	1860	2000	2790		
5 Nominal torque (max. continuous torque)	mNm	0.76	0.792	0.786	0.788	0.785	0.801	0.784	0.758	0.757	0.746		
6 Nominal current (max. continuous current)	A	0.368	0.307	0.243	0.222	0.191	0.17	0.143	0.125	0.101	0.0811		
7 Stall torque	mNm	0.924	1	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	0.15	0.123	0.106		
9 Max. efficiency	%	66	67	66	68	69	68	68	66	66	67		
<b>Characteristics</b>													
10 Terminal resistance	Ω	5.55	8	12.7	15.2	20.6	25.8	36.4	47.9	72.9	114		
11 Terminal inductance	mH	0.0461	0.072	0.112	0.136	0.184	0.24	0.325	0.398	0.605	0.92		
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	8.02	7.96	7.99	7.95	7.95	7.9	7.98	8.09	8.09	8.16		
16 Rotor inertia	gcm <sup>2</sup>	0.066	0.0711	0.0704	0.0706	0.0706	0.0726	0.0706	0.0666	0.0666	0.0654		

Specifications	
<b>Thermal data</b>	
17 Thermal resistance housing-ambient	45.5 K/W
18 Thermal resistance winding-housing	19.5 K/W
19 Thermal time constant winding	3.16 s
20 Thermal time constant motor	108 s
21 Ambient temperature	-20...+65°C
22 Max. permissible winding temperature	+85°C
<b>Mechanical data (sleeve bearings)</b>	
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



**Comments**

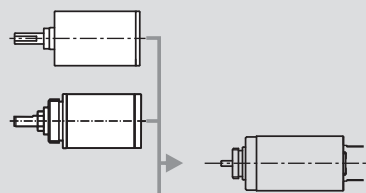
- Continuous operation**  
In observation of above listed thermal resistance (lines 17 and 18) the maximum permissible winding temperature will be reached during continuous operation at 25°C ambient.  
= Thermal limit.
- Short term operation**  
The motor may be briefly overloaded (recurring).
- Assigned 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 71.

**maxon Modular System** Overview on page 20 - 25

- Planetary Gearhead**  
Ø10 mm  
0.005 - 0.1 Nm  
Page 232
- Planetary Gearhead**  
Ø10 mm  
0.01 - 0.15 Nm  
Page 233



**Recommended Electronics:**  
ESCON 36/2 DC Page 320  
Notes 22