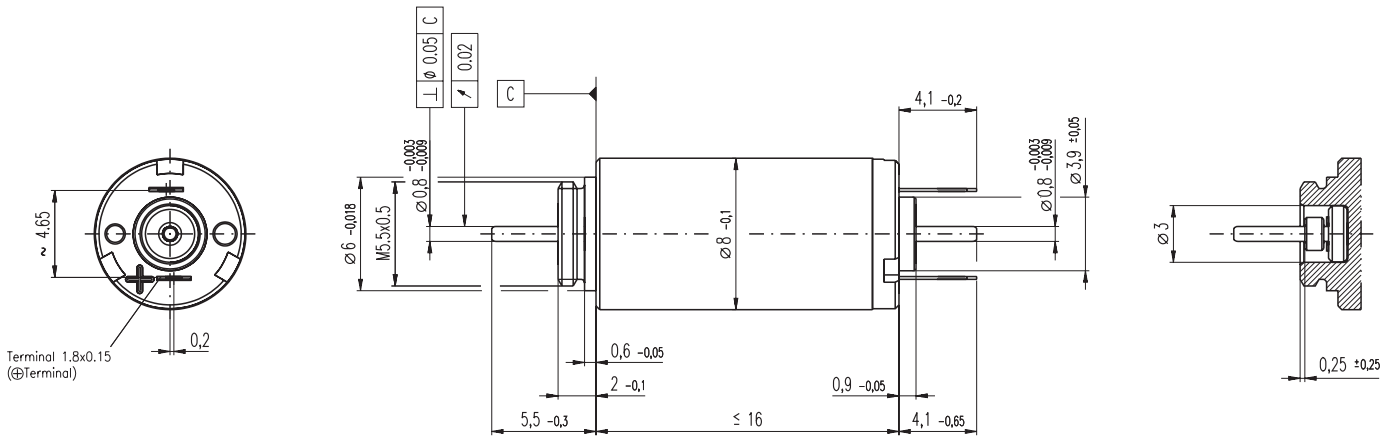


# RE 8 Ø8 mm, Precious Metal Brushes, 0.5 Watt



## M 2.5:1

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

### Order Number

347723	347724	347725	347728	347726	347727
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Motor Data		347723	347724	347725	347728	347726	347727	
<b>Values at nominal voltage</b>								
1	Nominal voltage	V	2.4	4.2	6.0	7.2	9.0	12.0
2	No load speed	rpm	13900	14200	13300	14300	14400	15600
3	No load current	mA	19.2	11.2	7.3	6.66	5.34	4.43
4	Nominal speed	rpm	4260	4460	3490	4210	4760	5400
5	Nominal torque (max. continuous torque)	mNm	0.626	0.623	0.616	0.595	0.626	0.589
6	Nominal current (max. continuous current)	A	0.409	0.237	0.154	0.134	0.113	0.0865
7	Stall torque	mNm	0.925	0.932	0.857	0.866	0.957	0.925
8	Starting current	A	0.581	0.340	0.207	0.187	0.166	0.130
9	Max. efficiency	%	67.3	67.4	66.3	66.2	67.7	66.9
<b>Characteristics</b>								
10	Terminal resistance	Ω	4.13	12.3	29.0	38.5	54.3	92.2
11	Terminal inductance	mH	0.0304	0.090	0.206	0.257	0.400	0.606
12	Torque constant	mNm / A	1.59	2.74	4.15	4.63	5.77	7.11
13	Speed constant	rpm / V	6000	3490	2300	2060	1650	1340
14	Speed / torque gradient	rpm / mNm	15600	15700	16100	17200	15500	17400
15	Mechanical time constant	ms	6.31	6.3	6.34	6.44	6.29	6.49
16	Rotor inertia	gcm <sup>2</sup>	0.0388	0.0383	0.0375	0.0358	0.0387	0.0355

Specifications	Operating Range	Comments
<b>Thermal data</b> 17 Thermal resistance housing-ambient 48 K / W 18 Thermal resistance winding-housing 22 K / W 19 Thermal time constant winding 3.0 s 20 Thermal time constant motor 21.3 s 21 Ambient temperature -20 ... +65°C 22 Max. permissible winding temperature +85°C  <b>Mechanical data (sleeve bearings)</b> 23 Max. permissible speed 23000 rpm 24 Axial play 0.02 - 0.1 mm 25 Radial play 0.012 mm 26 Max. axial load (dynamic) 0.15 N 27 Max. force for press fits (static) 10 N 28 Max. radial loading, 4 mm from flange 0.6 N	<b>Operating Range</b> 	<b>Comments</b> <div style="background-color: red; width: 20px; height: 10px; display: inline-block; margin-right: 5px;"></div> <b>Continuous operation</b> 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.  <div style="border: 1px solid black; width: 20px; height: 10px; display: inline-block; margin-right: 5px;"></div> <b>Short term operation</b> The motor may be briefly overloaded (recurring).  — Assigned power rating

Other specifications	maxon Modular System	Overview on page 16 - 21
29 Number of pole pairs 1 30 Number of commutator segments 5 31 Weight of motor 4.1 g  Values listed in the table are nominal. Explanation of the figures on page 49.	<b>Planetary Gearhead</b> Ø8 mm 0.002 - 0.03 Nm Page 213	<b>Encoder MR</b> 64 - 256 CPT, 2 channels Page 253  <b>Recommended Electronics:</b> LSC 30/2 Page 276 Notes 18