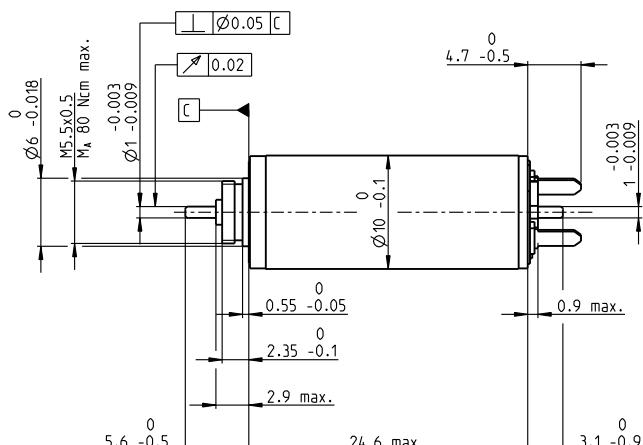
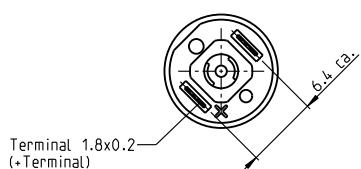


# RE 10 Ø10 mm, precious metal brushes, 1.5 watt

RE



## M 3:2

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

### Part Numbers

256096	256097	256099	256100	256101	256102	256103	256104	256105
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### Motor Data

	Values at nominal voltage									
1 Nominal voltage	V	2.4	2.4	4.5	4.5	6	7.2	9	10	12
2 No load speed	rpm	10400	8560	12800	10600	12400	11900	12200	12300	12500
3 No load current	mA	21.7	17	15.1	11.8	10.8	8.55	7.06	6.45	5.5
4 Nominal speed	rpm	4170	2230	6530	4210	6160	5900	6080	6250	6510
5 Nominal torque	mNm	1.51	1.49	1.48	1.47	1.5	1.56	1.53	1.54	1.55
6 Nominal current (max. continuous current)	A	0.715	0.583	0.462	0.379	0.339	0.282	0.226	0.207	0.176
7 Stall torque	mNm	2.49	2.02	3.04	2.47	3.01	3.13	3.08	3.14	3.24
8 Stall current	A	1.15	0.771	0.919	0.619	0.66	0.549	0.444	0.412	0.36
9 Max. efficiency	%	75	73	76	75	76	77	77	77	77
Characteristics										
10 Terminal resistance	Ω	2.08	3.11	4.9	7.27	9.09	13.1	20.3	24.3	33.3
11 Terminal inductance	mH	0.017	0.025	0.04	0.059	0.077	0.12	0.178	0.215	0.299
12 Torque constant	mNm/A	2.16	2.62	3.3	3.99	4.56	5.7	6.95	7.63	9
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	4.62	4.61	4.6	4.59	4.58	4.56	4.59	4.56	4.56
16 Rotor inertia	gcm²	0.104	0.102	0.102	0.1	0.105	0.113	0.109	0.11	0.11

### Specifications

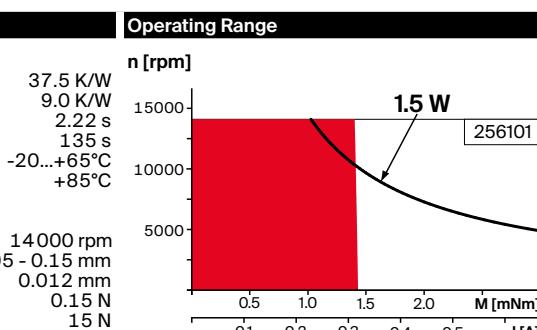
Thermal data	n [rpm]	
17 Thermal resistance housing-ambient	37.5 K/W	
18 Thermal resistance winding-housing	9.0 K/W	
19 Thermal time constant winding	2.22 s	
20 Thermal time constant motor	135 s	
21 Ambient temperature	-20...+65°C	
22 Max. winding temperature	+85°C	

Mechanical data (sleeve bearings)	14000 rpm	
23 Max. speed	0.05 - 0.15 mm	
24 Axial play	0.012 mm	
25 Radial play	0.15 N	
26 Max. axial load (dynamic)	15 N	
27 Max. force for press fits (static)	0.4 N	
28 Max. radial load, 4 mm from flange		

### Other specifications

29 Number of pole pairs	1	maxon Modular System	Details on catalog page 44
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 90.



### 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

Gear	Sensor	Motor Control
396_GP 10 K	471_ENX 10 GAMA	532_ESCON Module 24/2
397_GP 10 A	504_Encoder MR 16 CPT	532_ESCON 36/2 DC
	505_Encoder MR 64-256 CPT	542_EPOS4 Module 24/1.5
		544_EPOS4 Compact 24/1.5