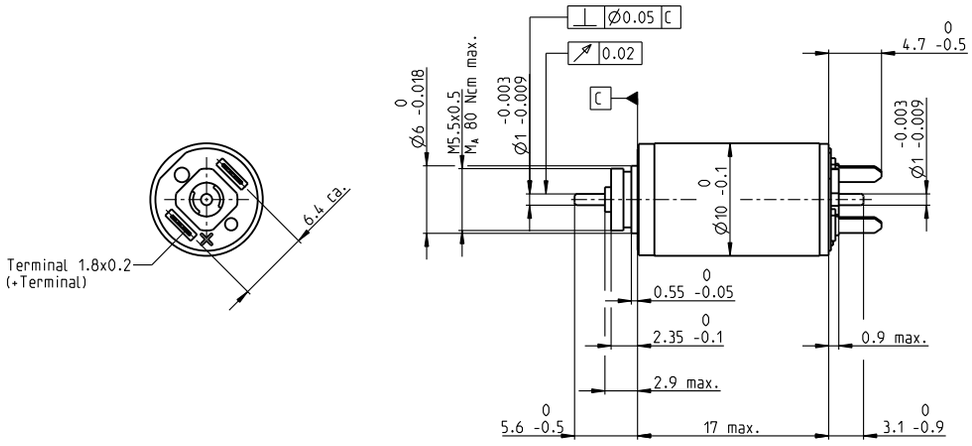
RE 10 ∅10 mm, precious metal brushes, 0.75 watt



M 3:2

Stock program
Standard program
Special program (on request)

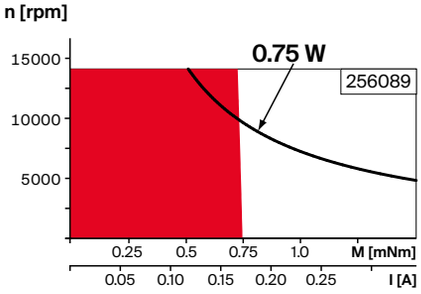
		Part Numbers									
		256085	256086	256087	256088	256089	256090	256091	256092	256093	256094
Motor Data											
Values at nominal voltage											
1 Nominal voltage	V	2.4	3	3.6	4.5	6	6	7.2	7.2	9	12
2 No load speed	rpm	10200	10300	9840	11200	12900	11300	11600	10500	10600	11500
3 No load current	mA	23.4	18.8	14.9	13.9	11.8	10.5	8.86	8.01	6.51	5.37
4 Nominal speed	rpm	1630	1990	1500	2950	4680	3160	3350	1860	2000	2790
5 Nominal torque	mNm	0.742	0.775	0.769	0.771	0.768	0.785	0.768	0.743	0.742	0.731
6 Nominal current (max. continuous current)	A	0.367	0.306	0.243	0.222	0.19	0.17	0.143	0.125	0.101	0.081
7 Stall torque	mNm	0.924	1	0.949	1.09	1.25	1.13	1.12	0.944	0.957	1.01
8 Stall 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	%	59	61	60	62	64	62	62	60	60	60
Characteristics											
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	0.046	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	7.97	7.92	7.95	7.9	7.9	7.85	7.93	8.04	8.04	8.11
16 Rotor inertia	gcm^2	0.066	0.0711	0.0704	0.0706	0.0706	0.0726	0.0706	0.0666	0.0666	0.0654

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	3.16 s
20 Thermal time constant motor	108 s
21 Ambient temperature	-20...+65°C
22 Max. winding temperature	+85°C
Mechanical data (sleeve bearings)	
23 Max. speed	14000 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 load, 4 mm from flange	0.4 N
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 90.

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

maxon Modular System

Details on catalog page 44

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