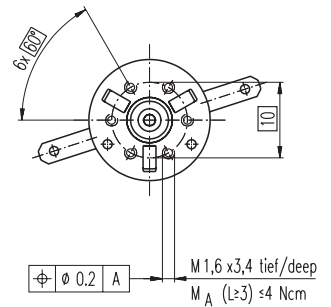
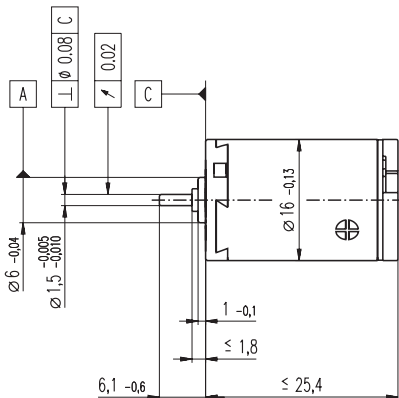
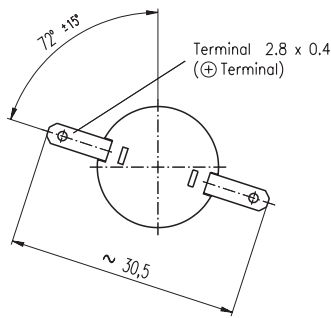


A-max 16 \varnothing 16 mm, Graphite Brushes, 2 Watt



M 1:1

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

Order Number

110061 110062 **110063** 110064 110065 110066 110067 110068 110069 110070

Motor Data

Values at nominal voltage		110061	110062	110063	110064	110065	110066	110067	110068	110069	110070	
1	Nominal voltage	V	1.5	3.0	6.0	9.0	12.0	14.0	15.0	18.0	21.0	30.0
2	No load speed	rpm	10200	11700	9620	11800	11800	11800	11200	11200	11600	10800
3	No load current	mA	201	117	46.7	39.1	29.3	25.1	22.2	18.5	16.5	10.7
4	Nominal speed	rpm	8670	7860	3240	5460	5410	5450	4820	4780	5070	4160
5	Nominal torque (max. continuous torque)	mNm	0.686	1.40	2.51	2.47	2.45	2.46	2.46	2.44	2.39	2.35
6	Nominal current (max. continuous current)	A	0.720	0.720	0.494	0.394	0.294	0.253	0.225	0.186	0.162	0.105
7	Stall torque	mNm	4.93	4.51	4.02	4.82	4.76	4.81	4.53	4.47	4.48	4.03
8	Starting current	A	3.76	1.97	0.721	0.700	0.519	0.450	0.377	0.310	0.275	0.164
9	Max. efficiency	%	58	57	56	58	58	58	58	57	57	55
Characteristics			110061	110062	110063	110064	110065	110066	110067	110068	110069	110070
10	Terminal resistance	Ω	0.399	1.52	8.32	12.8	23.1	31.1	39.8	58.0	76.2	183
11	Terminal inductance	mH	0.017	0.0519	0.306	0.467	0.831	1.13	1.42	2.05	2.61	6.01
12	Torque constant	mNm / A	1.31	2.29	5.57	6.88	9.17	10.7	12.0	14.4	16.3	24.7
13	Speed constant	rpm / V	7290	4170	1720	1390	1040	893	795	663	587	387
14	Speed / torque gradient	rpm / mNm	2220	2770	2560	2600	2630	2600	2630	2670	2750	2880
15	Mechanical time constant	ms	24.5	23.7	23.2	23.2	23.2	23.2	23.4	23.3	23.4	23.8
16	Rotor inertia	gcm ²	1.05	0.816	0.864	0.854	0.844	0.854	0.848	0.834	0.811	0.788

Specifications

- Thermal data**
- 17 Thermal resistance housing-ambient 29.8 K / W
 - 18 Thermal resistance winding-housing 5.5 K / W
 - 19 Thermal time constant winding 3.53 s
 - 20 Thermal time constant motor 313 s
 - 21 Ambient temperature -30 ... +85°C
 - 22 Max. permissible winding temperature +125°C
- Mechanical data (sleeve bearings)**
- 23 Max. permissible speed 11900 rpm
 - 24 Axial play 0.05 - 0.15 mm
 - 25 Radial play 0.012 mm
 - 26 Max. axial load (dynamic) 0.8 N
 - 27 Max. force for press fits (static) 35 N
 - 28 Max. radial loading, 5 mm from flange 1.4 N

- Mechanical data (ball bearings)**
- 23 Max. permissible speed 11900 rpm
 - 24 Axial play 0.05 - 0.15 mm
 - 25 Radial play 0.025 mm
 - 26 Max. axial load (dynamic) 2.2 N
 - 27 Max. force for press fits (static) 30 N
 - 28 Max. radial loading, 5 mm from flange 7.8 N

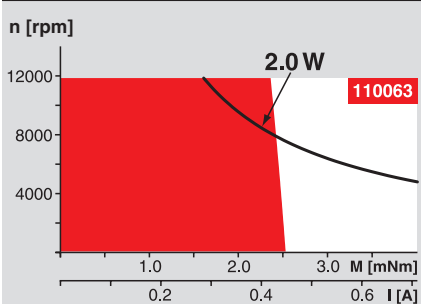
- Other specifications**
- 29 Number of pole pairs 1
 - 30 Number of commutator segments 7
 - 31 Weight of motor 21 g

Values listed in the table are nominal.
Explanation of the figures on page 47.

Option

- Ball bearings in place of sleeve bearings
- Pigtails in place of terminals

Operating Range



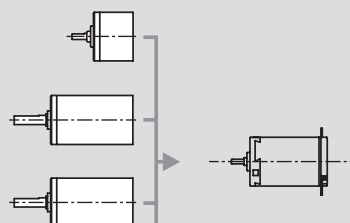
Comments

- 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

- Spur Gearhead**
 \varnothing 16 mm
0.01 - 0.1 Nm
Page 211 / 212 / 213
- Planetary Gearhead**
 \varnothing 16 mm
0.06 - 0.18 Nm
Page 214
- Planetary Gearhead**
 \varnothing 16 mm
0.1 - 0.3 Nm
Page 215



Recommended Electronics:
LSC 30/2 Page 268
Notes 18