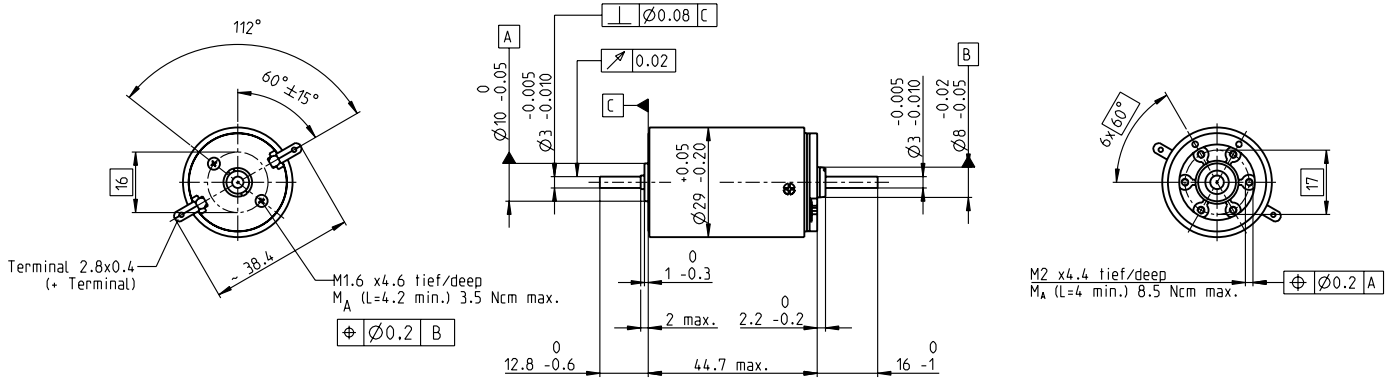


# RE-max 29 Ø29 mm, Precious Metal Brushes CLL, 9 Watt



## M 1:2

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

### Part Numbers

226765 226767 226770 226771 226772 226773 226774 226775 226776 226778 226779 226780 226781 226782 226783

Motor Data		226765	226767	226770	226771	226772	226773	226774	226775	226776	226778	226779	226780	226781	226782	226783
<b>Values at nominal voltage</b>																
1 Nominal voltage	V	4.5	6	9	12	15	18	24	24	30	36	36	42	48	48	48
2 No load speed	rpm	3940	4670	4500	4430	4570	4350	4810	4310	4670	4590	3940	4270	4050	3260	2710
3 No load current	mA	39.5	38.7	24.4	17.8	15	11.5	10.1	8.52	7.75	6.27	4.93	4.79	3.86	2.76	2.1
4 Nominal speed	rpm	3700	4370	3930	3800	3780	3530	3980	3480	3800	3740	3090	3410	3180	2380	1820
5 Nominal torque (max. continuous torque)	mNm	8.71	9.81	15.5	21.3	25.8	27.1	26.7	26.7	25.2	26	26.2	26.1	25.7	25.7	25.4
6 Nominal current (max. continuous current)	A	0.84	0.84	0.84	0.84	0.84	0.697	0.57	0.511	0.419	0.354	0.306	0.283	0.231	0.186	0.153
7 Stall torque	mNm	125	137	117	146	148	142	154	138	134	140	121	131	120	95.7	77.5
8 Stall current	A	11.5	11.2	6.16	5.66	4.73	3.61	3.24	2.6	2.2	1.88	1.39	1.39	1.06	0.683	0.461
9 Max. efficiency	%	89	89	88	89	89	89	89	89	89	89	89	89	88	88	87
<b>Characteristics</b>																
10 Terminal resistance	Ω	0.39	0.536	1.46	2.12	3.17	4.99	7.41	9.24	13.7	19.2	25.8	30.1	45.1	70.2	104
11 Terminal inductance	mH	0.035	0.045	0.108	0.199	0.292	0.465	0.677	0.841	1.12	1.67	2.26	2.63	3.81	5.87	8.48
12 Torque constant	mNm/A	10.9	12.2	19	25.8	31.2	39.4	47.5	53	61.1	74.7	86.9	93.7	113	140	168
13 Speed constant	rpm/V	879	781	502	370	306	242	201	180	156	128	110	102	84.6	68.2	56.8
14 Speed / torque gradient	rpm/mNm	31.6	34.3	38.6	30.4	31	30.7	31.3	31.5	34.9	32.8	32.7	32.8	33.9	34.2	35.2
15 Mechanical time constant	ms	4.78	4.63	4.43	4.32	4.3	4.29	4.29	4.28	4.32	4.31	4.31	4.3	4.33	4.34	4.35
16 Rotor inertia	gcm <sup>2</sup>	14.4	12.9	11	13.6	13.2	13.3	13.1	13	11.8	12.6	12.6	12.5	12.2	12.1	11.8

