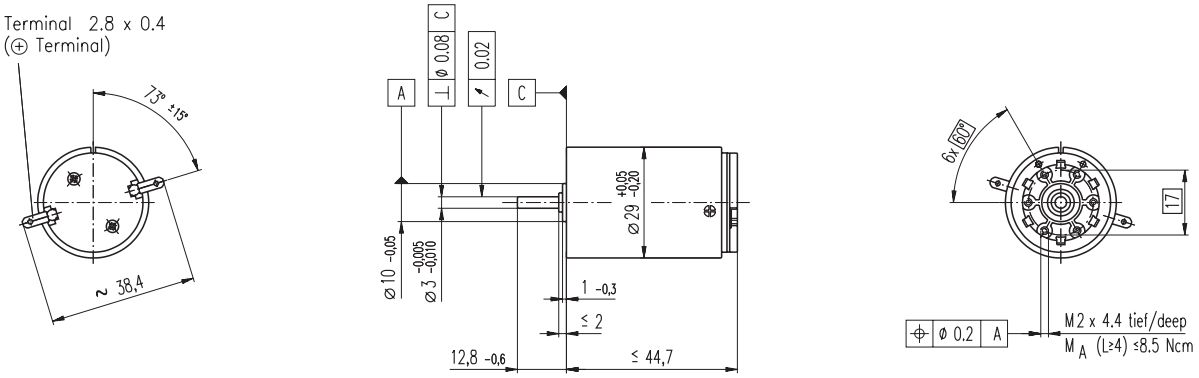
RE-max 29 ∅29 mm, Precious Metal Brushes CLL, 15 Watt



M 1:2

Stock program
Standard program
Special program (on request)

Order Number

			226748	226749	226751	226752	226753	226754	226755	226756	226757	226759	226760	226761	226762	226763	226764
Motor Data																	
	Values at nominal voltage																
1	Nominal voltage	V	7.2	9.0	12.0	18.0	18.0	24.0	30.0	36.0	42.0	48.0	48.0	48.0	48.0	48.0	48.0
2	No load speed	rpm	6480	7190	6160	6820	5630	5960	6170	6640	6710	6280	5400	5000	4160	3350	2790
3	No load current	mA	45.1	43.6	24.7	19.8	14.0	11.6	9.90	9.43	8.25	6.39	4.87	4.26	3.08	2.13	1.57
4	Nominal speed	rpm	6200	6850	5550	6160	4810	5110	5320	5790	5820	5410	4520	4130	3260	2440	1870
5	Nominal torque (max. continuous torque)	mNm	8.44	9.51	15.1	20.7	25.2	26.1	25.8	25.7	24.3	25.2	25.4	25.5	25.2	25.2	24.9
6	Nominal current (max. continuous current)	A	0.840	0.840	0.840	0.840	0.840	0.691	0.566	0.506	0.416	0.352	0.304	0.283	0.232	0.186	0.153
7	Stall torque	mNm	195	200	152	214	173	185	188	201	183	182	157	146	117	93.3	75.6
8	Starting current	A	18.4	16.8	8.22	8.49	5.68	4.81	4.05	3.90	3.07	2.51	1.86	1.59	1.06	0.683	0.461
9	Max. efficiency	%	91	90	90	91	90	91	91	91	90	90	90	90	90	89	89
	Characteristics																
10	Terminal resistance	Ω	0.390	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	0.0353	0.0447	0.108	0.199	0.292	0.464	0.676	0.839	1.12	1.67	2.26	2.63	3.81	5.86	8.46
12	Torque constant	mNm / A	10.6	11.9	18.5	25.2	30.4	38.4	46.3	51.6	59.6	72.8	84.7	91.3	110	136	164
13	Speed constant	rpm / V	902	802	515	380	314	249	206	185	160	131	113	105	86.8	70.0	58.2
14	Speed / torque gradient	rpm / mNm	33.2	36.1	40.6	32.0	32.7	32.3	32.9	33.1	36.8	34.5	34.4	34.5	35.6	36.0	37.0
15	Mechanical time constant	ms	4.99	4.84	4.62	4.51	4.49	4.48	4.48	4.47	4.51	4.50	4.50	4.49	4.52	4.53	4.54
16	Rotor inertia	gcm²	14.3	12.8	10.9	13.5	13.1	13.2	13.0	12.9	11.7	12.5	12.5	12.4	12.1	12.0	11.7

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	15.8 s
20	Thermal time constant motor	1260 s
21	Ambient temperature	-30 ... +65°C
22	Max. permissible winding temperature	+85°C

Mechanical data (sleeve bearings)

23	Max. permissible speed	11000 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
28	Max. radial loading, 5 mm from flange	5.5 N

Mechanical data (ball bearings)

23	Max. permissible speed	11000 rpm
24	Axial play	0.1 - 0.2 mm
25	Radial play	0.025 mm
26	Max. axial load (dynamic)	5 N
27	Max. force for press fits (static)	75 N
28	Max. radial loading, 5 mm from flange	20.5 N

Other specifications

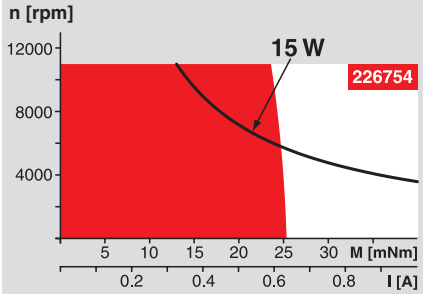
29	Number of pole pairs	1
30	Number of commutator segments	13
31	Weight of motor	159 g

CLL = Capacitor Long Life

Values listed in the table are nominal.
Explanation of the figures on page 49.

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

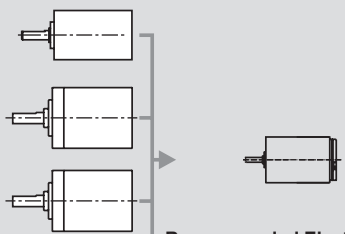
maxon Modular System

Overview on page 16 - 21

Planetary Gearhead
∅26 mm
0.5 - 2.0 Nm
Page 235

Planetary Gearhead
∅32 mm
0.75 - 4.5 Nm
Page 238

Planetary Gearhead
∅32 mm
1.0 - 6.0 Nm
Page 241



Recommended Electronics:

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ADS_E 50/5	277
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