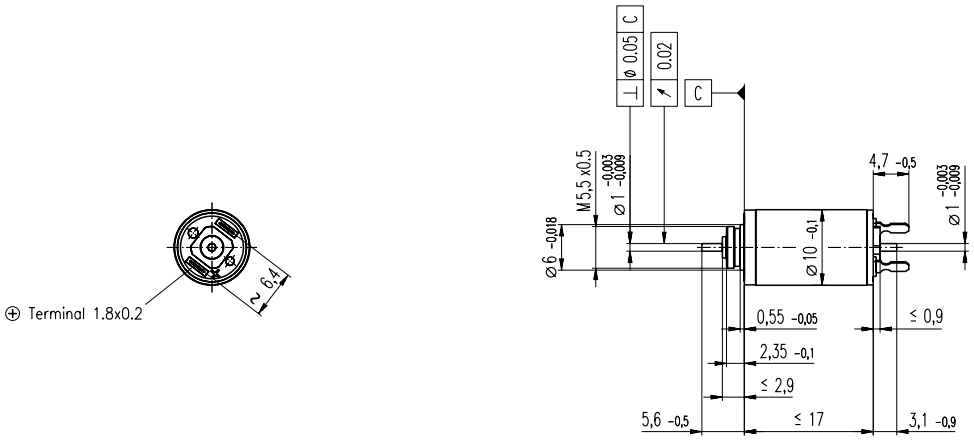
RE 10 ∅10 mm, Precious Metal Brushes, 0.75 Watt, CE approved

NEW



M 1:1

Stock program
Standard program
Special program (on request!)

Order Number

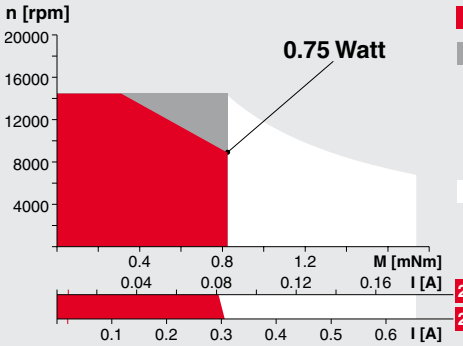
			256085	256086	256087	256088	256089	256090	256091	256092	256093	256094
Motor Data												
1	Assigned power rating	W	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
2	Nominal voltage	Volt	2.4	3.0	3.6	4.5	6.0	6.0	7.2	7.2	9.0	12.0
3	No load speed	rpm	10200	10300	9840	11200	12900	11300	11600	10500	10600	11500
4	Stall torque	mNm	0.924	1.00	0.949	1.09	1.25	1.13	1.12	0.944	0.957	1.01
5	Speed / torque gradient	rpm / mNm	11600	10700	10800	10700	10700	10400	10800	11600	11600	11900
6	No load current	mA	20	16	13	12	11	9	8	7	6	5
7	Starting current	mA	432	375	284	297	292	232	198	150	123	106
8	Terminal resistance	Ohm	5.55	8.00	12.7	15.2	20.6	25.8	36.4	47.9	72.9	114
9	Max. permissible speed	rpm	14300	14300	14300	14300	14300	14300	14300	14300	14300	14300
10	Max. continuous current	mA	367	306	243	222	191	170	143	125	101	81.1
11	Max. continuous torque	mNm	0.785	0.817	0.812	0.816	0.816	0.830	0.813	0.785	0.785	0.775
12	Max. power output at nominal voltage	mW	240	261	237	312	412	326	333	250	257	294
13	Max. efficiency	%	62.7	64.0	63.3	64.9	66.3	65.4	65.2	62.9	63.1	63.0
14	Torque constant	mNm / A	2.14	2.67	3.34	3.67	4.27	4.88	5.68	6.28	7.75	9.55
15	Speed constant	rpm / V	4470	3570	2860	2600	2230	1960	1680	1520	1230	1000
16	Mechanical time constant	ms	8	7	7	7	7	7	7	7	7	7
17	Rotor inertia	gcm^2	0.062	0.067	0.066	0.066	0.066	0.068	0.066	0.061	0.061	0.060
18	Terminal inductance	mH	0.05	0.07	0.11	0.14	0.18	0.24	0.33	0.40	0.60	0.92
19	Thermal resistance housing-ambient	K / W	46	46	46	46	46	46	46	46	46	46
20	Thermal resistance rotor-housing	K / W	20	20	20	20	20	20	20	20	20	20
21	Thermal time constant winding	s	3	3	3	3	3	3	3	3	3	3

Specifications

- Axial play 0.05 - 0.15 mm
- Max. **sleeve bearing** loads
  axial (dynamic) 0.15 N
  radial (4 mm from flange) 0.4 N
  Force for press fits (static) 15 N
- Radial play **sleeve bearing** 0.012 mm
- Ambient temperature range -20 ... +65°C
- Max. rotor temperature +85°C
- Number of commutator segments 7
- Weight of motor 7 g
- Values listed in the table are nominal.
  For applicable tolerances see page 43.
  For additional details please use the maxon selection program on the enclosed CD-Rom.

Operating Range

Comments Details on page 49



Recommended operating range

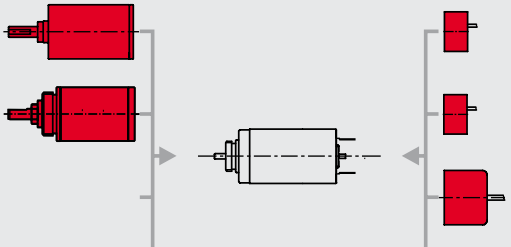
Continuous operation
In observation of above listed thermal resistances (lines 19 and 20) the maximum permissible rotor temperature will be reached during continuous operation at 25°C ambient.
= Thermal limit

Short term operation
The motor may be briefly overloaded (recurring).

256094 Motor with high resistance winding
256086 Motor with low resistance winding

maxon Modular System

Overview on page 17 - 21



Planetary Gearhead
∅10 mm
0.005 - 0.1 Nm
Details page 176

Planetary Gearhead
∅10 mm
0.01 - 0.15 Nm
Details page 177

Digital MR Encoder
16 CPT,
2 channels
Details page 206

Digital MR Encoder
64 - 256 CPT,
2 / 3 channels
Details page 207

Digital Magnetic Encoder ∅10 mm
12 CPT, 2 channels
Details page 222

Recommended Electronics:
LSC 30/2 page 231
MIP 10 245
Notes 17