### Specifications

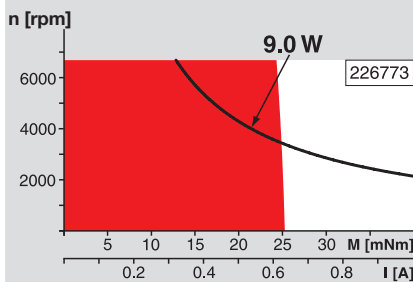
- Thermal data**
- 17 Thermal resistance housing-ambient 15.8 K/W
  - 18 Thermal resistance winding-housing 4.0 K/W
  - 19 Thermal time constant winding 15.9 s
  - 20 Thermal time constant motor 928 s
  - 21 Ambient temperature -30...+65°C
  - 22 Max. winding temperature +85°C
- Mechanical data (sleeve bearings)**
- 23 Max. speed 6700 rpm
  - 24 Axial play 0.1 - 0.2 mm
  - 25 Radial play 0.012 mm
  - 26 Max. axial load (dynamic) 1.7 N
  - 27 Max. force for press fits (static) 80 N (static, shaft supported) 1200 N
  - 28 Max. radial load, 5 mm from flange 5.5 N
- Mechanical data (ball bearings)**
- 23 Max. speed 6700 rpm
  - 24 Axial play 0.1 - 0.2 mm
  - 25 Radial play 0.025 mm
  - 26 Max. axial load (dynamic) 5.0 N
  - 27 Max. force for press fits (static) 75 N (static, shaft supported) 1200 N
  - 28 Max. radial load, 5 mm from flange 20.5 N
- Other specifications**
- 29 Number of pole pairs 1
  - 30 Number of commutator segments 13
  - 31 Weight of motor 161 g
- CLL = Capacitor Long Life

Values listed in the table are nominal.  
Explanation of the figures on page 151.

#### Option

- Ball bearings in place of sleeve bearings
- Pigtails in place of terminals
- Without CLL

### Operating Range

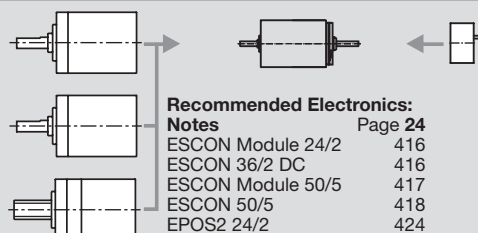


### Comments

- 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

- Planetary Gearhead**  
Ø32 mm  
0.75 - 4.5 Nm  
Page 339
- Planetary Gearhead**  
Ø32 mm  
1.0 - 6.0 Nm  
Page 343
- Spindle Drive**  
Ø32 mm  
Page 370-372



### Overview on page 20-27

- Recommended Electronics:**
- Notes** Page 24
  - ESCON Module 24/2 416
  - ESCON 36/2 DC 416
  - ESCON Module 50/5 417
  - ESCON 50/5 418
  - EPOS2 24/2 424
  - EPOS2 Module 36/2 424
  - EPOS2 50/5 425
  - MAXPOS 50/5 435