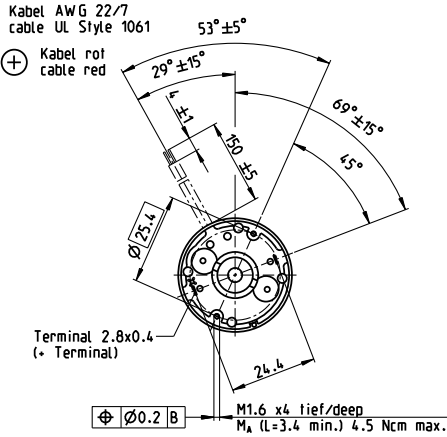
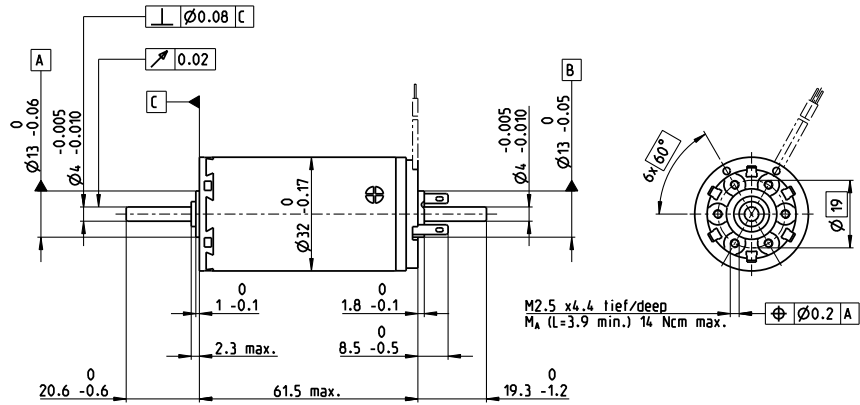


A-max 32 Ø32 mm, graphite brushes, 20 watt

A-max



Verlegung der Kabel im Buerstendeckel nicht dargestellt!
Cable routing not shown inside brush cover!



M 1:2

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

		Part Numbers						
with terminals		236666	236667	236668	236669	236670	236671	236672
with cables		353236	353237	301030	353239	353240	353241	353242

Motor Data									
Values at nominal voltage									
1 Nominal voltage	V	6	9	12	24	30	36	42	
2 No load speed	rpm	4880	5000	4670	6460	6160	5860	5650	
3 No load current	mA	123	84.2	58.2	42.8	32.3	25.3	20.8	
4 Nominal speed	rpm	3400	3480	3170	5060	4740	4430	4210	
5 Nominal torque (max. continuous torque)	mNm	44.5	43.1	44	45.5	45.1	45.4	45	
6 Nominal current (max. continuous current)	A	3.96	2.62	1.87	1.33	1.01	0.804	0.659	
7 Stall torque	mNm	153	146	140	212	197	189	178	
8 Stall current	A	13.2	8.57	5.77	6.02	4.27	3.24	2.54	
9 Max. efficiency	%	80	80	80	84	83	83	83	
Characteristics									
10 Terminal resistance	Ω	0.454	1.05	2.08	3.99	7.02	11.1	16.6	
11 Terminal inductance	mH	0.06	0.13	0.264	0.556	0.954	1.52	2.22	
12 Torque constant	mNm/A	11.6	17	24.3	35.2	46.1	58.2	70.4	
13 Speed constant	rpm/V	825	562	394	271	207	164	136	
14 Speed / torque gradient	rpm/mNm	32.4	34.8	33.8	30.8	31.6	31.3	31.9	
15 Mechanical time constant	ms	15	14.9	14.7	14.6	14.6	14.6	14.7	
16 Rotor inertia	gcm ²	44.2	40.8	41.7	45.3	44.2	44.6	43.8	

Specifications	Operating Range	Comments
----------------	-----------------	----------

- Thermal data**
- 17 Thermal resistance housing-ambient 7.5 K/W
 - 18 Thermal resistance winding-housing 2.1 K/W
 - 19 Thermal time constant winding 17.8 s
 - 20 Thermal time constant motor 521 s
 - 21 Ambient temperature -20...+85°C
 - 22 Max. winding temperature +125°C

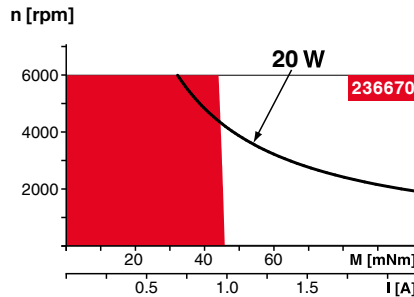
- Mechanical data (ball bearings)**
- 23 Max. speed 6000 rpm
 - 24 Axial play 0.12 - 0.22 mm
 - 25 Radial play 0.025 mm
 - 26 Max. axial load (dynamic) 7.6 N
 - 27 Max. force for press fits (static) 110 N
 - (static, shaft supported) 2000 N
 - 28 Max. radial load, 5 mm from flange 32 N

- Mechanical data (sleeve bearings)**
- 23 Max. speed 6000 rpm
 - 24 Axial play 0.12 - 0.22 mm
 - 25 Radial play 0.012 mm
 - 26 Max. axial load (dynamic) 5.0 N
 - 27 Max. force for press fits (static) 110 N
 - (static, shaft supported) 2000 N
 - 28 Max. radial load, 5 mm from flange 10.5 N

- Other specifications**
- 29 Number of pole pairs 1
 - 30 Number of commutator segments 13
 - 31 Weight of motor 240 g

Values listed in the table are nominal.
Explanation of the figures on page 82.

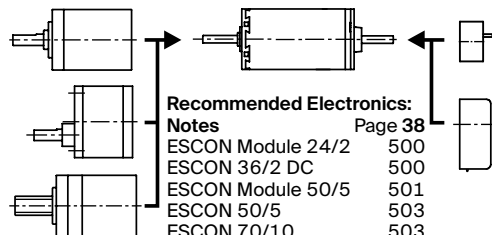
- Option**
- Sleeve bearings in place of ball bearings



- 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 38
----------------------	----------------------------

- Planetary Gearhead**
Ø32 mm
0.75 - 6.0 Nm
Page 392-394/396-398
- Spur Gearhead**
Ø38 mm
0.1 - 0.6 Nm
Page 404
- Screw Drive**
Ø32 mm
Page 426-433



Recommended Electronics:
Notes Page 38

- ESCON Module 24/2 500
- ESCON 36/2 DC 500
- ESCON Module 50/5 501
- ESCON 50/5 503
- ESCON 70/10 503
- EPOS4 Micro 24/5 509
- EPOS4 Mod./Comp. 50/5 510
- EPOS4 Mod./Comp. 24/1.5 510
- EPOS4 Comp. 24/5 3-axes 511
- EPOS4 50/5 515
- EPOS4 Disk 60/8 516
- EPOS2 P 24/5 520

- Encoder MR**
256 - 1024 CPT,
3 channels
Page 479
- Encoder HED_5540**
500 CPT,
3 channels
Page 487/489